THE DIMENSIONS OF STRESS IN EQUITY-DESERVING PERSONNEL

THE QUALITATIVE DIMENSIONS OF OPERATIONAL AND ORGANIZATIONAL STRESS IN EQUITY-DESERVING MILITARY AND PUBLIC SAFETY PERSONNEL

By SARAH E.R. LADE, H.B.SC.

A Thesis Submitted to the School of Graduate Studies in Partial Fulfilment of the Requirements for the Degree Doctor of Philosophy of Clinical Psychology

DOCTOR OF PHILOSOPHY, CLINICAL PSYCHOLOGY (2023)

PSYCHOLOGY, NEUROSCIENCE & BEHAVIOUR

McMaster University

Hamilton, Ontario

TITLE: The Qualitative Dimensions of Operational and Organizational Stress in Equity-Deserving Military and Public Safety Personnel

AUTHOR: Sarah E.R. Lade, H.B.Sc. (McMaster University)

SUPERVISORS: Dr. Margaret McKinnon, Ph.D., C.Psych. and Dr. Heather McNeely, Ph.D., C.Psych.

PAGES: xi, 207

Lay Abstract

Public Safety Personnel (PSP) and Military Personnel (MP) experience greater exposure to potentially traumatic experiences as part of their occupational duties than do civilians. As a result, they are more likely to suffer negative mental, social, health, and functional outcomes, known as Occupational Stress Injuries (OSI). The individual expression of OSI is mediated both by the domain of the original stressor (i.e., organizational or operational) and by person-specific factors, such as belonging to an equity-deserving population of service. Through qualitative research methods, this thesis examines the mental, social, health and functional outcomes of OSI in military and Public Safety Personnel (i.e., MP and PSP, respectively), as well as how membership in equity-deserving communities impacts these outcomes.

Abstract

Public Safety Personnel (PSP) and Military Personnel (MP) face high rates of potentially traumatic exposures as part of their on-the-job service. As a result, they frequently experience highly impactful Occupational Stress Injuries (OSI), which contribute to complex experiences of mental, health, social, and functional injuries. The individual experience of these injuries is mediated by domain of the causal stressor, including whether it stemmed from an operational factor (i.e., the unique operational demands of the position) or an organizational factor (i.e., systemic stressors associated with employment environment). Military Sexual Trauma (MST) and Military Sexual Misconduct (MSM) are two organizational stressors which involve systemically-normalized sexual violence and discrimination within military environments. MSM and MST unfairly target equity-deserving community members, such as woman-identifying personnel and 2SLGBTQIA+ personnel. By belonging to an equity-deserving community, these communities face an additive impact of distinctive personal factors (e.g., person-specific factors such as gender identity or sexual orientation), which predicate more complex experiences of OSI. In Chapter 2 (Study 1), we qualitatively outline how PSP personally describe their experience of OSI-related PTSD symptoms. In Chapter 3 (Study 2), we qualitatively examine the emotional, social, and functional outcomes of an organizational stressor, MSM, in an equity-deserving community of MP (i.e., woman-identifying military Veterans). Finally, in Chapter 4 (Study 3), we qualitatively assess the mental, social, and functional implications of MST in another equity-deserving population (i.e., the 2SLBTQIA+ military community) using a scoping review methodology.

Acknowledgements

I express my sincerest gratitude to the many people who have meaningfully contributed to bringing me to this point of my academic journey, the achievement of my doctoral thesis. Firstly, I would like to thank Dr. Heather McNeely and Dr. Margaret McKinnon for their selfless and steadfast support. As trusted mentors, their role in my life has been profound and will never be forgotten. I would also like to thank Dr. Jelena King and Dr. David Feinberg for their guidance as members of my doctoral committee. I would also like to acknowledge the roles of Dr. Andrea Brown and Dr. Kim Ritchie, whose mentorship and unconditional support made every difference. I gratefully recognize other academic colleagues who supported the development of the three chapters of this doctoral thesis, including Dr. Nicholas Held and Dr. Linna Tam-Seto, who both meaningfully contributed to the conceptualization, implementation, and analyses of the projects in this thesis.

I appreciatively recognize the academic collaborators who generously supported this work. These individuals include Bethany Easterbrook, Andrea D'Alessandro-Lowe, Mauda Karram, Emily Sullo, Charlene O'Connor, Heather Millman, Dr. Alexandra Heber, Dr. Ruth Lanius, Dr. Karen Davis, and Dr. Rosemary Park. I am grateful to the many participants who devoted their time, trust, and stories to the studies contained in Chapters 2 and 3. I extend my heartfelt thanks to dear friends and family whose support has made possible what previously seemed insurmountable. Finally, I would like to thank my partner, Devin Barros, whose devotion, steady presence, and impressive formatting skills, helped me to achieve this momentous feat.

Table of Contents

List of Tables

Table of Figures

List of all Abbreviations

CAF	Canadian Armed Forces
CIPSRT	The Canadian Institute of Public Safety Research and Treatment
CPT	Cognitive Processing Therapy
DSM-5-TR	Diagnostic and Statistical Manual for Mental Disorders-5th edition
IPA	Interpretive Phenomenological Approach
MI	Moral Injury
MP	Military Personnel
MSM	Military Sexual Misconduct
MST	Military Sexual Trauma
OSI	Occupational Stress Injury
PRISMA-SCR	Preferred Reporting Items for Systematic Reviews and Meta-Analyses Extension for Scoping Reviews
PSP	Public Safety Personnel
PTSD	Posttraumatic Stress Disorder
PPTE	Potentially Psychologically Traumatic Events
PMIE	Potentially Morally Injurious Events
RCMP	Royal Canadian Mounted Police
2SLGBTQIA+	Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Intersex, Asexual and other identities

Declaration of Academic Achievement

This thesis is composed of five chapters, including: a general introduction and overview of the relevant literature (Chapter 1), three empirical chapters (Chapters 2 through 4), and a general conclusion section (Chapter 5), where primary contributions and implications of the present to research are covered, as well as limitations and future directions.

The collection of the original research in this thesis (Chapters 2 through 4) is composed of three separate research projects. All three projects took place under the primary supervision of Dr. Margaret McKinnon, with co-supervision provided by Dr. Heather McNeely. Chapter 2 was conducted in partnership with an inpatient residential treatment facility located in Canada, with project conceptualization, design, and implementation being provided by Dr. Margaret McKinnon, Dr. Andrea Brown, Dr. Kimberly Ritchie, and support from other academic collaborators including Andrea D'Alessandro-Lowe, M.Sc., Ph.D. student, Bethany Easterbrook, M.Sc., Ph.D. (cand), and Charlene O'Connor, M.Sc., Ph.D. (cand). Though I did not participate in the conceptualization of this study or original data collection, I was directly involved in the analysis of this archived data set and prepared the manuscript of Chapter 2 as first author. Chapter 3 was conceptualized, designed, and implemented by Dr. Andrea Brown, Dr. Kimberly Ritchie, Lieutenant Colonel Dr. Alexandra Heber, M.D., FRCPC, Lieutenant Colonel Dr. Rosemary Park, and Ruth Lanius, M.D., Ph.D., Karen Davis, Ph.D., and Heather Millman, M.A., with Dr. Margaret McKinnon providing primary supervision. I participated in the data collection, data analysis, and manuscript preparation for Chapter 3 and prepared this manuscript for publication as a first author. With respect to Chapter 4, I was directly involved in the conceptualization, design, and implementation of this scoping review with support from Dr. Margaret McKinnon, Dr. Linna Tam-Seto, Dr. Nicholas Held, Ash Ibbotson, M.A., Bibora Imre-

Millei, M.Sc., and with data collection support from two academic collaborators, Mauda Karram, H.B.Sc., and Emily Sullo, M.Sc.

With respect to funding, Chapter 2 was not supported by in-kind or external funding. Chapters 2 and 3 were supported by a MINDS (Mobilizing Insights in Defence and Security Grant) Targeted Engagement Grant from the Department of National Defence, held by Dr. Margaret McKinnon, Principal Investigator.

Finally, with respect to the COVID-19 pandemic, restrictions were necessarily imposed on new participant recruitment. Given these restrictions, the present thesis employed the use of shared and archived data in the present thesis, which was agreed upon by thesis committee members, as well as team collaborators.

Chapter 1: General Introduction

Canadian Public Safety Personnel (PSP) and Military Personnel (MP) play crucial roles in protecting the interests of public safety and national security but are simultaneously burdened with severe forms of occupational stress as part of their vocational duties (Carleton et al., 2018; Ricciardelli et al., 2020). Indeed, as noted by Dr. Nick Carleton, PSP and MP face "trauma exposure [as] the rule rather than the exception" (Oliphant, 2016). Thus, in 2018, the Government of Canada enacted the Federal Framework on Post-Traumatic Stress Disorder in response to calls from PSP and their supporters, about a need for generalized understanding and adequate supports for the personal impact of on-the-job stress exposures. In 2020, Canada formulated a national strategy on PTSD, resulting in increased funding and attention to the pervasive impact of occupational stress on the well-being of these civil servants. Patty Hajdu, the former Canadian Minister of Health, suggested that Canada should be a place "…where people living with PTSD, those close to them, those at risk…are recognized and supported along their path toward healing, resilience, and thriving" (Government of Canada, 2020).

According to the Canadian Institute of Public Safety Research and Treatment (CIPSRT), Public Safety Personnel (PSP) are not restricted to police officers but also include the following vocations: "paramedics, police border services officers, public safety communications officials, correctional workers, firefighters (career and volunteer), Indigenous emergency managers, operational intelligence personnel, police (municipal, provincial, federal), and search and rescue personnel officers, correctional, probation, and parole officers, and emergency dispatchers" (CIPSRT Glossary, 2020). Within the Canadian military (i.e., the Canadian Armed Forces; CAF), two broad categories of MP exist: Regular Force Members, whose military service is full-time, and Reserve Force members, who are civilians who maintain a regular civilian career but

also participate in military service. Branches of the CAF may include Transport and Logistics, Naval Operations, Aviation, Health Care, Combat Operations, Computing and Intelligence, Safety and Emergency Services, Engineering and Infrastructure, Administration, Hospitality and Support, Public Relations, and Equipment and Vehicle Maintenance.

The duties of MP and PSP hold many similar features, particularly in the form of humanitarian aid, such as providing food and water, evacuation, search and rescue, infrastructure repair, as well as maintaining public safety (Ein et al., 2023). They are also both exposed to stressful subject matter, and life-threatening situations, which could include violent death and human remains (Corneil et al., 1999), exposure to toxins or infectious disease (Gallanter & Bozeman, 2002; Araujo et al., 2023), insufficient medical or humanitarian aid (Sloand et al., 2012) or lack of social infrastructure (Bennett, 2018). Given the similarity in skill sets, many PSP recruitment strategies intentionally favour hiring former MP (Schulker, 2017). For example, in Canada, approximately 7% of PSP are those who formerly served in the military (Groll et al., 2020).

As part of these duties and extreme exposure to physical and mental risks and stressors, PSP and MP face an elevated risk of developing work-related injuries, otherwise known as Occupational Stress Injuries (Voth et al., 2022). While it is widely understood that PSP and MP are at risk of negative health outcomes due to occupational stress exposure, there is a historical legacy of stigma surrounding being provided with an OSI-related mental health diagnosis (e.g., PTSD) (Carleton et al., 2019). Thus, CAF Colonel (Retd) Stephane Grenier, in her Operational Stress Injury Social Support Program, recommended the term occupational stress injury (OSI) be used to describe mental health outcomes of occupational stress as a meaningful nonclinical term that is in service of the person impacted (Department of National Defence, 1999). In 2016,

Public Safety Canada officially recommended that all occupational injuries be subsumed under the term OSI (Oliphant, 2016). Now, though the term OSI is well recognized by care providers and patients alike, stigma remains, particularly for OSI diagnoses pertaining to mental health (Mota et al., 2022).

Domains of OSI can include not only physical injuries (Garbern et al., 2016) but also psychological (Makwana, 2019) and emotional injuries (Wilson, Guliani, and Boichev, 2016). Psychological injuries can include depression and anxiety disorders (Williamson et al., 2018), suicidal ideation (Carleton et al., 2018), and dissociative symptoms (McKinnon et al., 2016). PTSD is a psychological injury relevant for both populations, with 14-20% of MP (Institute of Medicine, 2014) and 10-45% of PSP (Carleton, 2018) eventually developing clinically significant levels of PTSD. For both PSP and MP, rigorous mental health screening at hiring and recruitment stages does not preclude the later development of PTSD or trauma-related symptoms (Nazarov et al., 2015). Other symptoms associated with psychological injuries can include negative changes in emotionally regulation (McLean & Foa, 2017), as well as declines in autobiographical memory (Brown et al., 2014), attention (Block & Liberzon, 2016), theory of mind (i.e., ability to take the perspective of another person) (Mazza et al., 2012), and adaptive interpersonal functioning (Campbell et al., 2009). These effects are exacerbated by increased levels of negative emotionality (i.e., guilt and shame), often related to PTSD (Cunningham, 2020), which interfere with the cognitive processing of these negative emotions (e.g., self-deprecation, negative worldview, distorted autobiographical narrative) (Brown et al., 2014; Mazza et al., 2012).

1.1 Classification of Occupational Stressors

One type of occupational stressor commonly faced by PSP and MP is termed a Potentially Psychologically Traumatic Event (PPTE), defined as an event where the individual is "directly or indirectly exposed to serious injury, sexual violence, and actual or threatened death" (American Psychiatric Association, 2013). A PPTE's degree of impact on a PSP or MP depends both on individual interpretation of the event as well as unique contextual factors surrounding it (i.e., operational, organizational, personal influences) (Ricciardelli et al., 2020; Easterbrook et al., 2022; Edgelow et al., 2023).

While PPTE are commonly experienced in civilian populations, PSP and MP face significantly higher rates of and repeated exposure to diverse PPTE as an intrinsic part of their occupational duties (Ricciardelli et al., 2020). PSP report rates of exposure to PPTE as high as 90% (Carleton et al., 2018), in contrast with civilian populations, whose lifetime exposure to PPTE is in the range of 50% (Kilpatrick et al., 2013). In a recent study of Canadian PSP, 71.3% of PSP respondents endorsed repeated cumulative exposure of PPTE (up to 11 times in one career) to 11/16 types of PPTE assessed (Carleton et al., 2019). The type of PPTE may differ by the operational context. For example, when interacting with members of the public, PSP may encounter hostile or aggressive reactions as part of their duties (Duxbury & Higgins, 2009), or in the case of MP, they may face direct physical hostilities from enemy combatants (Farnsworth et al., 2013). For both PSP, and MP, PPTE typically occur in a cumulative (i.e., more than once) fashion. For PSP, up to 90% report experiencing the same PPTE 11+ times (Oliphant, 2016). MP are exposed to a similarly high degree of PPTE and PMIE as PSP (Garbern et al., 2016).

Another classification of occupational stress exposure that PSP and MP are at increased risk of experiencing is referred to as a Potentially Morally Injurious Event (PMIE), which is

defined as "perpetrating, failing to prevent, bearing witness to, or learning about acts that transgress deeply held moral beliefs and expectations" (Litz et al., 2009). Both PSP and MP vocations require a duty of care in the context of complex ethical decision-making and prompt response time. These decisions can take place in morally ambiguous social situations, such as being forced to quickly prioritize the life of one person over another in a life-or-death context (Angehrn et al., 2020). As a result of transgressing a personally held belief, a PSP or MP may develop a moral injury (MI), a type of psychological injury that may occur following exposure to a PMIE and which causes extreme emotional distress or functional difficulty (Litz et al., 2009). Indeed, PMIEs are highly likely as a part of PSP or MP vocational demands, wherein the need to act rapidly and decisively in morally ambiguous situations, outcomes of which may place a victim or colleague at risk of harm or death (Angehrn et al., 2020). Decisive actions associated with PMIE are linked to a greater risk to mental health, including those featuring a risk of harm to existential or moralistic ideals, particularly when decisions contrast with moral identity or involve errors in judgment (Lentz et al., 2021). PMIE may differentially impact mental health depending on whether they are omission-based (e.g., violating the rules of a military engagement) or commission-based (e.g., failing to protect the life of a civilian) (Jordan et al., 2017), as well as if they relate to others (i.e., acting on the direct order of a commanding officer, betrayal from leadership, or witnessing a colleague's transgressive behaviour) (Zerach & Levi-Belz, 2022; Jordan et al., 2017). In the experience of MI, the negative outcomes of PMIE may be misattributed to PSP's or MP's own inherent personal qualities, such as a perceived moral failure, leaving survivors with profound psychological, social, and functional implications (Farnsworth et al., 2017; Griffin et al., 2019).

1.2 Domains of Occupational Stress

Generally, occupational stressors may be separated into two overarching categories, operational stressors (i.e., occupation-specific events which caused the injury), and organizational stressors (i.e., contextual employment factors which caused, or exacerbated, an injury) (Duxbury & Higgins, 2009; Ricciardelli et al., 2020). Common operational stressors faced by PSP and MP include PPTE, reduced social connections, exhaustion, physical injury, and burnout (McCreary & Thompson, 2006; Ricciardelli et al., 2020; Ricciardelli, 2018). Common organizational stressors faced by PSP and MP include inadequate staff support or resources, insufficient training, or ineffective organizational structure (e.g., leadership, policy, practice) (McCreary & Thompson, 2006; Ricciardelli et al., 2020; Ricciardelli, 2018; Sterud et al., 2008; Shane, 2010). Research suggests that the diversity of these stressors, as well as the context in which they occur, are a critical lens through which OSI outcomes must be considered. The most impactful outcome factors include variable support from leadership, dismissive attitudes, and stigma towards mental health, downplaying of the impact of stress on the individual level, as well as top-down pressures resulting from unavoidable economic and cultural realities of these vocations (Ricciardelli et al., 2020; Ricciardelli, 2020)

Previous classifications of OSI have failed to adequately incorporate and consider the impact of person-specific factors on OSI outcomes, particularly as related to mental-health OSI, such as PTSD. Edgelow et al. (2023), in their Tri-Operational-Organizational-Personal Factor Model (TROOP) of occupational stress, argue for the inclusion of personal factors, such as family and social relationships, health status, hobbies, etc. The TROOP model outlines how personal factors bidirectionally interact with the impact of operational and organizational stressors, either exacerbating them, or acting to protective against them. For example, family

support (Dugan et al., 2021) and job satisfaction (Armstrong, Shakespeare-Finch, & Shochet, 2016) are factors that protect against severe negative outcomes of job-related mental health issues (i.e., suicide) (Genest, Ricciardelli, & Carleton, 2021), while family conflict tends to exacerbate job-related mental health issues (Lambert & Hogan, 2010). Edgelow and colleagues stress that previous strategies to address OSI, both in research and practice, have downplayed the role of person-specific factors in mediating the impact of OSI (Edgelow et al., 2023). Thus, each category of stressor (i.e., organizational, operational, and personal) is individually and meaningfully associated with OSI outcomes in PSP and MP (Donnelly, 2012; Carleton et al., 2020).

While operational stressors, such as PPTE, undoubtedly contribute to negative health outcomes for PSP and MP, their overall impact is heightened and made more complex by the experience of organizational stressors (Carleton et al., 2020). There is potential for deleterious organizational factors to contribute to and exacerbate severe functional and behavioural impairments that negatively impact job trajectory and occupational performance (Maguen et al., 2009; McKinnon et al., 2016). Indeed, organizational stressors are the contextual cues by which PPTE are interpreted and psychologically framed, resulting in an exacerbation of negative psychological reactions to them (shape the interpretation and psychological context by which a PPTE (Carleton et al., 2020). Some organizational stressors are more commonplace, including limitations of the organizational environment (e.g., implicating a lack of agency in individual decision-making), interpersonal stressors (e.g., conflict between colleagues, lack of time to complete duties, undesirable or menial tasks), and low levels of structural empowerment (e.g., psychological, and occupational resources) (Lamiani et al., 2017). At a lower level of personal impact, organizational stressors result in job dissatisfaction and higher levels of day-to-day stress

(Lambert, 2006; Lambert, Hogan, and Tucker, 2009; Finey et al., 2013). In more serious cases, these day-to-day organizational stressors can lead to burnout (i.e., psychological response involving extreme tiredness, pessimism, ineptness) (Maslach et al., 2001; Queiros et al., 2020). However, they can also be more extreme in nature, as well as entrenched in the cultural environment of PSP and MP. Furthermore, these institutional conditions set the stage for an increased risk of PPTE and PMIE for PSP and MP (Carleton et al., 2019).

1.3 Organizational Stressors of Militaristic Environments

Both PSP and MP environments share organizational cultures that are based in highly structured para-militaristic bureaucracies, which place heavy implication on policy and practice for civil servants within their organization (Lambert, 2006). They place heavy emphasis on operational success, whereby leadership can, at times, prioritize mission success over the individual well-being of their personnel (Varljen, 2001; Monteith et al., 2016). They also employ methods of social indoctrination that strictly emphasize values, attitudes, and behaviours that are beholden to the ideals of the organization at the expense of the person (Kleykamp et al., 2021; Shields, 2016). This indoctrination is typically hypermasculine and hegemonic (i.e., of higher social value) (Duncanson, 2015), regardless of sexual orientation or identity, and aims to strip ideals from recruits that may differ based on culture or background, with the goal of "secondary socialization" (Arkin & Dobrofsky, 1978, p. 159). Thus, paramilitary groups, including MP or PSP, are moulded into a unit characterized by efficacy and pure mission focus while simultaneously emphasizing the suppression of individual adaptive emotional or psychological reactions (e.g., fear, grief, pain) (Smith, 2008).

These ideals are often deeply internalized by PSP and MP, wherein their own measure of worth and internal moral compass are subject to the degree of inclusion or belonging they feel

within their group (Kleykamp et al., 2021). In the context of MP and PSP culture, this sense of comradery and group acceptance is critical (Jamieson et al., 2020a). If a PSP or MP acts contrary to the group ethos (Miller, 2016), such as may occur in a morally ambiguous situation, their sense of belonging may suffer, or they may be ostracized (Jamieson et al., 2020b). PSP and MP may begin to define their personal worth and values around this new measure of morality (Ellemers & Van der Toorn, 2015), the morality of the group. Indeed, this redefining of self often occurs early in training (Fox & Pease, 2012; Firing, Karlsdottir, & Laberg, 2009). Those who do not adapt or show reluctance (e.g., whistleblowing) (Bradley et al., 2017) may suffer consequences for their behaviour (e.g., socially ostracized) (Williams, 1997).

PSP and MP face unique organizational and operational contexts which contribute to a greater likelihood of PMIE occurring (Papazoglou, 2013; Lim, 2017), particularly those in which they must act according to professional systems of conduct which may contrast with a person-specific factor, such as a PSPs or MPs personal moral belief system. PSP and MP may both face complex PMIE, including disparate violence, civilian casualties, lack of ability to protect vulnerable persons, moral concessions, interpersonal or institutional duplicity, and difficult transitions from service to civilian (Drescher et al., 2011; Vargas et al., 2013; Currier et al., 2015; Schorr et al., 2018). In such situations, PSP or MP may be forced to sacrifice person-specific moral reactions in favour of the group moral ideal or, if not, face harsh consequences from group members or leadership. And, if they do comply with a group moral value that is in contrast with their own personal moral values, they face an increased likelihood of developing a moral injury due to resultant shame or guilt for betraying their own internal value (Ashforth & Kreiner, 2002).

Another feature common of militaristic and paramilitaristic cultures is the ideal of heteronormality (i.e., the normalization of heterosexuality and cisgender identity), which relies on ideals of Western nuclear family models (von Hlatky & Imre-Millei, 2022). It relates to the concept of militarized masculinity, in which an accultured hypermasculine military identity is favoured above all others (Shields et al., 2017). The impact of these ideals is that minority communities of service are uniquely and unfairly impacted; simply by not fitting within this socially constructed ideal, they are relegated to a lower social status (Duncanson, 2015).

Equity-deserving communities of service, including gender minority (e.g., woman-identifying populations) or sexual minority (e.g., 2SLGBTQIA+ populations; Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer or Questioning, Intersex, Asexual, and additional sexual orientations, and gender identities) groups, struggle to conform to these standards. These difficulties contribute to misattributions of personal and professional worth (Duncanson, 2015) and needless consequences to social and professional relationships when they are unable to achieve them (De Angelis et al., 2013). Sociological analyses posit that organizational leadership within these groups struggle to counteract these ideologies due to their deeply engrained nature in military culture (Shields et al., 2017), resulting in a systemic perpetuation of the "culturogenic harm" on equity-deserving groups (NATO, 2022). Thus, according to this perspective, minority communities of service are undeservedly placed in a lower level of organizational hierarchy and often subjected to suspicion, denigration, and, at times, outright harm (Butler, 2006; Shields, 2017).

The impacts of these systemic pressures hold profound impacts on the development of OSI for PSP and MP. One particularly impactful form of trauma is Betrayal Trauma, a subtype of PMIE (Smith and Freyd, 2014), which describes the violation of trust that occurs when a

perpetrator exploits a victim. In military (e.g., deployment) contexts, survivors are tightly knit with their fellow team members and may literally depend on their perpetrator for survival or for important career-related needs (e.g., occupational advancement, job security). Betrayal trauma could be considered the ultimate form of a power imbalance being tarnished. While betrayal trauma can happen at an interpersonal level, it can also occur at a broader systems level (termed institutional betrayal) (Reinhardt, Smith, & Freyd, 2016). For example, if a previously trusted institution defends perpetrators and/or generates an environment of unsafety for survivors, such systemic actions could be classified as a form of institutional betrayal. These forms of institutional betrayal have been documented widely in academic institutions, religion, as well as military and paramilitary environments (Smith & Freyd, 2014; Pyke, 2018; Kelly, 2021; Hannan et al., 2021).

1.4 Military Sexual Trauma and Equity-Deserving Communities of Service

Particularly for equity-deserving populations (e.g., gender minorities) (Smith, Cunningham, & Freyd, 2016), severe psychological outcomes may develop in the context of Institutional Betrayal (Freyd, 1994; 1998), including extreme stress reactions and dissociative symptoms (Smith & Freyd, 2017). Cultural Betrayal Trauma Theory (CBTT) describes how, in the context of intersecting cultural factors (e.g., racial or gender-based discrimination) (Gomez, 2019), an interpersonal trauma (e.g., sexual trauma) can result in an increased severity of psychological outcomes. In the context of a lack of inclusivity of equity-deserving groups (e.g., 2SLGBTQIA+ populations), such as military culture, the betrayal trauma is made more complex (Buton et al., 2019) due to the additive impact of a betrayal of "intracultural trust" (Gomez, 2012; 2017).

In the context of the military, interpersonal traumas are more often linked with Institutional Betrayal, especially in situations of Military Sexual Trauma (MST) and Military Sexual Misconduct (MSM). The Department of National Defence has recently defined MST as "experiences of sexual assault or sexual harassment experienced during military service … MST includes any sexual activity that you are involved with against your will" (Department of Defence, 2023). The Canadian Forces and the Department of National Defence expand on this concept with the term MSM, which is described as "conduct of a sexual nature that causes or could cause harm to others, and that the person knew or ought reasonably to have known could cause harm" (Cotter, 2019). For the purposes of the present paper, the term MST will be used to capture the experiences of both MST and MSM.

In the context of MST, institutional betrayal experiences generally include a breakdown of trust in leadership and fellow MP (i.e., betrayal), while survivors may continue to implicitly place complete devotion to their profession and regulatory body in service to a higher cause (i.e., the burden of care associated with their service) (Kelly, 2021). If the institution reacts negatively to an allegation of MST, expectations of trust and safety are irrevocably changed (Rufa et al., 2022). The MST survivor typically experiences intense feelings of shame, guilt, embarrassment, and blame misattribution (i.e., often blaming themselves) (Holliday & Monteith, 2019). In terms of the prevalence of MST in military environments, MP survivors have described it as "pervasive" and "inescapable" (Lofgreen et al., 2017, p. 411). As a form of cumulative trauma, MST is often reported by survivors as having occurred before, during, and after their time in service (Lofgreen et al., 2017). As a result of both MST and the impact of institutional betrayal, survivors' feelings of trust in the institution of the military are destabilized, creating a barrier to

help-seeking (Reinhard, Smith, & Freyd, 2018). Following the conclusion of military service, post-MST recovery is impeded, as is reintegration into society (Andresen & Blais, 2019).

As previously discussed, minority populations are more likely to face increased negative outcomes due to social and institutional stressors. However, they are also more likely to be targeted because of belonging to a minority population (Meyer, 2007). Minority Stress Framework theory suggests that minority populations, such as the 2SLGBTQIA+ population, are more likely to face stigma and discrimination purely by virtue of their lower social position relative to other members of society (Meyer, 2003). This framework also outlines how, because of the increased number of social pressures, minorities are also more likely than non-minority populations to face negative health outcomes (Meyer & Frost, 2013).

Thus, according to the Minority Stress Framework, the impact of MST is further complicated by belonging to a sexual minority population (e.g., female-identifying service members, the 2SLGBTQIA+ community) (Meyer, 2003, 2007; Meyer & Frost, 2013). As members of a military gender minority population, woman-identifying MP face greater rates of MST than do male-identifying MP (Middleton & Craig, 2012), and relatedly, increased rates of PTSD associated with MST (Mattocks et al., 2012). Increased rates of MST and PTSD have also been found among female-identifying veterans (Cobb Stott et al., 2014). Female service members who experience PTSD following MST experience significant functional impairment, as well as negative physical and mental health outcomes (Turchik et al., 2012; Gilmore et al., 2016). Another equity-deserving population, the 2SLGBTQIA+ military community, faces an even greater risk of MST (Blosnich, Gordon, & Fine, 2015). Consistent with the predictions of Minority Stress Theory, this group has been found to be disproportionately burdened with cumulative day-to-day stressors (e.g., micro-aggressions, discrimination, stigma) than are other

service members (Goldbach et al., 2023). Minority stress theory suggests that 2SLGBTQIA+ service members, because of the cumulative effects of discrimination, stigmatization, and an overall lack of acceptance in military environments, are more likely to experience adverse health outcomes (Meyer et al., 2003), including increased rates of mood disorders, personality disorders, and PTSD (Lindsay et al., 2016).

1.6 Theoretical Underpinnings of Military Sexual Trauma and Military Sexual Misconduct

There are several theories which help to explain the prevalence of MST and MSM in military culture, as well as the undue impact it has on sexual and gender minorities (i.e., female-identifying, 2SLGBTQIA+-identifying).

The theory of Heterosexual Hegemony (i.e., societal view of male-identifying-dominated heterosexuality, as opposed to homo/other-sexuality, as natural and normal) is deeply entrenched within most Western military ideologies (Kinsman & Gentile, 2010; Belkin & Bateman, 2003). These values stem from historically based patriarchal beliefs about the best management of social order and structure and are associated with difficulty accepting those who do not fit socially constructed views of normalcy (Castro et al., 2015; Cotter, 2016; Lankford, 2012). In the case of MST, MP with nonconforming gender identities are targeted based on the belief that they somehow violate these ideals.

Social Dominance Orientation describes the attitudinal structure of an authority figure's extant right to exert dominance over subordinate social groups (e.g., those that differ in their sexual orientation, gender expression, ethnicity, education level, etc.) (Sidanius & Pratto, 1999). It suggests that the systematic oppression of less dominant social groups is governed by systemic forces, which are "hierarchy-enhancing" social groups and "hierarchy-maintaining" attitudinal perspectives (Sidanius et al., 2017, p. 149-150). By this logic, in the case of MST, rape myths

and heterosexual ideologies which target a less dominant social group (e.g., 2SGLBTQIA+ military populations) are sustained by the more dominant group (e.g., heterosexual male-identifying military populations) to maintain their position of power and authority. It is critical to note that while many male-identifying cis-gendered individuals may not intentionally engage in behaviours associated with Dominance Orientation, they hold a position of privilege, implying an increased responsibility to recognize their role in its perpetuation, such as a lack of awareness or willful blindness to its impact (Callaghan, 2020).

Another common political orientation in military contexts is Right-Wing Authoritarianism, which purports that coercive tactics, blind obedience, and absolute respect for authority are necessary to maintain social order (Altemeyer, 1998). It has been linked to workplace bullying (Parkins, Fishbein, & Ritchey, 2006) and abusive attitudes, such as harm to another person being somehow permissible (Wilson & Sibley, 2013). These features of Right-Wing Authoritarianism imply that sexual aggression towards those of a lower social hierarchy, such as woman-identifying and 2SLGBTQIA+ MP, is permissible (Turchik & Wilson, 2010; Whitley & Lee, 2000; Cramer et al., 2013). Furthermore, research has demonstrated how Right Wing Authoritarianism has functional implications for the cultural environment of military units, resulting in a lower degree of efficiency and morale among unit members (O'Keefe, Son Hing, & Catano, 2023).

Finally, the Perpetrator Hypothesis (Castro & Goldbach, 2018) describes the additive impact of hyper-masculine, right-wing ideologies on MST and the 2SLGBTQIA+ military community. In addition to fundamental institutional ideological impediments, sexual and gender minority service members face overwhelmingly higher rates of deliberately perpetrated MST than do other military groups (i.e., deliberate and malicious actions that selectively and

specifically target 2SLGBTQIA+ community members) (Blosnich, Gordon, & Fine, 2015). They are ultimately left with profound negative impacts on their mental and physical health (Lindsay et al., 2016). Adverse behavioural outcomes can include a reluctance to engage in help-seeking behaviours, struggling internally to understand their identity/role as MP, and overall lower job satisfaction, morale, and unit cohesion than other service members (Smith, 2008; Castro & Goldbach, 2018; Klemmer et al., 2022).

1.7 Qualitative Examination of OSI Experiences

As civil servants and protectors of national security, PSP and MP risk their lives on a daily basis. It is imperative that an understanding of OSI, as well as precipitating conditions of occupational stress (e.g., PPTE, PMIE), are factored into our understanding of their lived experiences. As the risk of trauma exposure is so great in both professions, trauma research has a duty to better recognize and understand the impact of their service on OSI. Qualitative research offers an efficacious and empirically supported method by which to measure these individual differences in symptom expression. Indeed, it is through qualitative exploration of the experiences of OSI, as well as through query of behaviourally-specific language (Pearson et al., 2010), that gradients of person-specific experiences (Edgelow et al., 2023) may be elucidated.

Qualitative methods and inquiry are methods of scientific inquiry that are uniquely suited to answering and depicting descriptive examples of observable human phenomena (Agius, 2013), such as self-described experiences of OSI symptomatology in a special population. Indeed, quantitative methods alone would be ill-suited to capture the person-specific impacts of OSI (Crabb & Chur-Hansen, 2009), particularly with respect to gradients of symptom expression. Important practices should be followed throughout the process of qualitative inquiry to protect against the risk of a biased interpretive lens. This risk may be protected against

through triangulation, a form of team-based qualitative analysis which involves the active input of multiple raters and coders in interpreting qualitative findings. This form of team-based inquiry (Abraham et al., 2021; Campbell et al., 2021) helps to ensure the rigorous of results by maintaining interrater reliability. In cases of disagreement, interpretation may be further refined or re-examined in light of in-depth discussions between coders. The present qualitative research actively utilized triangulation in its analytic process to bolster the rigorousness of its results and extend the applicability of its findings to the greater scientific literature.

In considering forms of protecting against bias in qualitative inquiry, it is critical to discuss the practice of reflexivity, a self-reflective exercise in which a qualitative researcher engages in "active acknowledgment of her own actions and decisions which will inevitably impact upon the meaning and context of the experience under investigation (Horsburgh, 2003, p. 309). This process is dynamic, unfolding, and critical, requiring a personal examination of both the researcher's inherent presuppositions but also their reactions to the participants' responses to questions (Holloway & Gavin, 2017). Indeed, as per Berger (2015), as a qualitative researcher who is simultaneously a member of several equity-deserving communities, a survivor of trauma, a white upper-class academic, and my training as a clinician-researcher, my own personal lived experiences connect me as both an "insider" and an "outsider" to the phenomena of inquiry in this dissertation. I actively considered these, as well as my theoretical feminist and action-oriented approaches, while reflexively engaging with the data throughout my iterative analyses. However, without utilizing the process of reflexivity, my preconceived notions, emotional responses to participants' responses, and subconscious drivers may have inadvertently skewed the interpretive lens I utilized and the results which emerged from the data. To protect against the risk of bias, I engaged in multiple protective strategies, including the use of a "continual internal

dialogue" (Mitchell et al., 2018), investigator triangulation, a regular mindfulness practice, reflexive journaling, and bracketing (i.e., the practice of "refrain[ing] from judgment) (Moustakas, 1994, p. 33; Holloway & Gavin, 2017).

Finally, though this dissertation focuses heavily on qualitative methods of inquiry, it is important to note that it also included a scoping review as a unique and distinct way to examine the research questions of interest. Scoping reviews are a systematic form of inquiry which are rigorous in their methodological approach to data analysis and simultaneously iterative and flexible in how these data are described and synthesized (Peters et al., 2021). The inclusion of a scoping review as a chapter was complimentary to the present collection of studies. For example, given the degree of stigmatization towards OSI and the complexities of seeking input from stakeholder groups (i.e., equity-deserving communities facing systemic barriers), the use of a scoping review offers an appropriate and applicable way to guide future research activities, promote knowledge synthesis, and bolster the translatability of findings to stakeholders and consumers alike (Tricco et al., 2018).

1.8 Dissertation Objectives

To this end, the present thesis endeavoured to answer two questions:

Goal 1: How do two populations of service personnel, PSP and MP, describe their experiences of OSI (i.e., psychological, health, social, and functional domains) due to organizational and operational stress exposure?

Goal 2: How do two organizational stressors, MSM and MST, uniquely impact the person-specific experience of OSI for equity-deserving personnel (i.e., woman-identifying, 2SLGBTQIA+)?

To accomplish these goals, this dissertation utilizes qualitative methods to describe the "how", "why", and "what" of these participants' lived experiences (Hamilton & Finsley, 2020, p. 2). Three types of qualitative research methods were employed, including: interpretive phenomenological analysis, exploratory thematic analysis, and a scoping review. Chapter 2 (Study 1) explores Question 1 in a population of treatment-seeking PSP. Through an interpretive phenomenological lens, it interprets and synthesizes the self-described impact of OSI, as well as the impact of organizational stressors as they contribute to symptom expression. Chapter 3 (Study 2) shifts the focus to examine Questions 1 and 2 in a different minority community of service, that is, woman-identifying MP. This study captures how an equity-deserving population of MPs describe their experience of an organizational stressor, MSM, and its associated emotional, social, and functional outcomes. Finally, Chapter 4 (Study 3) expands on Questions 1 and 2, examining this same organizational stressor, MST, in a second minority community of service, 2SLGBTQIA+ MP. A scoping review of the extant literature review was conducted and identified themes of negative impacts to domains of well-being (i.e., health, psychological, social, and functional). Through these three studies, dimensions of the lived experience of OSI in multiple PSP and MP populations are qualitatively examined. Furthermore, they highlight the role of person-specific factors, such as belonging to an equity-deserving community, in exacerbating the outcomes of operational and organizational stressors.

Chapter 2: The Mental Health Toll of Service: An Examination of Self-Reported Impacts of Public Safety Personnel Careers in a Treatment-Seeking Population

Chapter Link: The work in the following chapter will be published in Armed Forces and Society, DOI: 10.1080/20008066.2023.2269696 .

Public safety personnel (PSP) are exposed to high rates of PPTE as part of their day-to-day jobs, which can result in complex mental health OSI. PTSD may develop, resulting in negative implications to mental, social, and functional wellbeing. The following chapter characterizes the self-described personal impact of PTSD in a population of treatment-seeking PSP, utilizing the DSM-5-TR's criteria A-E as a qualitative lens. Through developing a critical understanding of how PSP subjectively express their experience of PTSD symptomology, this research aims to support targeted PTSD treatment outcomes for PSP.

The Mental Health Toll of Service: An Examination of Self-Reported Impacts of Public Safety Personnel Careers in a Treatment-Seeking Population

Sarah Lade[1], email: lades@mcmaster.ca; postal address: 100 West 5th Street, Hamilton, ON, Canada, L9C 0E3

Bethany Easterbrook[1,2,4], email: easterb@mcmaster.ca; postal address: 100 West 5th Street, Hamilton, ON, Canada, L9C 0E3

Andrea Brown[1], email: browna84@mcmaster.ca; postal address: 100 West 5th Street, Hamilton, ON, Canada, L9C 0E3

Heather Millman[1], email: millmanh@mcmaster.ca; postal address: 100 West 5th Street, Hamilton, ON, Canada, L9C 0E3

Andrea M. D'Alessandro-Lowe[1], email: dalesa1@mcmaster.ca; postal address: 100 West 5th Street, Hamilton, ON, Canada, L9C 0E3

Charlene O'Connor[2], email: charoco@gmail.com; postal address: 150 Delhi St., Riverslea Building, Guelph, ON, N1E 6K9.

Margaret C. McKinnon[2,3] † mckinno@mcmaster.ca; postal address: 100 West 5th Street, Hamilton, ON, Canada, L9C 0E3

Affiliations

[1]Department of Psychology, Neuroscience & Behaviour, McMaster University, Hamilton, ON, Canada

[2]Homewood Research Institute, Guelph, ON, Canada

[3]Department of Psychiatry & Behavioural Neurosciences, McMaster University, Hamilton, ON, Canada

[4]MacDonald Franklin Operational Stress Injury Research Centre, London, ON, Canada

† This author holds senior authorship

Corresponding Author: Dr. Margaret McKinnon

mckinno@mcmaster.ca

Abstract

Introduction: Public safety personnel (PSP), including firefighters, paramedics, and police officers, are exposed to traumatic events as part of their day-to-day jobs. These traumatic events often result in significant stress and increase the likelihood of negative mental health outcomes, including post-traumatic stress disorder (PTSD). The present study sought to develop an in-depth understanding of the lived experiences of PSPs as related to the mental health toll of their service. Through a series of targeted focus groups, Canadian PSP were asked to provide their perspectives on the PTSD-related symptoms that resulted as a by-product of their occupational service. The DSM-5-TR PTSD criteria (A-E) provided a thematic lens to map the self-described symptomatic expression of PSP's lived experiences.

Methods: The present study employed a phenomenological focus-group approach with a treatment-seeking inpatient population of PSP. Participants included PSP from a variety of occupational backgrounds. Using semi-structured focus groups, fifty-one participants were interviewed. These focus groups were audio recorded, with consent, and transcribed verbatim. Using an interpretive phenomenological approach, emergent themes within the data were inductively developed, examined, and connected across individual cases.

Results: Utilizing the primary criteria of PTSD (Criteria A-E) outlined by the DSM-5-TR, we identified qualitative themes that included exposure to a traumatic event, intrusion symptoms, avoidance symptoms, negative alterations in mood and cognition, and marked alterations in arousal and reactivity.

Conclusion: PSP are exposed to extreme stressors as a daily part of their occupation and are at elevated risk of developing mental health difficulties, including PTSD. In the present study, focus groups were conducted with PSP about the mental health toll of their occupations. Their experiences mapped onto the five primary criteria of PTSD, as outlined by the DSM-5-TR. This study provides crucial descriptive information to guide mental health research aims and treatment goals for PSTD in PSP populations.

Keywords: qualitative, public safety personnel, mental health, self-report, PTSD, first responders

Data Availability Statement: The data that support the findings of this study are available on request from the senior author. The data are not publicly available due to containing information that could compromise the privacy of research participants.

Highlights:

- Repeated exposure to stressful and traumatic events is often a daily occurrence for public safety personnel, actively contributing to an increased risk of development of mental health disorders, including Post-Traumatic Stress Disorder, in this population.
- Through a series of interviews, the present study examined the subjective experiences of traumatic events in a treatment-seeking population of public safety personnel. Participants' narrative descriptions of their experiences were examined and analyzed using the criteria of Post-Traumatic Stress Disorder, as outlined by the Diagnostic and Statistical Manual of Mental Disorders-Version 5 – Text Revision, as a thematic lens. Analyses yielded rich descriptive information of the symptomatic expression of criterion-specific themes.
- The present study offers valuable insights into how a treatment-seeking population of public safety personnel experience their trauma-related symptoms. It also offers an

opportunity for both researchers and practitioners to better understand the way public safety personnel may differ from other populations in how they express and understand their experience of Post-Traumatic Stress symptoms.

Introduction

In 2018, the Canadian government enacted the Federal Framework on Post-Traumatic Stress Disorder (PTSD) Act (Government of Canada, 2018), outlining legislation and the formulation of a federal framework for improving tracking of PSTD among occupational groups facing increased risks of PSTD because of their duties. Public Safety Personnel (PSP) were identified as being at a high risk due to increased exposure to psychologically traumatic events (Carleton et al., 2018b). Repeated exposure to stressful and traumatic events is often a daily occurrence for PSP, for whom this may be seen as a "part of the job". The Canadian Institute of Public Safety Research and Treatment (CIPSRT) define PSP as "personnel who ensure the safety and security of Canadians" and includes the following: "paramedics, police border services officers, public safety communications officials, correctional workers, firefighters (career and volunteer), Indigenous emergency managers, operational intelligence personnel, police (municipal, provincial, federal), and search and rescue personnel officers, correctional, probation, and parole officers, and emergency dispatchers" (CIPSRT Glossary, 2020).

These stressful and potentially psychologically traumatic events (PPTEs) can include exposure to real or threatened death, injury, sexual violence, images of death and dying (e.g., human remains), as well as more subversive forms of harm, such as harassment or threats (Sareen et al., 2017). PSP may also be exposed to potentially morally injurious events (PMIEs) – events in which a person conducts, witnesses, or fails to prevent acts which transgress their moral values (Litz et al., 2009). Examples of PMIEs among PSP include having to remove a person experiencing homelessness from a public space, feeling poorly trained to work within broken systems with a lack of accountability, allocating limited life-saving resources, or being required to use more force than comfortable with (Lentz et al., 2021). Exposure to PPTEs and

PMIEs are known and largely unavoidable features of PSP professions and the negative impact of these events on the mental health of society's critical service members is undeniable.

In response to PPTEs or PMIEs, PSP often experience negative physical effects (e.g., headaches, heart disease, muscle tension), psychological effects (e.g., PTSD, anxiety, depression, increased stress), and social impacts (e.g., social exclusion, cynicism, avoidance of friends and family; Ricciardelli et al, 2018). In addition, these exposures can lead to feelings of anger, shame, guilt, betrayal, and worthlessness (Litz et al., 2009: Litz et al., 2018). Indeed, in the 2013 Canadian Mental Health Survey, Canadian PSP were also found to be at increased risk of major depressive disorder, generalized anxiety disorder, and alcohol use disorder, because of their exposure to stressful and potentially traumatic events (Carleton et al., 2019; Carleton et al., 2018a). In another study, approximately 45% of the 5,813 Canadian PSP surveyed screened positive for symptom clusters consistent with at least one mental health disorder (Carleton et al. 2018b). Notably, this rate is significantly higher than that of the Canadian civilian population, which screens at a 10% positivity rate on average for symptoms consistent with at least one mental health disorder (Carleton et al., 2018b).

Despite ongoing mental health research among PSP (Haugen et al., 2017; Lowe et al., 2021), little is known about their perspectives regarding the mental health toll of their service. Understanding the perspectives of this population is critical to increase potential treatment options, enhance adherence, and promote positive outcomes stemming from targeted treatments (Weeks et al., 2021). To address this pivotal research gap, we conducted focus groups with treatment-seeking Canadian PSP to gain a first-hand subjective understanding of the mental health toll of their service. The outcomes of these focus groups were published in an in an overview paper (Easterbrook et al., 2022) and revealed crucial areas of the trauma-related

impacts for these populations, including in their relationships, the mental health toll, and potential moral injury.

The present study sought to expand on the rich narrative descriptions of PTSD-relevant themes identified by Easterbrook and colleagues (2022), particularly as they relate to the PTSD diagnostic criteria set out in the Diagnostic and Statistical Manual of Mental Disorders, 5th edition – Text Revision (DSM-5-TR; American Psychological Association, 2022). In most cases, employers or insurance providers require a formal diagnosis of PTSD, made by a licensed health care provider, for PSP to access treatment (Szymanski & Hall, 2022). In Canada, most mental health professionals rely on the DSM-5-TR to inform diagnostic formulations (Kogan & Paterniti, 2017). In this paper, we describe the thematic outcomes of these focus groups using the DSM-5-TR's PSTD criteria (Criteria A-E) to better understand and characterize PSPs' subjective experiences of PTSD symptom expression. This analysis provides important insight into the experiences of treatment-seeking populations and inform treatment objectives for mental health care providers in the provision of tailored PSTD treatment.

Methods

Setting and Participants

Following institutional ethics approval, focus groups were conducted in a mental health and addictions inpatient residential treatment facility located in Canada. Institutional ethics approval was obtained from Regional Centre for Excellence in Ethics (REB #18-08).The facility offers group-based treatment to adults (i.e., 18+ years old) for substance use disorders, trauma, mood, and anxiety-related disorders.

The present focus groups were conducted as part of a dual diagnosis treatment program for individuals with a history of trauma and/or substance use. Twenty-six focus groups were

conducted with self-identified PSP (n = 51). An additional 12 participants who self-identified as military personnel participated in these focus groups but are excluded from the present analysis. These focus groups were conducted once weekly, for approximately an hour, with the number of participants per group ranging from 4-16. Any patient with PSP experience participating in group-based treatment programming was invited to attend the focus groups as often/frequently as they chose.

The mean age of participants was 46.4 (range: 29-80) years of age. With respect to gender identity, the present sample of participants identified only as male (73%) or female (27%). Eighty-six percent of participants identified as White, 8% identified as Indigenous, 2% identified as Other, and the remainder declined to respond.

Thirty-nine percent self-identified as police officers (regional, provincial, municipal, or RCMP), 18% as corrections officers, 18% as paramedics, 10% as firefighters, and 15% as other (unemployed, emergency dispatch, declined to answer). Fifty-five percent identified as having completed a college/university degree, 18% as having completed some college/university, 10% as having completed high school, 12% as having completed some graduate level education, and 6% declined to respond. With respect to marital status, 61% identified as married, 22% identified as separated/divorced, 12% identified as single, 6% as other/ declined to respond.

Participant demographics were not able to be disaggregated further for the purposes of this study due to potentially identifiable characteristics and ethical constraints surrounding protection of participant data and confidentiality. In particular, the PSP community is typically small and somewhat insular, resulting in a much higher likelihood of participants in the study knowing one another or being more easily identified as a result.

Table 1: Demographics of Focus Group Participants

Table 1		
Demographics of focus group participants (n=51)		
	n	**%**
Median age (Range: 29-80 years)	48	
Sex/Gender	51	
Male	37	73%
Female	14	27%
Marital Status	51	
Married	31	61%
Separated/Divorced	11	22%
Single	6	12%
Other/Declined to Respond	3	6%
Ethnicity	51	
White	44	86%
Other/Declined to Respond	7	14%
Education	51	
Completed College/University	28	55%
Some College/University	9	18%
High School	5	10%
Some graduate Level Education	6	12%
Declined to respond	3	6%
Employment status	51	
Working full time	29	57%
Other (e.g., off work, suspended)	13	25%
Retired	6	12%
Declined to respond	3	6%
Current Employment	51	
Police (Regional/Provincial/Municipal/RCMP)	20	39%
Corrections Officer	9	18%
Paramedic	9	18%
Firefighter	5	10%
Other (e.g., unemployed, emergency dispatch, declined to respond)	8	15%

Focus groups were led by Masters' or Doctoral level clinicians, using four different semi-structured question guides, who engaged participants in facilitative discussion to better understand their subjective experiences as PSP, while simultaneously encouraging general discussion and connection amongst group attendees. The interview guides posed discussion questions including what specific challenges and stressors participants' jobs resulted in that

affected their day-to-day lives, including relationships, stigma, potential moral injury, treatment expectations and treatment experiences. The question guides were rotated each session, resulting in some participants engaging in more than one focus group session. With consent, these discussions were audio recorded and transcribed verbatim by three research team members who then assessed them for initial ideas that could represent dominant themes.

Data Analysis

Initially, using an interpretive phenomenological approach (IPA), these data were analyzed and published as a preliminary study of the mental health and trauma/non-trauma-related experiences of military members and PSP (Easterbrook et al., 2022). This preliminary analysis of emergent themes was inductively developed, examined, and connected across individual cases (Engward and Goldspink, 2020). Primary themes were based on participant discussion topics, which were then discussed amongst the coders, and a consensus was agreed upon. Disagreements were resolved through discussion. Independent parallel coding was performed, with two coders evaluating the same raw text, using Miles and Huberman's techniques of data reduction, data display, and conclusion drawing/verification (Miles & Huberman, 1994).

Then, through an "unfolding" (Nicholls, 2019, p. 2) and reflexive exploration, new patterns became observable (Goldspink & Engward, 2018; Smith, 2011), with the data mapping neatly onto the DSM-5-TR PTSD diagnostic criteria (Easterbrook et al., 2022; American Psychiatric Association, 2022). Through supervised (i.e., multiple team members) reflexive hermeneutic analysis, unique data lodgers were identified (Smith, 2011). In the manner of Larkin, Flowers, and Smith's (2009), an "imaginative" (p. 40) systematic IPA methodology was used to guide and develop these insights to fit this new understanding. Thus, utilizing the DSM-

5-TR PTSD criteria as a structured framework by which to map these themes, five team members interpreted and mapped the data accordingly.

Results

The overview study on these data revealed that the phenomenological experiences of PSP's mental health toll and trauma experiences largely mapped onto the DSM-5 PTSD Criteria A-E (Easterbrook et al., 2022). Indeed, the present analyses found unique and descriptive examples of the symptomatic expression of these criteria that included exposure to a traumatic event, intrusion symptoms, avoidance symptoms, marked changes in reactivity, and negative alterations in cognitions and mood. Due to the detailed and sensitive nature of these narrative examples described herein, a content warning is provided to readers.

Criterion A

For a health care provider to provide a diagnosis of PTSD using the DSM-5-TR, they must confirm that the patient experienced an etiological event (Criterion A), that is, an initial exposure to a traumatic event (American Psychiatric Association, 2022). Criterion A is described by the DSM-5-TR as "exposure to actual or threatened death, serious injury, or sexual violence in one (or more) of the following ways: 1) directly experiencing the traumatic event(s); 2) witnessing, in person, the event(s) as it occurred to others; 3) learning that the traumatic event(s) occurred to a close family member or close friend. In cases of actual or threatened death of a family member or friend, the event(s) must have been violent or accidental; and 4) experiencing repeated or extreme exposure to aversive details of the traumatic event(s) (e.g., first responders collecting human remains: police officers repeatedly exposed to details of child abuse)".

PSP participants provided many examples of life threatening and potentially traumatic events that they experienced directly on the job, such as being shot and/or being shot at, stabbed,

punched, strangled, kicked, and being physically assaulted with various weapons (e.g., hammer, shears).

> *...and that can range anywhere from verbal aggression to being threatened to kill you, to stabbings, to assaults, to weapons there for murders. Like, I have been there for everything. (Participant 22; Firefighter/ Correctional Officer)*

> *We chased this guy who had already shot and murdered somebody, and we tracked him down and he turned and come up with a rifle... see the look in his eye and I ... he was going to shoot, I knew it. And then upon inspection of the weapon it was loaded and there was one in the chamber. (Participant 41; Police Officer)*

Participants also reported having their lives threatened and/or the lives of their loved ones threatened.

> *I've been in the [maximum penitentiary] and shit and piss thrown on me and like my life threatened every day. The big one is always, 'I'm going to get out and I'm going to rape and kill your family' and all that stuff. (Participant 22; Firefighter/ Correctional Officer)*

Trauma that incurred because of taking a life while on the job was also discussed. Although police officers are trained to take lives as a possible requirement of their vocation, many consider being forced to take the life of another to be a traumatic experience. The act of accidentally taking a life while on the job (e.g., accidentally hitting a pedestrian with a vehicle while chasing a suspect) also has negative impacts on PSP's mental health.

> *I find it very difficult, with faith in the organization. I believe that there's a moral injury there, with me having to shoot somebody that was mentally ill. (Participant 40; Police Officer)*

In addition to directly experiencing a host of traumatic events, witnessing traumatic events is also common for many PSP. Examples of these types of events that were discussed included drownings, homicides, physical assaults, sexual assaults, and vehicular homicides. For example, one participant described hearing a murder take place:

> *I'm a call taker, was that day, and I deescalated what started as a domestic and turned into a homicide, where I listened to him kill [person], from start to finish. (Participant 42; Emergency Dispatcher)*

PSP also witness, at times, colleagues being injured or even killed while on the job.

> *I've had two partners die in my arms. I've had three partners that were shot, one of them has no eyes. The other guy got his guts blown out 12 feet away [from me], 12-gauge shotgun. (Participant 43; Police Officer)*

Participants noted that they offer unique perspectives on witnessing trauma, because they observe these events in real-time, whereas other professions (e.g., healthcare providers) see the impact of the traumatic event but do not witness the actual event/scene. As described by one participant:

> *A doctor sees the trauma of the person; he doesn't see the traumatic experience where the knife's right there. The person still holding the knife, they're still freaking out and the whole scene where there's clothes and bugs crawling all over it. You know what I mean? It's a little different, you know? (Participant 61; Firefighter)*

Another participant spoke of the hard choices made on the scene of an accident:

> *You got to see bad things, [healthcare providers] see traumas and what have you, but they don't see the person that you've had to leave in the car because there's no way you're getting them out for two hours or an industrial accident. (Participant 4; Paramedic)*

PSP also learn about and are made aware of traumatic events experienced by other PSP. This occurs through numerous outlets, from discussions with each other following traumatic events, to briefings from management following negative outcomes of these experiences. For example, participants discussed learning about events in which their colleagues died due to a traumatic event either on the job or because of the job. For example, one participant noted that they had three partners who died by suicide over the course of their career.

Finally, participants provided examples of experiences that met the last descriptor of Criterion A: experiencing repeated or extreme exposure to aversive details of traumatic events. Potentially traumatic events that participants reported being regularly exposed to at work included homicide and suicide scenes, vehicular homicide, industrial accidents, and child and spousal abuse situations. Many of these events involved significant human suffering.

Participants noted that it is not always seeing the "gore" that is traumatic. Often the trauma comes from seeing people in difficult situations and anticipating the negative impact these situations inevitably may have on victims or witnesses.

> *It's not just the gore, it's the going into a house where there's a domestic and the kid's in a shitty diaper that's probably been there for 2 days and there's crap all over the floor and you know what the kid just saw and it's that kind of stuff that gets to you to it doesn't always have to be the gore. (Participant 9; Firefighter)*

Events involving children were described overwhelmingly as the most distressing events to attend.

> *Well, [my job has] given me PTSD … everything in my [traumatic incidents], other than one, are all child-based. You could only hold so many dying children and not be affected. (Participant 24; Firefighter)*

Events involving children were particularly traumatic for participants who had children of their own, especially if the children were similar in age.

> *The last one I had was a [age] girl that hung herself and I have an [same age] daughter. I had to go home and pick her up and take her to school that day. I was screwed up. And I just went in and as soon as I saw her, I just broke down. (Participant 24; Firefighter)*

Criterion B

Criterion B is described by the DSM-5-TR as the "Presence of one (or more) of the following intrusion symptoms associated with the traumatic event(s), beginning after the traumatic event(s) occurred: 1) Recurrent, involuntary, and intrusive distressing memories of the traumatic event(s); 2) Recurrent distressing dreams in which the content and/or effect of the dream are related to the traumatic event(s); 3) Dissociative reactions (e.g., flashbacks) in which the individual feels or acts as if the traumatic event(s) were recurring. (Such reactions may occur on a continuum, with the most extreme expression being a complete loss of awareness of present surroundings); 4) Intense or prolonged psychological distress at exposure to internal or external cues that symbolize or resemble an aspect of the traumatic event(s); 5) Marked physiological reactions to internal or external cues that symbolize or resemble an aspect of the traumatic event(s).

Criterion B symptoms were endorsed in a variety of ways by PSP. The most frequently discussed intrusion symptom was the experience of distressing dreams that made falling or staying asleep difficult, to the extent that some endorsed not wanting to sleep at all due to the content of their dreams. Many participants also noted that nightmares or distressing dreams regarding the traumatic events that they had witnessed were common.

One participant noted that distressing dreams were a normalized experience among colleagues:

I thought it just came with the job, the nightmares come with the job, that's what you sign up for. (Participant 7; Police Officer)

Some individuals also endorsed feeling as though they were re-experiencing the trauma. They could experience flashbacks "anywhere".

One participant described the experience of even simple daily tasks being difficult due to re-experiencing their trauma:

The shower used to be my safe place and now it's my nightmare…my brain just takes off…it kind of turns into like a flashback reflection and you get lost. (Participant 9; Firefighter)

Other participants described how they would experience physiological reactions when thinking about traumatic events, with one member stating *"I get so keyed up [thinking about the trauma] that I get the adrenaline going. Then that just makes me feel sick."* While many participants endorsed feelings of long-term psychological distress related to the traumas, few discussed explicitly the relation between this distress and their relation to cues that resembled or symbolized the trauma itself. Of note, many individuals commented that even being back at work could trigger psychological distress, which for many, may have been related to the resemblance of the environment in which the trauma occurred.

Criterion C

Criterion C is described by the DSM-5-TR as the "Persistent avoidance of stimuli associated with the traumatic event(s), beginning after the traumatic event(s) occurred, as evidenced by one or both of the following: 1) Avoidance of or efforts to avoid distressing memories, thoughts, or feelings about or associated with the traumatic event(s); 2) Avoidance or

efforts to avoid external reminders (people, places, conversations, activities, objects, situations) that arouse distressing memories, thoughts, or feelings about or closely associated with the traumatic event(s)."

Participants discussed avoidance of stimuli associated with traumatic events, including efforts to evade distressing memories, thoughts, or feelings associated with these events. This avoidance placed strain on relationships with family, friends, and coworkers, as participants found themselves progressively isolating both physically and emotionally from interpersonal relationships. Participants expressed a desire to leave the events of their shift behind them when returning home, either because they did not want to think about distressing events, or because they worried about how hearing of these events could negatively impact their spouse or partner. In both circumstances, public safety personnel described how they felt these experiences led them to isolate themselves from their family and friends.

As one participant explained:

Yeah, like I would be on a shift for whatever, front and low cases so you're gone for 36 hours or whatever. You come home and they'd want to talk and it's just like 'just stay away from me' kind of thing. I don't say, 'Stay away from me', I just, 'Sorry dear I don't want to talk'. I'd go down and put on the news or put on the hockey highlights and have a drink and eventually get to bed and get up in five hours and go back to work. (Participant 51; Police Officer)

Many individuals in our focus groups discussed a similar need to avoid thinking about traumatic events or discussing them with their loved ones, and how this loss of communication often combined with other avoidance behaviours, such as alcohol use, to negatively impact their relationships.

I isolated. I mean I ruined my life, I drank, I cheated on my wife, I isolated, I pushed family away, pushed my wife away. I treated everyone like crap, but I held everyone responsible for my happiness because I didn't know. Doesn't excuse my behaviour but after that call, it affected me. (Participant 7; Police Officer)

Participants described both the mental and social toll of persistently trying to push traumatic memories out of their minds. Some participants avoided their coworkers and work-related events such as holiday parties, because they felt they couldn't mask their feelings enough to fit into a certain professional "persona," or because they simply could not tolerate socialization outside of work. Others avoided public places where they may be identified by other coworkers or members of the public, or locations where specific incidents took place. Several participants found their anxiety was so overwhelming that it was too stressful to leave the house at all.

As one participant described:

Just my anxiety was through the roof. I didn't even want to go to the gym; didn't want to go to the grocery store because I identify myself as my job, not who I really am. So, then it's like, you know, how is work? And I just don't want to talk about it or whatever. So, like I felt like I shut in in the last four months waiting for [treatment facility] to call. It was horrible. Yeah, like just anxious nonstop and super-depressed. Yeah, it was crazy. (Participant 46; Paramedic)

Some participants also reported avoiding public spaces or leisure activities because they felt unsafe, or because they might run into members of the public with whom they had previously interacted on the job. This pattern was particularly true for police or correctional

officers, some of whom voiced anxiety or discomfort with the possibility of running into "criminals" in their off time, such as on sporting teams or at their children's school events.

Even when staying at home, many participants described frequently practicing distraction behaviours to avoid traumatic memories. Several participants voiced a need to keep chronically busy and distracted, whether that meant excessive housework or running errands on their days off, or to "*grab a couple of beers and forget a bad day."* Interestingly, several participants described taking overtime shifts to "keep busy with work" and avoid "off-time." Others felt that they could only discuss traumatic events during heavy drinking sessions with coworkers who "understood" what the participant had been through. Despite various strategies, these participants felt a need to avoid thoughts of their troubling work experiences.

> *For like 10 years I wouldn't say I was fine, but I just kept burying all this stuff and kept working and liked staying busy because if you're standing still – like the only way I could get through my day is if I completed 100 things, like if I wasn't working overtime, I wanted to stay busy and that was the only way. And then when I was off work things just came crashing down because I couldn't stay busy enough, and that staying busy was the only thing that helped me. But after that it kind of just all went crashing down. (Participant 12; Border Services Officer)*

Many participants expressed trepidation toward returning to work post-treatment as another mechanism of avoidance. Some worried about going back to the stressful environment or their ability to handle difficult calls. Some even doubted whether they would return to the job, weighing the risk to their mental health and the amount of work that went into achieving their position and status. Many felt that mental health supports in their place of work were inadequate, serving only as "lip service" to address the mental health struggles of staff or officers. Many

pointed out that the coping techniques they had been taught, while practical on-shift, did not help in their day-to-day management of PTSD symptoms. They reported feeling as though they had to choose between maintaining their mental health and being placed on unfulfilling "modified" duties.

> *I found the badge I made when I was six and it had my name and said, "I want to be a police officer". So, all my life I worked towards that and in my heart now I know I can't go back to it, so I'm trying to find a purpose for my life now because our job is – the reason we do it is because we love protecting the public and, yeah, helping. (Participant 35; Police Officer)*

Those participants considering a return to work felt similar conflicts, and despite tools gained through treatment, continued to feel the need to avoid re-exposing themselves to traumatic environments. One participant summarized what many participants expressed, when he questioned:

> *'How do you go back?' Like, we have these lifesaving tools, life-altering tools that we need to implement that I want to implement, because I want to be better. I mean, I don't think any of us would be sitting here, if we didn't want to be better. How do you go back into that? I don't see how. (Participant 7; Police Officer)*

Criterion D

Criterion D is described by the DSM-5-TR as "Negative alterations in cognitions and mood associated with the traumatic event(s), beginning or worsening after the traumatic event(s) occurred, as evidenced by two (or more) of the following": 1) Inability to remember an important aspect of the traumatic event(s) (typically due to dissociative amnesia, and not to other factors such as head injury, alcohol, or drugs); 2) Persistent and exaggerated negative beliefs or

expectations about oneself, others, or the world (e.g., "I am bad," "No one can be trusted," "The world is completely dangerous," "My whole nervous system is permanently ruined"); 3) Persistent, distorted cognitions about the cause or consequences of the traumatic event(s) that lead the individual to blame himself/herself or others; 4) Persistent negative emotional state (e.g., fear, horror, anger, guilt, or shame); 5) Markedly diminished interest or participation in significant activities; 6) Feelings of detachment or estrangement from others; and, 7) Persistent inability to experience positive emotions (e.g., inability to experience happiness, satisfaction, or loving feelings).

Some participants felt difficulty communicating with spouses and family members. Many participants discussed an overall decrease in their ability to engage in empathy in general, leading to a noticeable reduction in their ability to tolerate any interpersonal conflict at home:

> *You don't have empathy for [your spouse's problems] because you spent all day crushing your feelings and empathy because you have to, because that's your job, so you don't – it's not like a switch you can turn on and off, it's too big of a stretch and a demand to be able to do that. You'd almost need a split personality to have an effective work life and an effective home life. (Participant 16; RCMP Officer)*

Participants noted that, compared to early in their careers, their experiences as PSP (and relatedly the traumatic events they experienced) negatively impacted their worldviews. Many participants expressed feeling cynical of their organizations/governing bodies. As one participant described:

> *...like a callus over your emotions, just like you would get from lifting, you know, calluses on your hands. It's the same thing, like a callus over your emotions. (Participant 60; Correctional Officer)*

It's almost like you have a filter for the outside world now and your filter changes because it's been blocked by this [work experiences] and you can't help but see the world differently. (Participant 32; Paramedic)

Interestingly, this cynicism led to an intense, *"flip of the switch"* anger over minor stressors, which participants deemed typically disproportional to the situations they described.

Some individuals expressed that their emotional outbursts were driven by the need to keep how much they were struggling private, even attempting to hide these symptoms from their family members.

One participant described that:

I know my family has suffered because of my PTSD but it's like you said it's better than them knowing what's really going on out there. (Participant 24; Firefighter)

Symptoms typically related to emotional dysregulation, such as hypervigilance, agitation, and disproportionate anger, were also discussed:

Say the regular everyday stuff that people go through that is traumatic to them - whether it's my spouse or friends or somebody else and they're talking about some stress that they've gone through and then I get angry because I think 'Well that's your problem?! That's what your worst day is?! (Participant 52; Police Officer)

Many believed that their friends and family, as civilians, were unable to relate to them, leaving them feeling misunderstood and feeling isolated. Furthermore, some found it difficult to draw on their emotions to connect with others, leading to further frustration.

Criterion E

Criterion E is described by the DSM-5-TR as "Marked alterations in arousal and reactivity associated with the traumatic event(s), beginning or worsening after the traumatic

event(s) occurred, as evidenced by two (or more) of the following: 1) Irritable behavior and angry outbursts (with little or no provocation), typically expressed as verbal or physical aggression toward people or objects; 2) Reckless or self-destructive behavior; 3) Hypervigilance; 4) Exaggerated startle response; 5) Problems with concentration; and, 6) Sleep disturbance (e.g., difficulty falling or staying asleep or restless sleep).

Participants discussed being frequently "on-edge" or "keyed-up", unfortunately resulting in unintended outbursts towards people they cared about. Many expressed guilt or shame regarding their angry outbursts towards friends and family members, especially if these outbursts were directed at their children, but feeling at a loss for how to manage their "anger problems". They also indicated that they no longer had the "skills" needed to regulate their emotions effectively. These outbursts lead to relationship dysfunction and ongoing psychosocial difficulties in participants' personal relationships.

One participant spoke of vulnerability and a loss of self-control with respect to anger:

I know for me at least I feel more vulnerable. It seemed like when I first got on, I was able to kind of control myself on the scene more and now I find myself really having to work hard to not get emotional or upset especially if there's kids involved or whatever. That kind of seems to be my trigger. So now I find myself really struggling to keep myself put together to do what we got to do in the time, where before I was able to kind of focus. Now I just don't have that skill anymore; it just seems like the emotions start to take over. (Participant 9; Firefighter)

Another described the feelings of immense guilt after losing control:

Yeah, because when I'm done like freaking out then I realize that wow seriously I need to get control of myself, but I can't. And I think okay and then I'll talk to my daughter and

like "I'm so sorry", and I'd apologize but the words are already said, like I've already been angry so how do I take that back? (Participant 4; Paramedic)

One participant described "flying off the handle" at their young child:

The simplest thing that you can look at and just say "Okay this is only easy; I can deal with this." Well now it just becomes all a big deal; like my [child] if he's doing something and he's not listening or, that just compounds into a whole thing where I'm just flying off the handle for no reason. But it's because of the build-up of everything else, now I can't deal with that. (Participant 10; RCMP Officer)

Multiple participants spoke of their thinking being overly focused on trauma-content (either the subject and/or aftermath) and how this kept them from being able to be actively present in their lives. Participants would attempt to distract themselves by keeping busy with tasks or exhausting themselves to regulate.

...Because it's so focused on your trauma that you just don't think about anything else. I know, my husband had said to me that he thought I was angry at him and, because I just wasn't talking to him anymore. It's just everything was just, dealing with what's in my head. And, even with my kids, I noticed the same thing. Like, just disconnecting from them, as well. (Participant 3; Paramedic)

Many participants engaged in maladaptive coping strategies, including drinking excessive amounts of alcohol, engaging in risky sexual relationships, and/or engaging in recreational drug use. These behaviours surrounded a reported lack of inhibitory control regarding future-oriented thinking, ultimately leading to shame-related actions and hiding their coping strategies from friends and family. Importantly, participants felt helpless and often unable to find any other way to dampen the intensity of their symptoms other than to use these coping strategies. Participants

also described feeling under-stimulated and/or "dead inside", feeling drawn to engage in jobs with a greater element of risk, or pastimes of a risky nature, as though it provided a sense of comfort or normalcy.

> *I'm an adrenaline junkie, I've done the skydiving, I've done all that stuff, playing paintball this weekend just to try and feel normal again but that's one thing that I just don't feel any more either, that adrenaline rush and then enjoying a bit of the hobbies I used to do, it's just kind of gone. It feels like I'm just numb now where I just can't get that feeling back, you know, that true happiness. After, when we did that return-to-work thing I drove home like a fucking asshole, three hours blasting at 140/150. I'm like the kind of guy I want to chase down and I hope – I caught myself getting home and I was like, "That was stupid". But it was just that, I needed that energy, I needed that just to kind of get me through it, just to get me home. It was kind of that, you know, and when I got home, I'd go 'you're an idiot, like was that – you were risking yourself and other people on the road, it was just stupid'. (Participant 9; Firefighter)*

> *Yeah, the risk-taking, that's the only time I... feel good. I'm too much of a coward to jump out of an airplane and stuff but just the more gruesome, the more smelly, the more violent a call is at work those are the only calls that I want to take. (Participant 7; Police Officer)*

Heightened arousal and reactivity were reported across a widely varying range of circumstances. Participants discussed needing to be "prepared" or "on-guard", even in seemingly benign situations. There were pervasive negative impacts to relationships because of these startle responses, well as significant feelings of guilt and shame surrounding them.

You know, like so it's affected my relationship that way and, kind of, that startled effect. You know, you're overreacting to things that are just nothing at all, maybe...But even the talking. When the talking comes on over the PA, just the talking, because they are saying visiting hours are over, something like that, like I will get that instant startle jump… (Participant 20; Paramedic)

I see someone walk into a room; I just see where their hands are placed. And, if they kind of got their hand tight to their side but, they're swinging the opposite arm, like, I immediately think there could be a weapon in that pocket, just, yeah, threat assessments on everything, situations, rooms. (Participant 7; Police Officer)

Finally, many participants spoke of ongoing sleep difficulties, both in terms of falling asleep and staying asleep. Many participants spoke of nightmares, attempts to avoid nightmares, and the need for sleep aids (both prescribed and unprescribed).

It [keeping busy] keeps your mind off all the other stuff.... That's pretty much the only coping mechanism that I've ever used that – like there's others things, drinking and stuff to go to sleep, and those aren't healthy either but… (Participant 12; Border Officer)

But I fall asleep like that, probably within less than a minute. But as soon as I wake up to go to the bathroom or something that's it for the night. I'll wake up at 11, 12 and I'll just ... I got told get the hell out of bed and do something, but I just lay there, and I re-live all those fatal accidents and the smell of burning human flesh and…" (Participant 43; Regional Police)

Potential Moral Injury and Betrayal

In addition to describing symptoms across the spectrum of PTSD symptom clusters, many participants spoke of potentially morally injurious events. These events included

witnessing tragic yet preventable outcomes or having to make complex decisions that resulted in loss of life, while others felt that it was the repetitive nature of complex decisions made over time that could lead to these feelings of shame and guilt.

One participant explicitly discussed moral injury in those terms, stating:

It's that moral, those moral injuries right… it's not one trauma, I liken it to, it's that getting that little rock in your shoe where you can walk ten steps and kick it out, and it's okay, ten more steps you get another pebble in your shoe…You do that over ten years, you walk around with those pebbles in your shoes, it's going to irritate you after a while, and that's what I find in my experience, that's what kills me. And some of the big things are the straw that breaks the camel's back, [but] sometimes it's small. (Participant 39; Police Officer)

Many participants discussed guilt, shame, and betrayal as broader concepts, without explicitly mentioning the term moral injury. Another concept that was brought up in many different forms were feelings of betrayal. Some participants felt as though their organization did not care about them as people.

As one participant expressed:

…they squeeze as much out of you as they can then when you break, they just throw you away.(Participant 7; Police Officer)

Others felt a distinct difference between the support that is purported to be offered and the supports that were received or available. Another participant expressed feeling a lack of support from their organization:

Like, just having the lack of support. Like, they say they do all these great things for us and, they don't. They don't care one single bit. (Participant 12; Border Services Officer)

These feelings of betrayal exacerbated their frustration with the "*political red tape*" associated with careers in public safety organizations.

While guilt and shame may be associated with Criterion D of PTSD, they have also been shown to be crucial and individual components of moral injury. Whether the guilt and shame were associated with PTSD diagnoses or potential moral injury within this sample was not assessed in this study.

Discussion

The present study examined the qualitative experiences of PTSD symptoms among PSP who were seeking inpatient psychiatric treatment at a residential facility in Canada. We conducted focus groups with 51 self-identified PSP who were being treated for trauma and/or substance use disorder, regarding their subjective experiences of how exposure to traumatic events in their occupations impacted their personal well-being. The narrative descriptions provided by participants imparted rich information surrounding the subjective experience of PTSD symptoms across multiple PSP populations. Importantly, despite a wide range of traumatic experiences referenced among participants, criterion-specific themes (Criteria A-E) were readily identified within the subjective descriptions of their symptoms.

Considering the extensive experiences of traumatic occupational for PSP in the pandemic (Carmassi et al., 2020), in addition to the high rates of PSTD in treatment-seeking populations of PSP (Patel et al., 2022), the present results on the mental health toll of on-the-job traumatic experiences of PSP are both timely and relevant (Haugen et al., 2017; Lowe et al., 2021). The present study offers valuable insight into how a treatment-seeking population of PSP experience their trauma-related symptoms. For example, future research should examine the differences in how individuals describe their subjective experiences of the same symptom to further refine

current treatments for that symptom cluster. Furthermore, by exploring the narrative descriptions of symptoms, trauma-focused treatments may be better designed to increase patients' ability to tolerate trauma-specific memories, as opposed to avoid, which is critical for cognitive and emotional processing of traumatic experiences (Foa et al., 2008).

Currently, Cognitive Processing Therapy (CPT) is one of the "gold standard" treatments for PTSD (Resick, Monson, & Chard, 2016), and is part of the standard treatment provided at the inpatient hospital in which participants were being treated. CPT is an evidence-based treatment that assists patients in identifying errors in their thinking patterns and confronting maladaptive and inaccurate thought patterns through cognitive restructuring. Since participants in our study were actively participating in CPT, it was common for them to discuss trauma-related symptoms daily. Different results may have been observed if participants were not actively in treatment and/or not accustomed to speaking about their traumatic experiences. For example, in the context of a group inpatient treatment environment, participants may have provided less detailed descriptions had they not already spent time discussing trauma(s) with a licensed therapist on the inpatient unit.

In consideration of narrative descriptions of treatment targets, symptoms such as overgeneralized/assimilated/accommodated beliefs (e.g., when talking about levels of responsibility [blame, responsibility, and accidents]) and ruminative processing (e.g., repetitive thought cycles of blame/shame/grief) could be improved through CPT (Hayes & Andrew, 2020). The re-experiencing of symptoms is a distinctive feature of PSTD and predicts prognosis and chronicity of symptoms as well as degree of disability (Breslau et al., 2005). By developing a better understanding of the way in which PSP experience/express their own understanding of their own trauma-related symptoms, treatment engagement, outcomes, and efficacy can be

bolstered (Holmes et al., 2018). One example of such insights that emerged was the way in which participants coped with these cognitive symptoms while actively working (i.e., not on disability). Participants reported needing to keep busy to cope with ongoing activation of PSTD symptoms while actively partaking in their day-to-day occupational duties, which research has supported as one of the healthier ways in which public safety personnel can cope with occupational stress and burnout (Sundaram et al., 2014).

Also of note is the fact that these participants were currently off-work, were inpatients, and treatment-seeking. Their symptom severity warranted more extensive treatment than that of a non-treatment-seeking population or outpatient-treatment-seeking PSP population. As a result, their narrative descriptions may have differed from those of PSP who remained at work/ were on active duty or of those who were seeking outpatient supports. For example, participants who were still actively working may have been concerned about providing details that could potentially adversely affect their job or may not have experienced the same intensity of distress associated with the PPTEs as inpatient treatment-seeking PSP. Further, patients who are off work may have had significantly more time to think about their traumatic experiences, and in fact been able to provide a greater degree of detail about their experiences as a result.

PSP may experience PMIES that are uniquely complex and that may differentially impact them in terms of symptom expression and treatment outcome when compared to civilian populations (Anderson et al., 2020). By developing a better understanding of the specifics of how PSP experience these symptom clusters, treatment providers and researchers may better inform treatment modality alterations that are specifically tailored to this population. For example, in treatments like Cognitive Processing Therapy (Resick, Monson, & Chard, 2016), not all examples provided in the therapeutic material are directly relatable for PSP (e.g., when

talking about levels of responsibility as related to assigning blame in cases of accidents or mass casualties). A lack of relatability of material can hinder the perceived credibility and rate of patient buy-in (Sherrill et al., 2020) as well as reduce the sense of accountability of group members for the shared cause of group work (Sutherland et al., 2012). A trauma-specific and focused milieu supports efforts of treatment providers to facilitate connections among CPT group members and may boost progress for those who are struggling (Wright et al., 2022). Thus, through increasing treatment provider's understanding of contextually relevant examples, PSP may be able to better positioned to engage with the therapeutic material, group members, and thereby, potentially experience improved treatment outcomes.

Potential moral injury, while not directly probed for, emerged as a common theme in the present study. It is well understood that exposure to PMIEs is related to PTSD, major depressive disorder, and suicidal ideation among members of the Canadian Armed Forces (Nazarov et al., 2015). For example, when considering the mental health toll experienced as part of their job, many participants spoke of feelings of betrayal, guilt, and shame resulting from traumatic events, including a negative world view that they had not previously held. A person's internal assumptions guides their outlook on the world (Edmonson et al., 2011). Following intervening traumatic events (Janoff-Bulman, 1989), survivors experience a fragmenting of their inner conceptual system about how the world ought to function. While this system previously was sensical and coherent, it became broken because of traumatic events that were discrepant with a survivor's personal/occupational value system (Molendijk, 2021). Fleming (2022) describes how the complexity of this shattering directly impacts the development of a potential moral injury, prompting this as an important directive for future research efforts. For example, for many, this shattering results in generalized guilt, skewed moral/spiritual beliefs, and hopelessness that can

become intractable in cases of increased complexity and nuance (Fleming et al., 2022; Jinkerson, 2016). In our results, while narrative descriptions of shattered feelings and assumptions were, at times, associated with Criterion D symptoms, in many cases, they surfaced as individual themes and connections were not directly apparent. It is critical that the literature develop a better understanding of the common factors contributing to potential moral injury as experienced by public safety personnel.

Limitations

The present study is not without limitations. Firstly, this investigation included a variety of PSP professions; however, the specific professions and roles within these categories were not separated in analysis. By collapsing across specific professions and roles, this study is unable to address nuanced differences in the perceived mental health toll of service across professions. Future research should consider the unique mental health impacts that different PSP report when asked explicitly about the perceived mental health toll of their service.

Though not directly a limitation, the results of this investigation may not be easily generalizable to a broader population of PSP with PTSD, given that participants in this study were actively seeking treatment for PTSD and/or substance use in an inpatient treatment facility, had severe symptom expression, and had the ability to take time off work to access treatment. Given the study was qualitative in nature, this lack of generalizability is not particularly problematic, as case-to-case transfer is the only type of direct generalizability that can be achieved in qualitative research (Tobin & Begley, 2004). Qualitative research cannot predict the transferability and applicability of one study to another (Lincoln & Guba, 1985; Braun & Clark, 2022).

Conclusion

PSP are exposed to extreme stressors as a daily part of their occupations. As a result, they are at elevated risk of developing mental health difficulties, including PTSD. In the present study, focus groups were conducted with PSPs on the mental health toll of their occupation. Participants discussed personal descriptions of their mental health experiences which mapped onto the five main PTSD criteria outlined in the DSM-5-TR (American Psychiatric Association, 2022). These symptom descriptions included exposure to a primary stressor (e.g., witnessing a trauma), intrusion symptoms (e.g., unwanted memories or flashbacks), avoidance symptoms (e.g., avoidance of trauma-related thoughts/feelings), negative alterations in mood and cognition (e.g., inability to recall details of trauma), and alterations in arousal and reactivity (e.g., irritability, hypervigilance). In examining these descriptions, we are provided crucial illustrative examples of their own unique experience of PTSD symptoms with an aim to inform future research on mental health and treatment goals for these populations.

References

Anderson, G. S., Di Nota, P. M., Groll, D., & Carleton, R. N. (2020). Peer support and crisis-focused psychological interventions designed to mitigate post-traumatic stress injuries among public safety and frontline healthcare personnel: a systematic review. *International journal of environmental research and public health*, *17*(20), 7645.

American Psychiatric Association. (2022). Trauma and stressor-related disorders. In *Diagnostic and statistical manual of mental disorders* (5th ed., text rev.). https://doi.org/10.1176/appi.books.9780890425787.x07_Trauma_and_Stressor_Related_Disorders

Braun, V., & Clarke, V. (2022). Contextualism. thematic analysis a practical guide. SAGE.

Breslau, N., Reboussin, B. A., Anthony, J. C., & Storr, C. L. (2005). The structure of posttraumatic stress disorder: latent class analysis in 2 community samples. Archives of general psychiatry, 62(12), 1343–1351. https://doi.org/10.1001/archpsyc.62.12.1343.

Carleton, R. N., Afifi, T. O., Taillieu, T., Turner, S., El-Gabalawy, R., Sareen, J., & Asmundson, G. J. G. (2018a). Anxiety-related psychopathology and chronic pain comorbidity among public safety personnel. *Journal of Anxiety Disorders*, *55*, 48–55. https://doi.org/10.1016/j.janxdis.2018.03.006

Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D. M., ... & Asmundson, G. J. (2018b). Mental disorder symptoms among public safety personnel in Canada. *The Canadian Journal of Psychiatry*, *63*(1), 54-64.

Carleton, R. Nicholas, Afifi, T. O., Taillieu, T., Turner, S., Krakauer, R., Anderson, G. S., MacPhee, R. S., Ricciardelli, R., Cramm, H. A., Groll, D., & McCreary, D. R. (2019). Exposures to potentially traumatic events among public safety personnel in Canada.

Canadian Journal of Behavioural Science, *51*(1), 37–52. https://doi.org/10.1037/cbs0000115

Carleton, R. Nicholas, Afifi, T. O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D. M., Sareen, J., Ricciardelli, R., MacPhee, R. S., Groll, D., Hozempa, K., Brunet, A., Weekes, J. R., Griffiths, C. T., Abrams, K. J., Jones, N. A., Beshai, S., Cramm, H. A., Dobson, K. S., … Asmundson, G. J. G. (2018b). Mental disorder symptoms among Public Safety Personnel in Canada. *Canadian Journal of Psychiatry*, *63*(1), 54–64.

Canadian Institute for Public Safety Research and Treatment (CIPSRT). (2020). Glossary of terms: A shared understanding of the common terms used to describe psychological trauma (Version 2.1). /https://doi.org/10.1177/0706743717723825

Carmassi, C., Foghi, C., Dell'Oste, V., Cordone, A., Bertelloni, C. A., Bui, E., & Dell'Osso, L. (2020). PTSD symptoms in healthcare workers facing the three coronavirus outbreaks: What can we expect after the COVID-19 pandemic. Psychiatry research, 292, 113312.

Easterbrook, B., Brown, A., Millman, H., Van Blyderveen, S., Lanius, R., Heber, A., McKinnon, M., & O'Connor, C. (2022). The mental health experience of treatment-seeking military members and public safety personnel: a qualitative investigation of trauma and non-trauma-related concerns. *Health promotion and chronic disease prevention in Canada: research, policy, and practice*, *42*(6), 252–260. https://doi.org/10.24095/hpcdp.42.6.03

Edmondson, D., Chaudoir, S. R., Mills, M. A., Park, C. L., Holub, J., & Bartkowiak, J. M. (2011). From shattered assumptions to weakened worldviews: Trauma symptoms signal anxiety buffer disruption. *Journal of Loss and Trauma*, *16*(4), 358-385.

Engward, H., & Goldspink, S. (2020). Lodgers in the house: Living with the data in interpretive phenomenological analysis research. *Reflective Practice*, *21*(1), 41-53.

Foa, E. B., Chrestman, K. R., & Gilboa-Schechtman, E. (2008). *Prolonged exposure therapy for adolescents with PTSD emotional processing of traumatic experiences, therapist guide*. Oxford University Press.

Fleming, W. H. (2022). Complex moral injury: Shattered moral assumptions. *Journal of religion and health*, *61*(2), 1022-1050.

Goldspink, S., & Engward, H. (2018). Shedding light on transformational online learning using five practice based tenets: illuminating the significance of the self. *Asia Pacific Journal of Contemporary Education and Communication Technology*, *4*(2), 10-16.

Government of Canada. (2018). Federal framework on Post-Traumatic Stress Disorder Act. Retrieved from https://laws-lois.justice.gc.ca/eng/acts/F-7.38/page-1.html.

Hayes, A. M., & Yasinski, C. (2015). Pattern destabilization and emotional processing in cognitive therapy for personality disorders. *Frontiers in psychology*, *6*, 107.

Holmes, E. A., Ghaderi, A., Harmer, C. J., Ramchandani, P. G., Cuijpers, P., Morrison, A. P., ... & Craske, M. G. (2018). The Lancet Psychiatry Commission on psychological treatments research in tomorrow's science. *The Lancet Psychiatry*, *5*(3), 237-286.

Haugen, P. T., McCrillis, A. M., Smid, G. E., & Nijdam, M. J. (2017). Mental health stigma and barriers to mental health care for first responders: A systematic review and meta-analysis. Journal of Psychiatric Research., 94, 218–229. https://doi.org/10.1016/j.jpsychires.2017.08.001.

Janoff-Bulman, R. (1989). Assumptive worlds and the stress of traumatic events: Applications of the schema construct. *Social cognition*, *7*(2), 113-136.

Jinkerson, J. D. (2016). Defining and assessing moral injury: A syndrome perspective. *Traumatology*, *22*(2), 122.

Larkin, M., Flowers, P., & Smith, J. A. (2021). Interpretative phenomenological analysis: Theory, method, and research. *Interpretative phenomenological analysis*, 1-100.

Lentz, L. M., Smith-MacDonald, L., Malloy, D., Carleton, R. N., & Brémault-Phillips, S. (2021). Compromised conscience: a scoping review of moral injury among firefighters, paramedics, and police officers. *Frontiers in Psychology*, *12*, 639781. https://doi.org/10.3389/fpsyg.2021.639781.

Litz, B. T., Contractor, A. A., Rhodes, C., Dondanville, K. A., Jordan, A. H., Resick, P. A., Foa, E. B., Young-McCaughan, S., Mintz, J., Yarvis, J. S., & Peterson, A. L. (2018). Distinct trauma types in military service members seeking treatment for Posttraumatic Stress Disorder. *Journal of Traumatic Stress*, *31*(2), 286–295. https://doi.org/10.1002/jts.22276

Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: a preliminary model and intervention strategy. *Clinical Psychology Review*, *29*(8), 695–706. https://doi.org/10.1016/j.cpr.2009.07.003

Lincoln, Y. S., & Guba, E. G. (1985). *Naturalistic inquiry*. Sage.

Lowe, S. M., Haugen, P. T., Marrone, K., Rosen, R., & Reissman, D. B. (2021). The COVID-19 Pandemic and the Five Essential Elements in Mass Trauma Intervention: Perspectives from World Trade Center Health Program Mental Health Clinicians. Psychiatry., 84(4), 386–392. https://doi.org/10.1080/00332747.2021.2005443

Nazarov, A., Jetly, R., McNeely, H., Kiang, M., Lanius, R., & McKinnon, M. C. (2015). Role of morality in the experience of guilt and shame within the armed forces. *Acta Psychiatrica Scandinavica*, *132*(1), 4–19. https://doi.org/10.1111/acps.12406

Nicholls, C. D. (2019). Innovating the craft of phenomenological research methods through mindfulness. Methodological innovations, 12(2), 2059799119840977.

Miles, M., & Huberman, M. (1994). *Qualitative Data Analysis*. Sage.

Molendijk, T. (2021). *Moral injury and soldiers in conflict: Political practices and public perceptions*. Routledge.

Patel, H., O'Connor, C., Andrews, K., Amlung, M., Lanius, R., & McKinnon, M. C. (2022). Dissociative symptomatology mediates the relation between posttraumatic stress disorder severity and alcohol-related problems. Alcoholism: Clinical and Experimental Research, 46(2), 289-299.

Public Health Agency of Canada (PHAC). (2020). Federal framework on post- traumatic stress disorder: Recognition, collaboration and support. Ottawa (ON): Government of Canada.

Resick, P. A., Monson, C. M., & Chard, K. M. (2016). *Cognitive processing therapy for PTSD: A comprehensive manual*. Guilford Publications.

Ricciardelli, R., Carleton, N.R., Groll, D., & Cramm, H. (2018). Qualitatively unpacking Canadian public safety personnel experiences of trauma and their well-being. *Canadian Journal of Criminology and Criminal Justice*, *60*(4), 566-577. https://doi.org/10.3138/cjccj.2017-0053.r2

Rusu, C., Zamorski, M. A., Boulos, D., & Garber, B. G. (2016). Prevalence comparison of past-year mental disorders and suicidal behaviours in the Canadian Armed Forces and the Canadian general population. *Canadian Journal of Psychiatry., 61*(1), 46S-55S.https://doi.org/10.1177/0706743716628856

Sareen, J., Afifi, T. O., Taillieu, T., Cheung, K., Turner, S., Stein, M. B., & Zamorski, M. A. (2017). Deployment-related traumatic events and suicidal behaviours in a nationally representative sample of Canadian Armed Forces Personnel. *Canadian Journal of Psychiatry*, *62*(11), 795–804. https://doi.org/10.1177/0706743717699174

Sherrill, A. M., Maples-Keller, J. L., Yasinski, C. W., Loucks, L. A., Rothbaum, B. O., & Rauch, S. A. (2022). Perceived benefits and drawbacks of massed prolonged exposure: A qualitative thematic analysis of reactions from treatment completers. *Psychological Trauma: Theory, Research, Practice, and Policy*, *14*(5), 862.

Smith, J. A. (2011). Evaluating the contribution of interpretative phenomenological analysis. *Health psychology review*, *5*(1), 9-27.

Sutherland, R. J., Mott, J. M., Lanier, S. H., Williams, W., Ready, D. J., & Teng, E. J. (2012). A pilot study of a 12-week model of group-based exposure therapy for veterans with PTSD. *Journal of Traumatic Stress*, *25*(2), 150-156.

Sundaram, M. S., Sekar, M., & Subburaj, A. (2014). Occupational stress coping on policing reference to grade III police constables. *International Journal of Business Management & Research*, *4*, 39-50.

Szymanski, T., & Hall, A. (2021). Posttraumatic Stress Disorder and the Limits of Presumptive Legislation. In *Handbook of Posttraumatic Stress* (pp. 109-130). Routledge.

Tobin, G. A., & Begley, C. M. (2004). Methodological rigour within a qualitative framework. *Journal of advanced nursing*, *48*(4), 388-396.

Weeks, M., Park, S. B., Ghanem, S., Plebon-Huff, S., Robert, A. M., MacKay, H., & LeBlanc, A. G. (2021). A systematic review of the prevalence of posttraumatic stress disorder reported in Canadian studies. *Handbook of Posttraumatic Stress*, 38-108

Wright, E. C., Wachen, J. S., Yamokoski, C., Galovski, T., Morris, K., Goetter, E. M., Klassen, B., Jacoby, V., Zwiebach, L., Sornborger, J., Dondanville, K. A., Fina, B. A., & Rauch, S. A. (2022). Clinical and Administrative Insights From Delivering Massed Trauma-Focused Therapy to Service Members and Veterans. *Cognitive and Behavioral Practice*. https://doi.org/10.1016/j.cbpra.2022.06.005

Chapter 3: The Impact of Military Sexual Misconduct on the Deployment Experiences of Woman-Identifying Canadian Veterans

Chapter Link: The work in the following chapter has been submitted for publication to Armed Forces and Society (AFS-22-156) and is in the process of a revise and re-submit.

The previous chapter provided essential insights into the self-described mental, social, and functional outcomes of a mental health OSI, PTSD, in a population of treatment-seeking PSP. However, it did not examine intersectional experiences of the impact of OSI. In this case, this chapter (Chapter 3) seeks to characterize the self-described implications of a different operational stressor (i.e., an organizational stressor, MSM) on the functional experiences of a population of equity-deserving woman-identifying military Veterans. Through a gendered lens, it examines how, by belonging to an equity-deserving community of service, woman-identifying Veterans experienced adverse impacts to military cohesion while operationally deployed. It expands on the results of Chapter 1 by linking the negative impacts of MSM to mental and social repercussions experienced by these service members and tying it to the environmental strain created by MSM.

Title: The Impact of Military Sexual Misconduct on the Deployment Experiences of Woman-Identifying Canadian Veterans

Abstract: *The present research examines how Military Sexual Misconduct (MSM) impacts the perceived experiences of unit cohesion in a population of woman-identifying Canadian military Veterans. Semi-structured interviews were conducted with thirteen Veterans, asking questions about deployment-related factors (e.g., rewarding/challenging aspects). While MSM was not explicitly probed for, it was widely discussed in relation to participants' experiences of unit cohesion. Thematic analysis yielded three themes describing participants' perceived feelings of unit cohesion — value, acceptance, and unity. In contexts in which MSM was present, participants described these feelings as being undermined, resulting in a degraded experience of unit cohesion. In contexts in which MSM was absent, participants described value, acceptance, and unity as being improved, as well as their experiences of unit cohesion. The present research represents an exploratory model by which to consider the impact of MSM on the gendered experience of unit cohesion.*

Keywords: military sexual trauma, deployment, military, trauma, women, gender issues, military culture.

Introduction

Supreme Court Justice Marie Deschamps previously characterized Canadian Armed Forces (CAF) military environments as featuring a "sexualized culture… hostile to women and LGBTQ members, and conducive to more serious incidents of sexual harassment and assault" (Deschamps, 2015, p. i). She highlighted woman-identifying service persons' lived experiences of military culture as starkly contrasting with the CAF's professional conduct standards. Several years later, a secondary review conducted by Supreme Court Justice Louise Arbour (Arbour, 2022) furthered these findings, suggesting that previous recommendations of even basic cultural improvements of increasing acceptance of service members from diverse lived experiences had yet to be achieved.

Like many militaries, the CAF was founded on a culture of militarized masculinity (Eichler, 2014; Whitworth, 2004). Historically, soldiers' militaristic competency was measured against their conformity to a hypermasculanized "warrior ethos" (Davis & McKee, 2004, p. 52). This principle obscured understanding of effective militaristic cohesion by suggesting that operational effectiveness depended on teams being composed of all heterosexual man-identifying members (Breede & Davis, 2020). These expectations imply that the contribution of woman-identifying personnel's service (Bell, Turchik, & Karpenko, 2014) is inherently lesser than that of man-identifying service members. These ideals are deeply embedded in militaristic society and uphold experiences of sexual oppression and harassment against non-conforming service members (Callaghan, 2020; Wadham & Connor, 2023). This legacy lives on in present-day military culture, whereby those who do not readily conform to this ethos, particularly woman-identifying personnel (Kimerling et al., 2010; Biskupski-Mujanovic, 2022; Breede & Davis, 2020), are disproportionately and negatively impacted.

Terminology

Importantly, this paper acknowledges the responsible language relating to sexual orientation, gender identity, and the intersections of both. Thus, it follows Sex and Gender Equity in Research Guidelines (Heidari et al., 2016), utilizing the term "woman" or "woman-identifying" to describe service members who identify as women and "man" or "man-identifying" to describe service members who identify as men.

In the present paper, the term Military Sexual Misconduct (MSM) describes a continuum of sexualized and sexually-discriminatory behaviours, including "conduct of a sexual nature that causes or could cause harm to others, and that the person knew or ought reasonably to have known could cause harm" (National Defence, 2019; Cotter, 2016). Importantly, this term acknowledges discrimination based on sexual orientation or gender identity, which is known to contribute to a hostile work environment (Hajizadeh, Aikem, & Cox, 2019), particularly for equity-deserving military personnel, such as woman-identifying personnel (Cotter, 2016; 2019; Biskupski-Mujanovic, 2022).

For some personnel, MSM can lead to experiences of Military Sexual Trauma (MST), a unique and separate experience which describes a potential outcome of MSM. MST also describes a continuum of non-consensual and sexualized activity (e.g., sexualized comments, displays of sexually violent material, sexually coercive expectations, or unwanted sexual advances, and non-consensual sexual contact), but importantly, it contributes to physically or psychologically traumatic outcomes (Heber et al., 2023). Symptoms of MST may include emotional difficulties (e.g., anger, guilty, shame, rage, numbness, sadness, depression); physical difficulties (e.g., physical injury or pain); and functional difficulties in the workplace (e.g.,

avoidance of work, difficulty meeting work-related expectations) and at home (e.g., spousal relationship, relationship with children) (Heber et al., 2023).

MSM and the Gendered Experience of Operational Deployment

The gendered impact of MSM in deployed contexts is complex. MSM is pervasive throughout CAF culture. Approximately 97% of CAF Regular Force members note being the target of sexually discriminatory behaviour, and 18% note having experienced MSM while deployed (Cotter, 2019). Identify-based factors which meaningfully contribute to heightened rates of MSM in the CAF include being female-identifying, single, younger, and from an equity-deserving population (e.g., LGBT, Indigenous) (Hajizadeh et al., 2019). Indeed, reports indicate that woman-identifying military personnel are generally exposed to disproportionately higher rates of sexually discriminatory or sexually violent behaviour (Castro et al., 2015; Kimerling et al., 2010; Biskupski-Mujanovic, 2022).

Unique compared to other Western nations, for much of the period in which the women in this study served, Canada placed no restrictions on the roles women-identifying personnel could serve in (North Atlantic Treaty Organization [NATO], 2021). Thus, while woman-identifying personnel serve alongside man-identifying personnel in deployments, they are still outnumbered in comparison (i.e., only 20% of CAF Regular Forces members are woman-identifying) (Statistics Canada, 2022). They may experience less social support compared to man-identifying team members (Walsh et al., 2014). In cases of MSM, woman-identifying personnel may be forced to continue to serve alongside or depend on their perpetrators for survival (Dardis et al., 2018). To cope, they may intentionally distance themselves from their comrades (Dardis et al., 2018; Cotter, 2019). Thus, MSM may contribute to a decline in individual psychosocial functioning (Katz et al., 2007), as well as contribute to lower overall job

satisfaction, organizational withdrawal, and declined perceptions of the group's combat readiness and cohesiveness (Dickstein et al., 2010; Scott et al., 2014).

The functionality of military operations was historically believed to be dependent on gendered-based homogeneity (Davis, 2022). Indeed, it was believed that women lacked the masculine traits traditionally associated with military excellence (e.g., physical strength, toughness, etc.) (Whitworth, 2004; Howard & Prividera, 2006) and, thus, were previously excluded from service (King, 2016). This harmful and conflated expectation of a hypermasculine ideal of military excellence has endured in modern military culture (Basham, 2016). It has formed the basis of misattributions of gender-based performance expectations (Lucero, 2018) resulting in increased gender-based discrimination (Bonnes & Tosto, 2023). Thus, integrated groups of woman- and man-identifying CAF personnel must work side-by-side in a hostile work environment, in which MSM implicates declines in individual and group-level perceptions of group cohesion (Morris et al., 2014; Dickstein et al., 2010; Scott et al., 2014).

The concept of unit cohesion may be defined as that which maintains the "strong bonds of mutual respect, trust, confidence and understanding…. [that] bind members of a unit together – mentally, emotionally, and spiritually… to accomplish all missions in peace and war" (FM 22-100, 1983). Unit cohesion exists in both horizontal and vertical domains. Vertical cohesion is the trusted relationship between unit members and leadership (King et al., 2006; Van Epps, 2008), while horizontal cohesion represents the bond, shared values, and sense of belonging amongst unit members (Van Epps, 2008; Meredith et al., 2011; Siebold, 2006; Breede & Davis, 2020). In the context of the present paper, we will be focusing on the concept of unit cohesion in the context of horizontal cohesion. Improved experiences of unit cohesion support individual service members' capacity to cope with stress (Kirschner et al., 2018). In deployment contexts, unit

cohesion is critical and protective (Griffith, 2007) against the heightened stress-related demands on the group dynamic (e.g., frontline combat, post-combat exposure to injured/deceased persons, and morally injurious events) (Mondragon et al., 2015). The degree of unit cohesiveness, as individually perceived, is imperative to perceptions of mission success (deYoung, 2018). Due to the negative impacts of gender-based discrimination and other forms of MSM, operationally deployed units of woman- and man-identifying service members make experience a ruptured experience of unit cohesion, in which its protective functions are threatened, and so too, the purpose of the mission itself.

The present study is part of a broader study examining CAF woman-identifying military Veterans' gendered experiences of operational deployment and unit cohesion. In the present study, 13 of 15 participants acknowledged pervasive experiences of MSM throughout their operational deployments, emphasizing it as negatively impacting their experiences of unit cohesion. The present study utilized MSM as a lens by which to understand its impacts on woman-identifying military members' experiences of unit cohesion in operational deployments contexts.

Methods

Study Design

Semi-structured interviews were conducted with 13 woman-identifying former CAF service members who had deployed on at least one international operation during their service. The mean age of participants was 52 (range: 38-67 years of age), and most were of European descent (n=12). All participants had served in the Regular Force, and eight had also served as Reservists. Nine of the participants had been senior officers (e.g., Major, Colonel). Their deployments spanned from the 1970s until 2020, with most taking voluntary release (n=9).

Participants were recruited with purposive sampling through social media posts in a CAF servicewomen group (currently serving and those who had released), and through word of mouth. These posts read, "Are you a female-identifying Veteran of CAF deployments? Although the CAF is actively recruiting for 25% female representation, little is known about women's experiences during operational deployments. To better understand these experiences, we would like to talk to you about your deployment experiences. Please join us for a one-hour interview to 'discuss your thoughts and experiences'". Individuals interested in taking part then contacted the research team, who then scheduled an interview with them.

Following Hamilton Integrated Research Ethics Board approval (#12577), all interviews were conducted using Zoom video-conferencing platform (Personal Health Information Protection Act compliant Zoom license). Informed consent was completed prior to the interview. Interviews were conducted using semi-structured question guides and audio recorded. All audio files were transcribed verbatim by a team member with expertise in transcription. Questions were open-ended and explored participants' deployment experiences (e.g., rewarding and challenging aspects of their deployment experience). It should be noted that no questions in the interview protocol directly asked about MSM-related experiences. Interviews ranged from 37 minutes – 68 minutes and averaged 54 minutes in length. They were conducted by three cisgender heterosexual woman-identifying interviewers with graduate-level training (Masters, Ph.D.). These interviewers each possessed substantial training in trauma-informed and anti-oppressive research methods, as well as qualitative research methods and analysis.

Data Analysis

Data analysis for this study was performed in two steps. First, for the broader study, transcripts were coded inductively and then developed into a coding tree by three independent coders (A.B., H.M., K.R.). Second, a separate analysis of the code relating to Military Sexual Trauma was extracted and completed by a smaller group of researchers (A.B. and S.L.), utilizing the transcripts of participants who had acknowledged experiences of MSM in their operational deployments (i.e., 13 participants total). Through immersion and reviewing the relevant data, three themes – value, acceptance, and unity – were identified to represent how participants' experience of MSM affected their experience of unit cohesion in the context of their operational deployments. These three themes were then considered in relation to the entire dataset, both in the context of experiences of MSM, as well as instances in which MSM was absent.

Results

An analysis of observable themes within these interviews suggested three primary ways in which MSM relates to the gendered experience of unit cohesion, including its impact on feelings of value, acceptance, and unity. Participants described contrasting experiences of unit cohesion in their deployments related to experiences of MSM. Qualitative thematic analysis of these interviews indicated three primary themes, each with two subthemes, describing how woman-identifying service members experienced unit cohesion, in the context of MSM, and, in contexts in which MSM was absent. In the context of MSM, participants reported feeling decrements to unit cohesion, wherein they felt the contribution of their service was devalued, as well as that acceptance from group members was strained, and that their feelings of unity with group members were harmed. On the other hand, when MSM was absent from deployment experiences, reported experiences of unit cohesion were conserved and even bolstered. Scheme 1

is an overview of the themes and subthemes observed in the Interview data. This section is followed up by a detailed overview of the thematic analysis with illustrative quotes from participants.

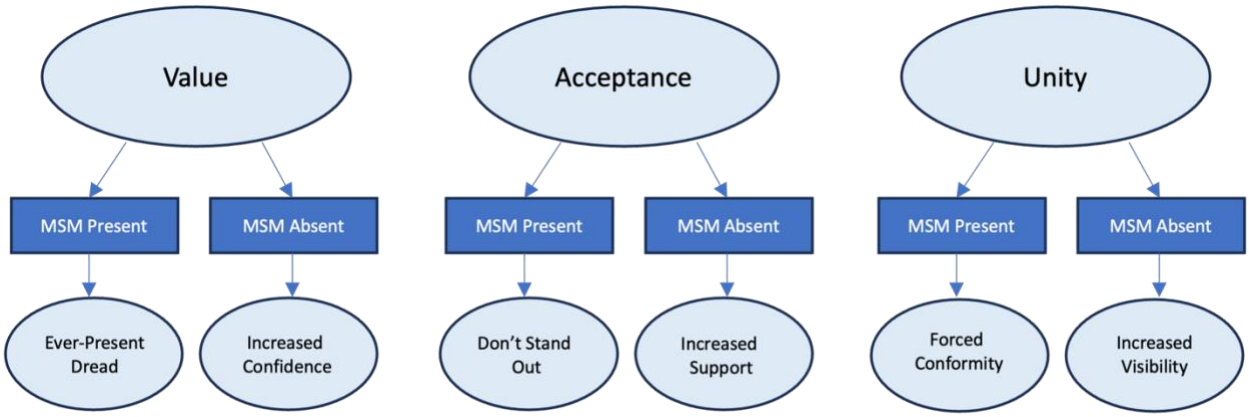

Figure 1: Thematic Map.

This thematic map displays the three major themes and their corresponding subthemes. Each theme is divided into two contexts, one in which MSM was present and one in which MSM was not present. The first theme is Value, with subthemes Ever-Present Dread (MSM Present) and Increased Confidence (MSM Absent). The second theme is Acceptance, with subthemes Don't Stand Out (MSM Present) and Increased Support (MSM Absent). The third theme is Unity, with subthemes of Forced Conformity (MSM Present) and Increased Visibility (MSM Absent).

Theme 1: Value.

The first theme, Value, described how, in the context of unit cohesion, participants' self-worth related to how they perceived the value of their contribution of service. Participants described value as related to occupational fulfillment, relating it to their individual contribution and the shared commitment of the group to a given military mission. It was frequently connected to the concept of shared integrity. In the context of MSM, value was described as diminished, both in its impact on feelings of individual fulfilment as well as on group-level integrity. Such

diminishing experiences included sexually discriminatory behaviours from peers or superiors or misogynistic and sexist language.

MSM-related behaviours resulted in participants feeling segregated or ostracized from the group, invoking adverse emotional states, such as feeling "at risk" or "in danger", or simply a "lack of respect". Participants described a conflicting set of emotions, whereby their sense of value and fulfilment in their military work was threatened by MSM:

> *There was so much good about the military, it is such a great job and like if you know what you're getting into and you really pay attention, but my God the second you put your guard down, I guarantee something will happen to you. (Participant 22)*

However, in deployment scenarios where MSM was not experienced, feelings of value were maintained. Participants then felt able to harness feelings of value and an increased degree of integrity associated with their connection to others in their group.

Subtheme: Ever-Present Dread. One subtheme, Ever-Present Dread, describes the underlying fear that, simply by nature of identifying as a woman in a hypermasculine environment, a participant's value as part of their unit was inherently lesser than that of a man-identifying individual. In being forced to cope in this hostile environment, participants described feeling a constant sense of dread.

Participants linked this fear to different expectations of conformity, which were not always subtle. In some cases, they resulted in overt expectations of conformity, such as being re-assigned to more traditionally "feminine" support roles (e.g., secretarial or administrative tasks), even in cases where these roles were clearly below the rank or station of the participant, or roles which contradicted their training or expertise. Participants reported that MSM contributed to an awkward and often hostile social environment. Some participants described situations of a

generalized reluctance amongst man-identifying personnel to share space with them, such as sharing living quarters, which they described as decreasing their feelings of safety, particularly in more remote deployment contexts.

One participant highlighted the impact of leadership in contributing to these feelings of dread, wherein investigations of MSM-like behaviour "terrified" fellow man-identifying group members, who then withdrew from woman-identifying personnel in the group. As a result, feelings of value in the group suffered. These misguided attempts to address MSM harmed the bonding amongst the unit, and relationships became strained:

> *Because…like someone sniffs…there might have been some impropriety… the new [superior officer]…was so hellbent to catch [sexual misconduct] violations, the [group members] were terrified…that anything they did would be misconstrued as an [MSM] offence…we ended up not going to shared gendered tents because the guys were terrified. (Participant 5)*

Another participant described how, due to MSM prevalence in deployment culture, her value was lessened by her inability to use her "voice" to speak up against perceived injustice:

> *It's so pervasive. It's so normal…when a woman does stand up and demand to be heard, "She is a bitch..." I can think of a dozen words. She's the worst person on the planet. And she is the reason there's no cohesion in that group. (Participant 22)*

The link between MSM and a collective dread that prevented fellow man-identifying service members from openly acknowledging the value of fellow woman-identifying service members was shared by a participant:

They were like no, we're equal. Everybody is sort, everything's equal, but that's not equality, but they were afraid to sort of highlight that they might want a woman or to say that they would want a woman over a man. (Participant 24)

Related to the pervasiveness of MSM, participants described how a mutual tolerance of insensitive, discriminatory, and non-inclusive language resulted in a breakdown of social bonds which are integral to unit cohesion. In one case, a participant described her value as being lessened by group members' use of sexist language, as well as sexually aggressive behaviour:

… there was a lot of name calling…the duty office next to my office would watch porn videos after duty hours. And they would turn it up really loud just because they knew I was in the office next door. (Participant 20)

Subtheme: Increased Confidence. In contrast to being devalued by MSM, in contexts where it was absent, participants reported feeling that their value was preserved. This value was related to increased feelings of confidence, related to self-efficacy (i.e., ability to execute performance-dependent behaviours) and agency (i.e., ability to use intentional action to produce a desired effect). When value was preserved, personal value, alongside the value of the group, it resulted an improved perception of unit cohesion. One participant described MSM's absence as leading to value in the form of "empower[ment]":

… *it's very empowering, so each person who's deployed feels like they're part – like they're really contributing, like each person has some authority. And they have – they can exercise their agency, so that's what's powerful. (Participant 9)*

Other participants spoke of confidence as connected to their being recognized for their contribution of service over time, or through their ability to inspire other woman-identifying service members in their own work.

Several participants described increased confidence as being related to their ability to help augment the work of other woman-identifying personnel, or in witnessing their successes: *I already had built up my own reputation. And I'm being a one of [them], the first of, in many situations, it led them into allowing other women to do those things. (Participant 21).*

Another participant shared the following:

And women – women did shine, and when they did – when they shone, it was not seen as a fluke, it was seen as the norm, right? And I listened to these men talk about the [officer] who was so damn good…she just happened to be a woman, right? (Participant 2)

Theme 2: Acceptance.

A second theme, acceptance, represents the unconditional belonginess of group members, regardless of their personal values, orientation, or identity. Participants described acceptance as linked to improved experiences of unit cohesion, as well as being integral and protective against negative experiences of MSM. When MSM was present, it resulted in a perceived lack of acceptance and increased social tension within the group setting. As a result, participants needed to avoid "standing out", just to cope, or to stay physically safe. In such situations, participants noted feelings of frustration, anger, confusion, and betrayal. Alternatively, when MSM was absent from a given deployment situation, participants highlighted how feelings of acceptance were maintained, leading them to feel supported and cohesive with other group members.

Subtheme: Don't Stand Out. Participants described attempting to preserve feelings of acceptance, to cope with MSM in deployment contexts, by conforming to hypermasculanized expectations of performative behaviour to not "stand out". If they did not sufficiently conform, they described being at risk of harassment or retaliation. To avoid standing out, some participants described overtly tailoring their behaviour, to try to protect against the risk of MSM:

...the only way to survive at that time was this idea of being the same...just fitting in... demonstrating your competency in the way that everyone else did. (Participant 24)

Another participant described a context in which MSM forced the suppression of feminine characteristics (e.g., physical characteristics, behaviour) to avoid "standing out":

...it was just one of those little army things…they don't…think about the differences between men and women… their approach] was [to] just simply treat women as smaller men…Would just size down the uniforms and we should be good… though not so much. (Participant 9)

...you can't be girly and lead men, because men don't respond to that – they hear their mothers, right, not happening. So, you got to find this way to lead that fits into the majority dynamic demographic… I never saw myself as a woman… what did I bring as a woman, I have no clue, you'd have to ask the guys." (Participant 9)

Other participants described misogynistic and/or sexually discriminatory language as undermining the effectiveness of communication within their group. Such experiences were described as associated with deep emotional pain, related to the group refusal to treat them as "one of their own". One participant described her frustration with inconsistent and ineffective standards as hindering her experience of group acceptance:

Why do we need to have different rules…treatment…and behaviour? why can't I go to the field without [being] hit on by my own detachment commander, where everyone around me is drunk in the field? Why can't I just be like everybody else? and you couldn't, but I think it's changed a lot. (Participant 1)

Subtheme: Increased Support. In contrast to feeling unaccepted by their group members in the context of MSM, in cases where MSM was absent, participants reported feeling increased

support from, and greater cohesiveness, with their units. They described this support as relating to a sense of collective care and reciprocity amongst group members.

One participant appreciatively noted a deployment situation, where in the absence of expectations of hypermasculine conformity from group members, she felt accepted:

> *…Like he did not give me the same kind of grief, or…try and box me into these stereotypical roles…he was like a brother in many ways… I was supported. (Participant 6)*

Another participant described how, in the absence of MSM, she observed an increase in support through the attentiveness of group members towards their fellow soldiers:

> *…we care about our people, we put our people first…we're always concerned about the wellbeing of our buddy to the left and buddy to the right…(Participant 9)*

In describing the feeling of increased tenderness and care from team members another participant shared *the following,*

> *I felt…a closeness with some people who maybe felt a little more comfortable coming and talking to the women particularly on that…tour. (Participant 24)*

Theme 3: Unity.

A third theme, Unity, implies an intentional and collaborative solidarity amongst group members. In the context of MSM, participants described a lack unity as being "isolating", due to their identity as a woman, which seemingly implied lack of "fit[ting] in". They described MSM as contributing to feeling invisible within the context of the group dynamic, and relatedly, a lack of unity. However, in contexts where MSM was absent, participants described feeling integrated with group members, supporting unit cohesion by increasing connection with other group members, but also with local forces and communities. They also linked feeling integrated with a

feeling of personal safety within the group dynamic, as well as feelings of pride in their unit's conduct and purpose.

Subtheme: Forced Conformity. Participants frequently highlighted the detrimental impact of feeling unintegrated with fellow team members, due to MSM-related behaviour. To avoid experiencing MSM, participants engaged in a "conforming" to a hypermasculine standard of competency, behaviour, and appearance. Oftentimes, despite conforming to these expectations, participants were still not adequately protected against MSM.

As relayed by one participant, under the guise of routine checks on her military attire by a superior, she was exposed to daily experiences of MSM, resulting in her feeling unintegrated with her military company:

> *It was all about conforming you to a military way of living. Like you had to put nametags on everything you own, including your bra… it was insane… And the male instructors would check the tag every day. Make us take our shirt off and show it to them. I'm not joking, like the [things] they put us through was unreal (Participant 22)*

Another participant connected her experience of MSM, and feeling unintegrated, to unrealistic expectations of the "equality" of man and woman-identifying personnel in needing to "prove" their degree of militaristic competency:

> *...the military has tried to integrate women based on the idea of everybody is the same … that you'll be integrated… if you prove yourself and you are equal to a man or you do the same things…because it's mostly been men, how they have proven themselves, how they've demonstrated their competencies. (Participant 24)*

> *Because I was a female and you know, basically there was going to be no give, when it came to being a woman… (Participant 25)*

Other participants described a lack of unity as being linked to painful emotional outcomes of this unachievable standard (e.g., feeling "left out" or "lonely"),

> *…women also don't want to get left out, and if they're not in with their section or whatever they feel very left out…(Participant 24)*

Another participant also shared how she experienced loneliness as an emotional outcome of MSM:

> *And it's lonely. When you're –the other colonels of all the different nations formed a bond and they would socialize together, but really because I was the only woman at that rank, like woman deputy commander, I didn't really have a core group (Participant 12)*

Some participants painted a particularly stark image of the necessity of conformity in deployed contexts, describing it as being for the sake of "surviv[al]", to ward off unwanted sexual attention, or to protect their physical safety, in the absence of alternative solutions:

> *...you need to extend yourself…you've got to become part of the team, … that's the only way you'll survive…to have someone looking out for your back, because you're looking out for their back. So however, you do that, you've got to find the people that you connect with…and nurture those relationships. (Participant 9)*

***Subtheme: Increased Visibility*.** In contrast to feeling unintegrated, when MSM was absent from participants' deployment experiences, they reported feeling "seen" and, thereby, a sense of inclusivity. Participants described a feeling of "ease" in how they related to their fellow unit members. They linked feeling integrated to a sense of increased pride in their military company, the purpose of their mission, and even how they related to the military. Finally, participants also described the positive impacts of visibility as being linked to the diversity within their unit, particularly of woman-identifying individuals.

One participant described the overwhelmingly "powerful" impact of being visibly integrated with her military company:

...It's so rewarding, you're working hard, but you're with all the people, like you're with your brothers and sisters in arms, right. It's an exceptionally powerful experience…our military does this really well. (Participant 9)

When woman-identifying personnel described the positive impacts of visibility, linking it to improved connection with fellow man-identifying unit members:

I mean certainly there were men that I would relate to well…. I felt like they would seek us women out…we kind of just hang out there all night. (Participant 24)

... that you are competent, you have to show that you're fit, you know, you have to show that you have a sense of humour. Those are the three things that, in the army, that will assist bonding…by the time I was getting ready to go home, they were very sad to see me go. (Participant 2)

One participant linked unity to increased diversity, whereby unit cohesion is improved by the inclusion of woman-identifying individuals, particularly in leadership roles:

..the more diverse an organization is, the more predisposed it is to be open to different approaches to getting things done, and particularly the way in which women will get things done. And I think it's very important for women to realize that women can lead as women. They don't have to pretend to be guys. They don't have to look at the way a man leads and say, 'I should lead like that.'…the harder you try to be someone else, the worse your outcome will be, eventually. Because you can't sustain that, right?... So, never be afraid to be yourself, you know, and have confidence in your training and confidence in your experience. (Participant 2)

Discussion

Despite MSM not being probed for, most participants spontaneously indicated experiences of MSM in their operational deployments and linked it to degraded experiences of unit cohesion. They described MSM as diminishing their feelings of value, acceptance, and unity with other group members in the context of unit cohesion. When feeling unvalued, participants described a sense of ever-present dread, in which hypermasculine standards lead to a sense of hostility amongst group members and harmed social bonding. When feeling unaccepted, participants described going to great lengths to protect themselves against the risks of appearing "different". They linked the disparate treatment of man-identifying personnel, as compared to themselves, to painful emotional outcomes. When feeling unintegrated, in the context of MSM, participants reported feeling "isolated" and invisible, leading to the perception that their risk of MSM was heightened. In the context of MSM, feelings of devaluation, as well as associated strains on acceptance and unity, prevented participants from feeling cohesive with their military units.

In contrast, in describing deployment situations in which MSM was absent, participants reported that their feelings of value, acceptance and unity, were preserved. The presence of these three emotional states was linked to improved experiences of unit cohesion. In MSM's absence, participants indicated value as being linked to increased confidence, allowing them to harness individual agency, and to "empower" the agency of others. In MSM's absence, participants reported increased feelings of acceptance, and importantly, support, from fellow group members. Finally, in MSM's absence, participants described an increased sense of unity with their unit, describing feeling "pride" in being "visible", particularly amongst units that were more diverse.

Thus, in the absence of MSM, participants felt the positive impacts of these three emotional states which bolstered their experience of unit cohesion.

These interviews highlighted unique pressures of operational deployment on the gendered impact of MSM. In the context of combat in operational deployments, wartime priorities undoubtedly shift the political status-quo (MacKenzie, 2012), "disrupt[ing] and produce[ing]…gender norms", whereby deployed servicewomen are forced to "live up" to gender stereotypes, and men are "held hostage by the pressure to perform [to this standard]" (MacKenzie and Foster, 2017, p. 207). Davis (2013) previously noted the CAF combat arms as being overly reliant on this perspective, whereby "women and men are different; men are strong, women are weak; women are protected, men protect women; women are emotionally unstable, men are more stable for fighting in war". Indeed, many participants discussed these gendered challenges, including feeling unspoken pressure to "represent" a "masculine" identity to feel a part of their unit (Waruszynski et al., 2019; 2021). Importantly, other roles that woman-identifying personnel may participate in while deployed, such as technical, logistical or support roles, are also negatively impacted by experiences of MSM. These critically important roles, which historically were held by men and not diminished in importance by hypermasculine rhetoric, are often denigrated by MSM as being "feminine" (i.e., not "manly" enough), and therefore "nonvital" (Lane, 2017, p.473). This misattribution of gender-based roles undermines the importance and contribution of all roles of service, and relatedly, harms the overall mission purpose itself.

Participants linked the hypermasculine military culture in deployment contexts to negative experiences of unit cohesion. They noted the costs associated with a lack of conformity to this standard as being linked to experiences of MSM. Indeed, some researchers have suggested

that MSM is a cultural stratagem by which the social cohesion of military groups is covertly undermined (Feitz & Nagel, 2008) but is also disproportionate in its impact, with woman-identifying service members "bear[ing] the brunt" (Biskupski-Mujanovic, 2022, p. 153). Participants spoke of a variety of barriers to cohesion, including a lack of acceptance by unit members, inconsistent and subjective performance standards, as well as a generally unwelcoming environment (Segal et al., 2016; Grady et al., 2018). Indeed, participants described feeling pressured to work "harder" to "prove" themselves as being as capable as fellow man-identifying unit members. Instead of being valued as an equally contributing soldier, participants described experiences akin to the concept of King's concept of "honorary men" (King, 2016, p. 124).

The hypermasculanized military ideals is deeply embedded in military culture (Yoder, 1991), and has historically emphasized the segregation of woman- and man-identifying individuals as being necessary for effective unit cohesion. These ideals are based on such doctrines as "heroic masculinity" (i.e., those qualities possessed by "traditionally" heroic men) (Halberstam, 1998, p. 2) and "hegemonic masculinity" (i.e., the legitimization of men by the subordination of women) (Taber, 2018, p. 105; Van Gilder, 2019). While these ideals are now recognized as misguided (Van Gilder, 2019), they are still present in the basic tenets of military culture. From the earliest stages of recruitment, woman-identifying service members still face being consigned to more stereotyped gender roles (e.g., emotional support) (Welsh, Olson, & Perkins, 2019). The pervasiveness of MSM within military culture reinforces these standards. Traditionally, woman-identifying personnel described experiences of a loss of comradery, perceived competence, and a shared doctrine, which imparted painful emotions of grief and loss (King, 2013, 2016; Castro et al., 2015; McCormack & Bennett, 2023). Indeed, our participants

described the expectations of hypermasculinity as being associated with complex feelings of betrayal, frustration, anger, disappointment, and sadness. Importantly, improved experiences of unit cohesion have been shown to support resilience and to protect against the impacts of PTSD (Ward et al., 2021), emphasizing the importance of the results of the present study.

Participants noted the damage caused by unit members and superior officers failing to recognize how MSM impacted their deployment experiences. Indeed, by avoiding difficult conversations or by "going along", the harm MSM exacts on survivors is obscured (Callaghan, 2020). MSM survivors are often told to "forget about" their experience, are personally blamed, or suffer ongoing harassment as a form of retaliation after reporting (Mengeling et al., 2014). They may also experience institutional betrayal, whereby the larger institution of the military fails to protect against or commensurately respond to harm experienced by those it serves (Smith & Freyd, 2014; Monteith et al., 2021). Experiences of institutional betrayal are known to contribute to worse experiences of moral injury (Frankfurt et al., 2018) and difficulty in reconciling the experience of trauma and subsequent recovery (Monteith et al., 2021). Currently, the relationship between moral injury and MSM is being examined by researchers but is still early in its development (Dougherty, 2021; Lopes et al., 2023; Yahalom, Frankfurt, & Hamilton, 2023).

Importantly, interview questions did not specifically ask about experiences of MSM. The degree to which participants spoke of MSM suggests its pervasive and adverse impact across their operational deployments (Laws et al., 2016; Taber, 2005). This pattern may also have emerged related to increased conversations of MSM in Canadian military culture, as well as high profile MSM-related events occurring during the time period these interviews were conducted. Particularly, as MSM is often underreported due to fear of negative consequences, this outcome

was somewhat unanticipated (Pershing, 2003). Indeed, many participants noted having "remain[ed] silent" after experiencing or having knowledge of MSM within their ranks for fear of reprisals. However, given increased coverage of MSM in the media in recent years and recent attempts at reconciliation, it is not surprising that it emerged as part of these discussions. Seemingly, these interviews presented a safe opportunity for these service members to disclose and explore their experiences of MSM.

Connecting these themes — value, acceptance, and unity —to the previous definition of unit cohesion, together, they represent the foundational "bonds" (i.e., "respect, trust, confidence, and understanding") (FM 22-100, 1983) on which unit cohesion is experienced by group members. In the context of MSM, they are either bolstered (MSM absent) or undermined (MSM present), mediating how participants in this study described their ability to engage with fellow unit members in their military missions. In the context of this definition, the first theme, Value, relates to the bonds of "respect" and "confidence", representing the foundation on which unit cohesion develops. Participants related value to self-perceived experiences of self-efficacy and agency, which "empowered" them in their roles. The second theme, acceptance, relates to the bonds of "trust" and "understanding", which participants described as a form of social support and interpersonal care, permitting feelings of safety among group members and further solidifying these bonds. And finally, unity, the final theme, relates to the definition's overarching concept of "mutual[ity]", in which the collaborative solidarity among group members firmly established these bonds within the group's identity in the form of a collective "will". MSM, by undermining these critically important aspects of how unit cohesion is experienced, destabilizes the ability of group members to fulfill their military roles and thus, undermines the purpose of the military mission itself (Kovitz, 2000; Kovitz, 2021). By addressing the MSM in military

culture, integrated teams of woman- and man-identifying service members may experience improved unit cohesion in their operational deployments.

Future Directions and Limitations

A burgeoning area of research concerns the impact of MSM on deployed man-identifying service members. Existing research points to the important impacts of deployment-related factors on MSM health outcomes. The way in which man-identifying service persons experience MSM in deployment contexts may differ from woman-identifying individuals, such as experiences of sexual assault by more than one perpetrator (Morral et al., 2015), and being more likely to experience MSM off-base, as opposed to woman members who are more likely to experience MSM while on-base (Cotter, 2019; Garrett, 2011). The risk of MSM is positively associated with the degree of combat exposure for deployed man-identifying service members (Barth et al., 2016). Future research should further explore contextual features of MSM in deployment contexts that may uniquely impact man-identifying personnel in deployment situations. Research could also examine whether man-identifying personnel experience similar emotional outcomes as woman-identifying personnel to MSM in the context of operational deployment and unit cohesion.

In this study, most experiences of MSM were based on deployments prior to 2010. Since that time, changes have occurred within the CAF and Canadian society, including the now discontinued Operation HONOUR (Government of Canada, 2020). While Operation HONOUR achieved some positive changes, such as increases in MSM-focused training and education (National Defence, 2019), these efforts have been criticized as insufficient in their scope (Taber, 2020). These changes in the CAF could also be, in part, a reflection of the #MeToo movement (Alvinius & Holmberg, 2019), reflecting a societal call to gender-based violence. Given

organizational and societal shifts in military culture since these participants' deployments, woman-identifying personnel may now have differing experiences of MSM. However, given the noted lack of change in CAF culture in matters of ongoing MSM (Arbour, 2022), it is likely that many of these issues have persisted. Three behaviours have been highlighted as contributing to maintaining MSM in military culture: false "allyship" (i.e., bystander behaviour), "willful blindness" (i.e., intentionally redirecting awareness) and "toxic masculinity" (i.e., hypermasculine behaviours that normalize MSM) (Callaghan, 2020). Instead of addressing MSM, they reinforce it, and, notably, are. In direct contrast with the CAF's stated ethics (e.g., the dignity of all persons) and values (e.g., integrity, inclusion) (Taber, 2022). Future research could examine how gendered experiences of unit cohesion and MSM relate to the CAF's stated ethics and values (i.e., Trusted to Serve).

As participants in this study were recruited with purposive sampling, the degree of variation in the sample, nor the theoretical saturation of the qualitative data, could be determined a-priori (Miles & Huberman, 1994). While this study was not designed to probe into issues of MSM within the CAF, 86.6% of participants introduced unprompted discussions of MSM during interviews. It is possible that, due to a lack of MSM-related questions, only a limited scope of how MSM impacted participants' operational deployment experiences was captured. Also, while the results of this study are only directly generalizable to the experiences of the service members who participated in this study, the contextual themes identified within (i.e., value, acceptance, unity) support those conclusions of the larger body of literature on gendered experiences of MSM and operational deployment.

Conclusions

In 2021, the Honorable Louise Arbour examined the inadequacy of the CAF's response to gender-based impacts of ongoing MSM (Taber, 2018). Defense Minister Anita Anand responded, noting the CAF as having "failed to dedicate enough time, money and personnel to dealing with [MSM]" (Baily, 2021). Though time has passed, the CAF's response has failed to adequately address the hypermasculine culture that maintains MSM's harm on woman-identifying military personnel (Biskupski-Mujanovic, 2022; Eichler, George, & Taber, 2022). The present study described the impact of MSM on the deployment experiences of woman-identifying service members and how it related to their perception of unit cohesion. Participants noted that when MSM was present as part of their deployment experience, it devalued the contribution of their service, and placed strains on feelings of acceptance and unity from unit members. In contrast, when MSM was absent from their deployment experience, they noted preserved feelings of value, acceptance, and unity. Through such lived-experience research, ongoing initiatives examining the gendered experiences of MSM will help to inform efforts to address its negative impact on unit cohesion for all service persons.

Chapter 4: A Scoping Review of the Experiences of 2SLGBTQIA+ Military Members and Veterans who Have Experienced Military Sexual Trauma

Chapter Link: The work in the following chapter is being prepared for submission with S. Lade as first author. Proposed co-authorship for this manuscript includes Bibora Imre-Millei, M.Sc., Ash Ibbotson, M.Sc., Nicholas Held, Ph.D., Bethany Easterbrook, Ph.D. (cand)., Margaret McKinnon, Ph.D., and & Linna Tam-Seto, Ph.D.

The preceding two chapters explored the mental, social, and functional outcomes of generalized operational stressors, as well as one specific organizational stressor, on two separate populations, treatment-seeking PSP and equity-deserving MP. Chapter 3 provided insight into how equity-deserving community membership mediates the experience of OSI. The present chapter (Chapter 4) builds on this understanding by examining the impact of this same organizational stressor, MST, in a novel population, the 2SLGBTQIA+ military community, as well as provides extensions to future research efforts into intersectional experiences of MST in this community. The present study utilizes a scoping review of the literature to thematically examine what is currently understood about the experiences of this community in relation to this organizational stressor. It provides an understanding of the breadth and depth of the extant literature, as well as identifies relevant gaps in knowledge, with the goal of informing future research endeavours.

Introduction

Two-Spirit, Lesbian, Gay, Bisexual, Transgender, Queer and/or Questioning, Intersex, Asexual, and additional sexual orientations and gender identities (2SLGBTQIA+) military personnel face higher rates of sexually aggressive and discriminatory behaviour than other sexual minority personnel (Beckman, Shipherd, Simpson, & Lehavot, 2018; Brown & Jones, 2016; Lehavot & Simpson, 2014). The term military sexual trauma (MST) describes this continuum of experiences including "sexual assault or repeated, threatening sexual harassment experienced during military service, including sexual activity that you are involved with against your will" (Veterans Affairs, 2020). The Canadian Armed Forces (CAF), while actively working on a formal definition of MST, currently utilizes the term Military Sexual Misconduct (MSM), which separates these behaviours into three main categories: sexual assault (e.g., non-consensual sexual activity), sexualized behaviour (e.g., displaying of insensitive or sexually explicit materials), and sexually discriminatory behaviour (e.g., based on gender identity or sexual orientation) (Cotter, 2019).

The military culture of celebrated hypermasculinity has normalized sexual violence (Burks, 2011; Mosher & Sirkin, 1984) to exert social dominance over nonconforming group members (Herek et al., 1999) and members of the 2SLGBTQIA+ military community (Connell, 2022; Kinsman & Gentile, 2010; Beckman et al., 2018). Characterized as the "practiced hate of otherness" (Poulin, 2001, p. 65), these tactics were justified by theorists as achieving greater cohesion among similar military community members by the "demeaning" of others and their differences (Poulin, 2018, p. 61). Thus, MST became formalized against the 2SLGBTQIA+ military community through the "policing" of differences (Poulin, 2019, p. 61) in the form of policy-based discrimination (Poulin, Gouliquer, & Moore, 2009), deliberately targeted

aggression and harassment (Schuyler et al., 2020; Burks, 2011), and, subversively, through sexually discriminatory language (Konik & Cortina, 2008). When reporting MST, 2SLGBTQIA+ community members often experience retaliation (Morral et al., 2015) and opt to avoid reporting (Burks, 2011), coping through complex psychosocial defensive tactics (e.g., by "downplaying queerness") (Connell, 2022, p. 10) and attempting to mitigate worse outcomes through "trajectory guarding" (i.e., intentional surveying of one's environment for threat) (Hart, 2021, p. 257).

In the experience of MST, 2SLGBTQIA+ military community members face significant negative physical and mental outcomes (e.g., mood disorders, post-traumatic stress disorder) (Lindsay et al., 2016; Valentine & Shipherd, 2018; Cochran et al., 2013), barring their recovery from MST. Authors have argued that MST's impact on psychological health may be more impactful than comparable forms of systemic trauma (e.g., betrayal experienced by victims of sexual violence in college administrative processes) (Monteith et al., 2016; Smith & Freyd, 2013, 2014). 2SLGBTQIA+ military community members may struggle to access health supports, legal assistance, and familial aid (Romaniuk & Loui, 2017; Saver et al., 2008) or even be re-victimized in healthcare settings (Lindsay et al., 2016). These barriers manifest in a reluctance to engage in help-seeking (Simpson et al., 2013; Shipherd et al., 2018) as well as difficulty comprehending their place in their military community (Castro & Goldbach, 2018; Klemmer et al., 2022).

To date, military research has typically focused on white, heterosexual, cisgender service members, rendering the experiences of 2SLGBTQIA+ community members as "invisible" (Eichler, 2016). Efforts have been made to bridge this gap (Minden, 2022; Office of the Auditor General of Canada, 2018) with the goal of higher-quality research and more reliable data

(Callaghan, 2020; Schuyler, 2020; Eichler, 2016, 2020). Yet, there is a gap in our current understanding of the state of the literature on 2SLGBTQIA+ military community and MST (Romaniuk and Loue, 2017; Taber, 2017; Eichler, 2016). Hence, this review examines the depth and breadth of the existing literature on the experiences of 2SLGBTQIA+ military members and Veterans who have experienced MST.

Methods

This review's purpose was to evaluate the breadth and depth of the existing literature on experiences of MST in the 2SLGBTQIA+ military community, with the goals of identifying gaps in knowledge, summarizing findings, and directing future research efforts (Arksey & O'Malley, 2005; Pham et al., 2014). Given the recent focus of attention on the 2SLGBTQIA+ community and military sexual trauma in recent years (Eichler, 2021), the objective of this scoping review was to examine how the extant literature describes the experiences of MST within the 2SLGBTQIA+ military community.

Step 1: Identify the Research Question

With the aim of better understanding this research objective, the question selected to be investigated was "How, and to what extent, does the literature describe the experiences of 2SLGBTQIA+ military members and Veterans who have experienced Military Sexual Trauma?". This question was left intentionally broad to capture a range of knowledge (Arksey & O'Malley, 2005; Mays, Robers, & Popay, 2001) and the wide array of experiences subsumed under the definition of MST (Veterans Affairs, 2019; Cotter, 2019).

This study incorporated the five-step framework of Arksey & O'Malley (2005), including identifying the research question, identifying relevant studies, selecting studies, charting the data, and, finally, collating, summarizing, and reporting the results. This process is described further

by Levac et al. (2010). According to Levac, Colquhoun & O'Brien (2010), this approach is furthered by a defined scope of inquiry, clearly defined concepts, and the identification of target populations. This study meets the standards of the Preferred Reporting Items for Systematic Reviews and Meta-analyses Extension for Scoping Reviews (PRISMA-SCR) checklist.

Step 2: Identify relevant studies and study selection

Utilizing the five-step framework of Arksey and O'Malley (2005), key search terms were identified collaboratively with a team of expert reviewers (LTS, BIM, AI, SL), intending to reflect the three main topics of interest identified in the research question (i.e., military membership, 2SLGBTQIA+ identity, and MST) (Figure 2).

Military	MST	2SLGBTQIA+
Military	Sexual Trauma	Gender Queer
Reserve	Sexual Violence	Gender Fluid
National Guard	Sexual Harassment	Intersex
Soldier	Military Sexual Trauma	Gender Identity
Special Force	Sexual Assault	Asexual
Marine		Transgender
Coast Guard		Gender Dysphoria
Air Force		Transexual
Navy		Bisexual
Veteran		Pansexual
Army		Lesbian
Armed Force		Gay
		Homosexual
		LGBTQ
		2SLGBTQ
		Queer
		Two Spirit

Figure 2: Key Search Terms

These search terms were combined into a preliminary search strategy. A research librarian was consulted in selecting potentially eligible databases to ensure a comprehensive range of available literature was captured. Eight databases were selected, including: Medline, EMBASE, EMCARE, PsycINFO, CINAHL, LGBTQ+ Source, ProQuest, Scopus, and Web of Science. In September 2022, this initial search strategy was piloted, whereby key combinations

of the keywords were input into each database: (military* OR national guard* OR reserves* OR special forces* OR marines* OR armed forces* OR veterans* OR coast guard* OR army personnel* OR enlisted military personnel* OR army* OR air force* OR navy*) AND (military sexual misconduct* OR military sexual trauma* OR sexual violence* OR sexual harassment* OR sexual assault*) AND (LGBTQ* OR LGBTQIA* OR LGBTQIA+* OR bisexuality* OR homosexual* OR transgender* OR queer* OR gender fluid* OR lesbian* OR gay* OR trans* OR intersex* OR 2SLGBTQIA+* OR LGBT* OR LGBTQ2S+). In August 2023, this search strategy was revised, in consultation with a graduate librarian (Appendix C), and rerun in these same databases, inclusive of the years 1990 to August 2023.

The results of these searches were imported into the systematic review software Covidence (Veritas Health Innovation, Melbourne, Victoria, Australia) to organize and screen eligible studies for inclusion. A total of 13,054 articles were imported to be screened against inclusion criteria. Following deduplication, 8078 articles were removed, with 4976 articles remaining to be screened by abstract. These articles were screened by three team members (SL, MK, ES), first by title, then abstract, applying inclusion and exclusion criteria to ensure eligibility. Any disagreements were resolved through collaborative discussion of these three team members.

Then, following the abstract screening stage, 154 articles remained to be assessed for eligibility in the full-text review stage. This stage was performed by two reviewers (MK, SL), who attempted to resolve conflicts through collaborative discussion. If disagreements could not be resolved, one reviewer (ES) acted to resolve conflicts. One team member (SL) combed reference lists of eligible papers and Google Scholar (up until page 10) to determine the presence of other eligible studies (n=20) or other eligible grey literature (n=2). A total of 60 studies were

excluded from the review for the following reasons: being a book chapter (n=4); unable to be located (n=6); being in the wrong setting (n=1); being the wrong clinical indication (n=8); not being a peer-reviewed source (e.g., news articles) (n=9); being the wrong study design (n=9); and being the wrong population (n=23). Following this screening process and the exclusion of non-eligible studies, 94 studies remained that met full eligibility criteria. The results of the search and screening process are described in Figure 3 (Prisma Flowchart).

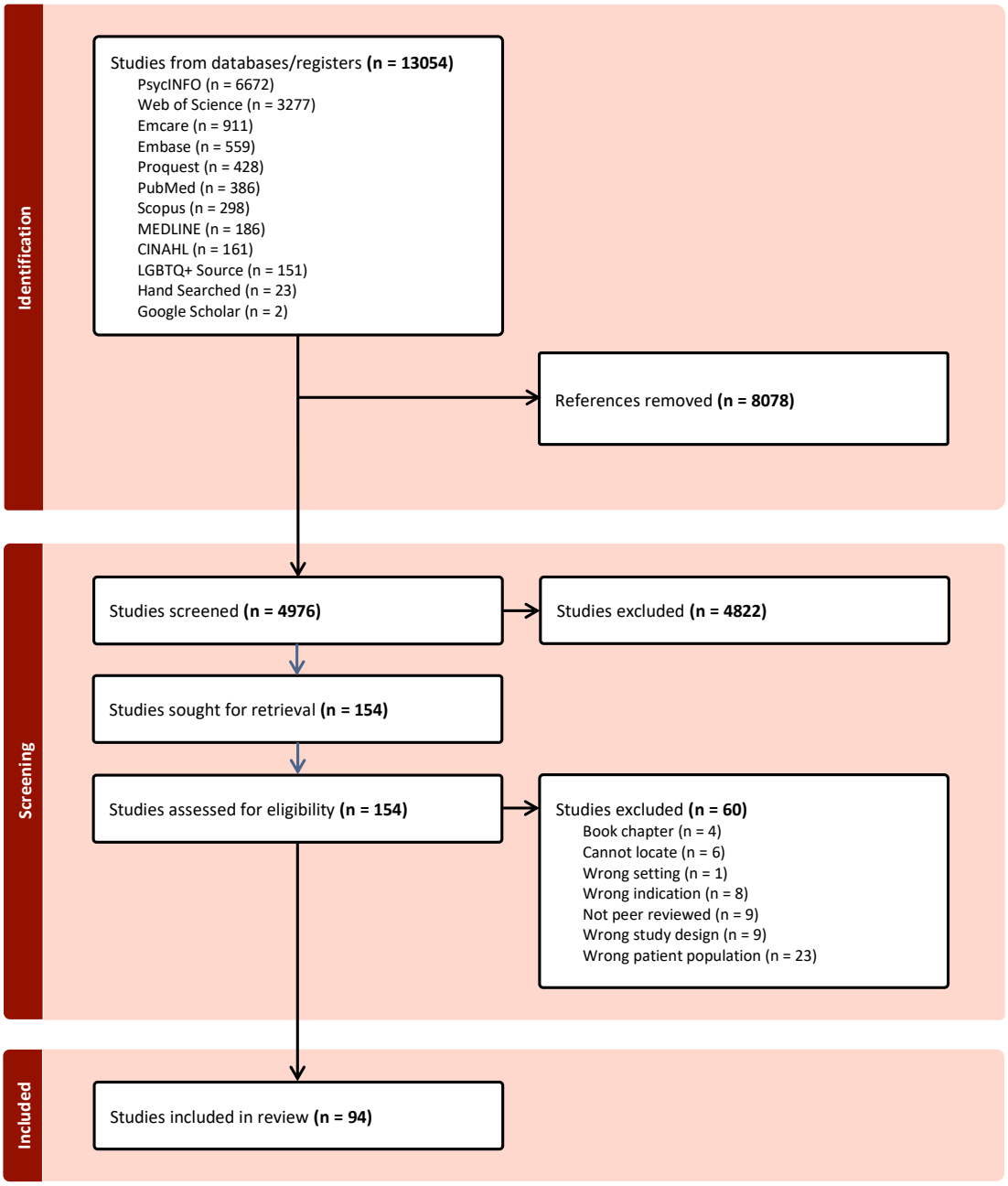

Figure 3: PRISMA Flowchart

Inclusion/Exclusion Criteria

With respect to study eligibility, this scoping review considered the following range of MST experiences, requiring them to have occurred during active military service: rape, sexual trauma, sexual assault, sexual harassment, military sexual trauma, sexual violence, sexual hate crimes, and sexual misconduct (Department of Veterans Affairs, 2019, Cotter, 2019). With respect to sample populations, it considered active duty service members or Veterans who were part of the 2SLGBTQIA+ military community. Due to reviewers' language abilities, only English language articles were selected for consideration. Articles were limited to 1990 through 2023, selected to capture important shifts in military culture towards 2SLGBTQIA+ populations. The review was limited to Five-Eye nations (Australia, Canada, New Zealand, the United Kingdom, and the United States) due to their similarities in socio-economic standing, national and international geopolitical landscapes, and alignment of their military missions and ideologies. Articles reviewed for eligibility included quantitative, qualitative, mixed-methods designs, perspective articles, editorials, synthesis articles, and grey literature (i.e., unpublished dissertations). This study excluded articles based on the following criteria: articles written outside of the geographical region of the 5-Eyes nations; articles which examined nonmilitary populations or prospective military populations (e.g., cadets); articles which were not written in the English language; articles which examined non-MST-based traumatic experiences; and articles that were non-peer reviewed publications (e.g., government resources, news articles), book chapters, or textbooks.

Chart the data, collate, summarize, and report the results.

According to Levac et al.'s (2010) methodology, a three-step process of data analysis was employed, including analyzing the data, reporting the results, and applying meaning to these

results. An initial data-charting form was developed with the input of three expert reviewers (LTS, BIM, AI), with the intention of capturing the essence of the research question. This form was then tested and refined in consultation with research team members (LTS, BIM, AI, SL) (Arksey & O'Malley, 2005).

This data charting form was piloted by one reviewer (SL), utilizing the analytical qualitative data extraction tool (i.e., MaxQDA) (22.6.0 Edition VERBI GmbH, Berlin, Germany). Utilizing descriptive and qualitative summary analysis techniques (Colquhoun et al., 2014), and MaxQDA software, one team member (SL) extracted key information of interest (i.e., study characteristics) from each article, including: title, authors, journal, year of publication, article type, objectives, methods, implications, population, recommendations, and use of 2SLGBTQIA+ language, along with phenomena-of-interest data, including the health implications of MST and barriers to accessing health-related services; the social implications of MST, including interpersonal relationship dynamics, social implications related to individual identity, and social implications related to military culture; and, finally, recommendations for combatting MST in the 2SLGBTQIA+ military population, through the provision of cultural support and affirming healthcare, as well as through adjustments to policy-making and research practice.

Utilizing MaxQDA software, an initial qualitative coding of these data was completed, and then, data codes were compiled and iteratively sorted, and finally, placed into distinct categories (Peters et al., 2020). Employing conventional qualitative content analysis methods (Elo & Kyngas, 2008; Hsieh & Shannon, 2005), one reviewer (SL) performed a qualitative content analysis (Colquhoun et al., 2014) in which study characteristics and phenomena of interest were coded deductively (Suri & Clarke, 2009). These data were then iteratively collected

into a compilation of essential thematic categories, each with unique and distinct meanings. Finally, the data were summarized and thematically described. The last optional stage of a scoping review (i.e., consultation) (Colquhoun et al., 2014) was not employed as part of this review.

Results

Following full-text review, 94 distinct articles emerged related to experiences of MST in the 2SLGBTQIA+ military community, the majority of which were position/perspective papers (n=21) and survey studies (n= 29), but also secondary analyses of larger data sets (n=13), interview studies (n=11), scoping reviews (n=2), narrative reviews (n=12), meta-analysis (n=1), editorials (n=2), program evaluation projects (n=2), and one pilot study (n=1). The distribution of study methodology included qualitative studies (n=45) and quantitative studies (n=42), with the remaining articles being mixed-methods studies (n=7). The distribution of years were as follows: 1993 (n=1), 1999 (n=1), 2001 (n=1), 2003 (n=1), 2005 (n=2), 2006 (n=2), 2009 (n=3), 2011 (n=3), 2012 (n=6), 2013 (n=7), 2014 (n=4), 2015 (n=4), 2016 (n=7), 2017 (n=1), 2018 (n=9), 2019 (n=7), 2020 (n=8), 2021 (n=11), 2022 (n=10), 2022 (n=10), and 2023 (n=6). Most research took place in the United States (n=86), with remaining research occurring in Canada (n=6), or England/the United Kingdom (n=2). With respect to 2SLGBTQIA+-related terminology, the following identifiers were used: lesbian (n=78), women who have sex with women (n=2), gay (n=67), bisexual (n=63), queer (n=13), trans (n=45), other identifying (n=4), pansexual (n=1), gender diverse (n=3), and genderqueer (n=1). With respect to acronyms, they included: LGBTQ (n=9), LGBT (n=28), LGB (n=16), LGBTQIA2S+ (n=1), TG (n=2), LGBTQ+ (n=5), LGBTQ2 (n=1), SMG (sexual and gender minority) (n=1), LGBTQIA+ (n=1),

TGD (transgender and gender diverse (n=1), GLB (n=1). The remaining articles did not use acronyms (n=28).

These analyses revealed three overarching domains which described the experiences of MST within the 2SLGBTQIA+ military community, including health and social functioning, as well as recommendations for addressing MST for 2SLGBTQIA+ service members. Authors described MST as degrading health-related functioning (physical, psychological), as well as causing unnecessary obstacles in accessing needed healthcare services. It also described social hardships, including how MST undermined the dynamics of interpersonal relationships, exacted a toll on individual identity, and caused indiscriminate harm due to military culture. Finally, it also included a critical discussion of ways to confront MST, including recommendations for ongoing cultural support, affirming healthcare practices, policy-related implications, and research.

Health Factors

Negative Health Outcomes. Authors described MST as exacting negative consequences on the physical and mental wellness of 2SLGBTQIA+ community members (Schuyler, 2020; O'Leary, 2022; Brown et al., 2015; Eleazor, 2022; Beckman et al., 2018; Klemmer, 2020; Hebrank, 2022; Carroll, 2018; Shipherd et al., 2018). Health outcomes were described as including Post-Traumatic Stress Disorder (PTSD) (Sexton et al., 2018; McDonald, 2020; Lucas et al., 2018), suicidality (Sexton et al., 2018; Blosnich, 2021; Eleazor, 2022), depression (Brown et al., 2015; Simpson et al., 2013; Beckman et al., 2021), anxiety (Lindsay et al., 2016; Moody et al., 2020; McDonald, 2020; Levahot, 2013; Jeffery, 2021), eating issues (Brown et al., 2016; Bell et al., 2014), and maladaptive coping methods (e.g., substance misuse) (Poulin, 2009; Jeffery, 2021; Cunningham, 2021; Fletcher, 2022; Browne et al., 2018). Authors also discussed resultant

physical health issues, including chronic pain (Booth et al., 2012), headaches (Klemmer, 2020), insomnia (Brown et al., 2015), sexual health issues (Kauth et al., 2014; Lofgreen et al., 2021; Mattocks et al., 2013; Rashkovsky et al., 2023), and hypertension/heart disease (Brown et al., 2016; Brown et al., 2015). Authors described these outcomes as explicable consequences of the psychological distress of MST (Moody et al., 2020; Chang et al., 2023) and as impeding psychological and physical recovery (Sexton et al., 2018; Lucas et al., 2018).

Barriers to Recovery. Authors explained how the 2SLGBTQIA+ military community encounters unwarranted barriers while accessing care for MST-related health outcomes (Bovin et al., 2019; Lofgreen, 2020; Mankowski et al., 2017; Mark et al., 2019; Livingstone et al., 2019; Powell, 2022). Some of these barriers were logistical and geographical (e.g., not being able to physically access a care center) (Lofgreen et al., 2017; Burks, 2011). Others were due to ineffective care provision related to MST-assessment techniques (Mattocks et al., 2013; Lofgreen, 2020; Bovin, 2019; Powell, 2022). For example, one study found that MST was more likely to be positively endorsed during a clinical interview rather than a screening form (Bovin, 2019). Authors also discussed the experience of perpetuated discrimination post-MST from care providers or even patients in healthcare settings (Simpson et al., 2013; Senter, 2020; Lofgreen et al., 2013; Mark et al., 2019; Shipherd et al., 2018). These barriers were noted as extending pre-existing stressors faced 2SLGBTQIA+ military community (e.g., minority-stress) (Mattocks et al., 2013). In response to them, 2SLGBTQIA+ community members may avoid utilizing health services (Senter, 2021; Shipherd et al., 2018; Mark et al., 2019; Simpson, 2013; Mattocks et al., 2013; Powell, 2022), exacerbating the negative health outcomes of MST (Mankowski, 2017).

Social Factors

Interpersonal Relationships. Authors denoted MST as undermining 2SLBTQIA+ military community members' relationship quality, particularly with fellow unit members (Ahuha, 2019; Belkin, 2001; Cunninghman 2021; Simpson et al., 2013; Bloeser, 2016; McNamara, 2021), leadership (Cunningham, 2021; Schvey, 2020; Estrada, 2013), and romantic partners and family (Gurung et al., 2018; Livingstone et al., 2021; Paulson et al., 2022; Warren, 2023; Dallocchio, 2021; Walker, 2021). Authors also discussed the social dynamics of MST perpetration, including the "policing" of gender identity (Poulin, 2018), or MST as a form of social dominance (i.e., to debase or humiliate or as retaliation) (Calkins, 2023; Hajizadeh et al., 2019, Hebrank, 2022; Gurung et al., 2018; Cunningham, 2021). It also described MST's role in widespread social rejection and betrayal of trusted relationships for 2SLGBTQIA+ community members (Hebrank, 2022). In response to these social stressors, 2SLGBTQIA+ community members are excised from their community and social supports, perceiving an inherent lack of belonging (Poulin, 2018) or the pressures of failing to conform to the demands of a heteronormative military environment (McNamara, 2021). Authors discussed how, particularly in deployed contexts, where 2SLGBTIA+ community members may be isolated from typical supports (e.g., friends and family) (Eichler, 2016; Senter, 2020), this lack of belonging is particularly treacherous (Burks, 2011; Lofgreen et al., 2017; Sexton et al., 2018). In such cases, 2SLGBTQIA+ community members may be forced to rely on perpetrators for support, who are simultaneously emboldened (Schuyler, 2020; Bowling, 2005) and harm further perpetuated (Bowling, 2005).

Individual Factors. Authors discussed the impacts of ongoing rejection and discrimination (Rashkovsky et al., 2022; McNamara et al., 2021; Johnson, 2015; Bell et al., 2014) as contributing to 2SLGBTQIA+ community members internalizing the insidious messaging of

MST (Jasuja et al., 2023; Alford & Lee, 2016). Instead of holding the institution and their perpetrators responsible (Cunningham; 2021; Hajizadeh et al., 2019; Lofgreen et al., 2017; Schuyler, 2020), 2SLGBTQIA+ community members may revert to self-blame (Beckman et al., 2018; Carroll, 2018). Such experiences destabilize aspects of identity (Eleazar, 2022; McDonald, 2017; Lofgreen et al., 2017), whereby a 2SLGBTQIA+ military member may perceive their identity as being "thwarted" (Sexton et al., 2018, p. 12). In one qualitative study with lesbian military members, participants described having to lead a "double life" in their military roles (Poulin, 2018, p. 68) In another study of gay, bisexual, and lesbian military members, participants described sacrificing their personal identity (e.g., suppressing aspects of their sexual orientation) to avoid risking their military careers (Vaughn, 2014). Thus, 2SLGBTQIA+ military community members may engage in survival strategies, including the concealment and suppression of sexual orientation or gender identity (O'Leary, 2022; Mark et al., 2019; Burks, 2011; Jeffery, 2021; Mattocks et al., 2013; McDonald, 2020; Senter, 2020), or sacrifice openness of personal identity for the sake of their occupational identity (i.e., to meet the standard of an hypermasculanized "ideal soldier") (Poulin, 2018, p. 66; McNamara, 2021).

Military Culture. Authors described how, due to normalization of heteronormative and hypermasculine military culture (e.g., "old boys club) (Poulin, 2018), 2SLGBTQIA+ military community members are disproportionately targeted in sexually discriminatory ways (Wilson-Buford, 2013; Beckman et al., 2018; Rich, 2012; Beckman, 2018; Cunningham, 2021; Eleazer, 2022; Schuyler, 2020). For example, by virtue of belonging to this community, where nonconformity to heterosexual standards is "negative and distasteful" (Burks, 2011), service members are relegated to being lower in social status in their military community (Poulin, 2018). These ideological stances were highlighted as contributing to the harmful legacy of

discriminatory policies (e.g., Don't Ask, Don't Tell; LGBT purge) (Senter, 2020; Burks, 2011; Gurung et al., 2018; Mark et al., 2019; Hajizadeh et al., 2013; Schuyler, 2020). The ongoing legacy of these policies was related to the continuing hostility against 2SLGBTQIA+ community members in military culture (Moradi, 2006; Banner, 2012; Fletcher, 2022; Eichler, 2016).

Recommendations and Future Directions

Cultural Support. Authors widely discussed the importance of ongoing equity, diversity, and inclusion training (Mark et al., 2019; Klemmer, 2020; McDonald, 2020; Simpson, 2013; McNamara, 2021). They also discussed the importance of targeted skills training (e.g., moral dilemma training) (Brown et al., 2022) in mitigating the widespread cultural effects of MST. The literature stressed these efforts as being insufficient on their own, emphasizing the need for ethical and cultural change from within (e.g., shifting from "rules-based" ethics to "values-based" ethics) (Brown et al., 2022, p. 87). Authors also emphasized leaderships' role in modelling equitable values and fostering inclusivity within and outside of military communities (e.g., 2SLGBTQIA+ and subcommunity support groups, family support groups) (Brown et al., 2022; Poulin et al., 2018; Monin et al., 2017; Levahot et al., 2013; Lofgreen et al., 2021).

Affirming Healthcare. Authors provided recommendations on healthcare improvements, including novel considerations for approaching MST (Fletcher, 2022; Valentine et al., 2021; Lofgreen, 2020), such as eliminating irrelevant forms of testing (e.g., testing for sexually transmitted infections sexual harassment, denial of services if a physical exam is refused) (Lucas et al., 2018; Wilsey, 2020; Klemmer, 2020; Livingstone et al., 2018; Bovin, 2019; Gorman, 2021). Authors also focused on fostering inclusivity and safety in assessment settings (Valentine et al., 2021; Herek, 1993; Levahot and Simpson, 2013) and the importance of training in

affirmative care for military health providers (Johnson et al., 2015; Shipherd et al., 2018; Mark et al., 2019; Schuyler, 2020).

Policy Considerations. Authors focused discussion of policy recommendations as needing to be firmly grounded in empirical evidence (Ahuha et al., 2019; Alford et al., 2016; Brown et al., 2022). They also highlighted the need to shift the lens by which social barriers are understood (e.g., "intersecting vulnerabilities") (Eichler et al., 2021, p. 9; Eleazer, 2023; Watkins, 2022) in policy-making. Authors highlighted gaps in policy implementation, such as the failure to all stakeholders' perspectives (e.g., of 2SLGBTQIA+ community members) (Eichler et al., 2021; Brown et al., 2022). It also noted the role of deliberate strategies to increase 2SLGBTQIA+ community members' confidence in engaging with policy development efforts (e.g., the use of "culturally competent language" on policy-related surveys) (Watkins, 2022; Goldbach, 2016).

Research Guidance. Authors noted a need for ongoing research into the dimensions of MST's impact on 2SLGBTQIA+ military populations, including the need to update epidemiological research (Hebrank, 2022; Gurung et al., 2018; Cunningham, 2021; Burks, 2011; Lucas et al., 2018; Mattocks et al., 2013), by standardizing MST definitions (Lofgreen et al., 2021; Sexton et al., 2018), and by using intersectional lens in research (Bonnes, 2021; Eichler et al., 2021; Dallachio, 2021). Authors noted the importance of qualitative MST research for 2SLGBTQIA+ populations, including supporting participant safety in disclosure (Livingstone et al., 2019), developing an increased understanding of social and healthcare barriers faced by this community (Turchik et al., 2013; Livingstone et al., 2019) and, to generalize outcomes of qualitative findings to other populations (Vaughn, 2014).

Discussion

This scoping review examined the literature on experiences of MST in the 2SLGBTQIA+ military community, including health factors, negative health outcomes (n=44) and barriers to healthcare (n=15); social factors, including harm to interpersonal relationships (n=24), harm to individual identity (n=5), and the role of military culture in maintaining MST (n=17); and, recommendations for intervening in MST for 2SLGBTQIA+ community members, including providing cultural support recommendations (n=9), affirming healthcare recommendations (n=11), policy recommendations (n=48), and research recommendations (n=49). Results highlighted the pervasiveness of MST in 2SLGBTQIA+ active duty or Veterans military members' experiences and, simultaneously, the overwhelming challenges faced in circumventing its negative impacts.

MST – The Cumulative Stressor. A sizable portion of the literature focused on negative physical and mental health outcomes (Schuyler, 2020; O'Leary, 2022; Brown et al., 2015; Eleazar, 2022; Beckman et al., 2018; Klemmer, 2020; Hebrank, 2022; Carroll, 2018; Shipherd et al., 2018), which were described as complicated by pre-existing healthcare barriers (Bovin et al., 2019; Lofgreen, 2020; Mark et al., 2019; Livingstone et al., 2019; Powell, 2022). These health outcomes were noted as seemingly unavoidable repercussions of the entrenched nature of MST in military culture (Banner, 2012; Poulin, 2018) and as contributing to the disproportionate impact MST has on 2SLGBTQIA+ military community members (Chang, 2023).

Indeed, 2SLGBTQIA+ community faces pre-existing stressors that are exacerbated by MST (Eleazar, 2023; Bloeser, 2016; Meyer, 2003; Frost & Meyer, 2023). Literature on MST's impacts on other minority groups (e.g., women and ethnic minority populations) reflects similar negative physical and mental health outcomes (Rodriguez, King, & Buchhold, 2023; Yancey et

al., 2023; Costello, 2022; Klingensmith et al., 2014; Scott et al., 2014). Some authors postulate that these health outcomes are traceable to lifetime trauma exposure because of minority community membership (Doucette et al., 2023). Indeed, sexually minority populations, even compared with other minority groups, undergo increased pre-service traumatic exposure, including sexual assault (Booth et al., 2011), to adverse childhood experiences (Brewin, Andrews, & Valentine, 2000; Iverson et al., 2007), and to intimate partner violence (Andersen & Blosnich, 2013; Marshall, Panuzio, & Taft, 2005; Gerber et al., 2014). Then, as part of their military service, 2SLGBTQIA+ people continue to face hostility, microaggressions, and stigma (Eleazar, 2023), accumulating the impact of pre-existing stressors placed on their well-being. In the context of a microaggression, painful memories of MST may be reactivated or triggered (Shipherd et al., 2018; Eleazar, 2022).

Coping with these stressors exacts a toll, including feelings of acute vulnerability, diminished self-efficacy, helplessness, and social disconnection (Fassinger, 2008; Herek & Garnets, 2007; Lehavot & Simoni, 2011; Szymanski & Kashubeck-West, 2008; Hatzenbuehler, 2009). Changes occur at a neurological level, disrupting the efficiency of emotion and social processing area of the brain and contributing to increased difficulty in regulating socioemotional health (Panchankis et al., 2015). In fact, in the context of increased minority tress, genetic markers of immune function may be altered (Flentje et al., 2018), with markers of inflammation (i.e., stress hormones) remaining heightened long after a traumatic event ends, even following the amelioration of negative psychological symptoms (D'Elia et al., 2022).

Importantly, pre-existing trauma exposures nor heightened minority stress, predetermine increased risk of MST but instead represent the impact of resultant psychological distress and the cumulative nature of MST for equity-deserving communities (Anderson & Blosnich, 2013; Xu et

al., 2023). It also reflects the lack of a supportive context in which to heal (Brown, 2022; Castro et al., 2015; Lankford, 2012). Our findings may be considered in the context of the Rejection Sensitivity Model (Feinstein, 2020), wherein emotional and behavioural correlates of anticipated rejection (e.g., sexual-orientation-based discrimination) mediate the degree of stress experienced and associated psychological outcomes (Hatzenbuehler, 2009). Indeed, the fear of sexual orientation-based discrimination is so powerful that 2SLGBTQIA+ service members may avoid healthcare utilization altogether (Simpson et al., 2013). Collectively, the results of this review contribute to the large body of evidence that highlights the deleterious impact of MST in military culture (Hajizadeh et al., 2019) and its profound and disproportionate impact on 2SLGBTQIA+ military community members (Kinsman & Gentile, 2010; Beckman et al., 2018; Blosnich et al., 2012, 2015).

Social Considerations. Another domain highlighted by the literature was the social dynamics by which 2SLGBTQIA+ community members experience MST. It described the role of heteronormative ideologies (Bonnes, 2021; Poulin, 2018) as celebrating a hypermasculanized warrior culture (Estrada, 2013) which discriminates against nonconformity (i.e., 2SLGBTQIA+ community members) (Poulin, 2018; Banner, 2012). The literature described the impact of these ideologies as being insidious to matters of identity (Damanio, 1999; Vaughn, 2014), including individual identity (Sexton et al., 2018) and occupational identity (Poulin, 2018). These harms may be thought of as stemming from forced assimilation (e.g., “covering” aspects of identity) (Eleazar, 2023, p. 289) to a disadvantageous and futile standard of military performance (Banner, 2012). At its core, MST is a destabilizing social force which weakens the moral fabric of military communities (Belkin, 2001, 2003; McNamara, 2021) by maintaining a hostile environment for

2SLGBTQIA+ military community members (Damanio, 1999; Moradi, 2006; Beckman et al., 2018).

Within the interpersonal dynamics of MST and 2SLGBTIQA+ identity, trust may act as a powerful protective tool, but also one which may exact extreme harm when abused (Cunningham, 2021; Schuyler, 2020; Hebrank, 2022; Livingstone et al., 2019). It holds important weight in supporting the cohesiveness of military units and maintains bonds between unit members in the balance of life-or-death (Cunningham, 2021). As a result, social alliances suffer, as does the perception of social support from peers and superiors (Lehavot & Simoni, 2011). As opposed to serving openly and authentically, these service members must focus on protecting themselves within their own ranks (Levahot and Simpson, 2013).

MST undermines this trust amongst military communities, as it is morally injurious in nature (i.e., psychological, spiritual, and social harm due to a shaken "moral framework" following a traumatic experience) ((Frankfurt et al., 2018; Jamieson et al., 2020, p. 1050; Drescher et al., 2011; Jinkerson, 2016). It destabilizes the understanding of self in relation to others (Litz et al., 2009; Lopes, McKinnon, & Tam-Seto, 2023). Stemming from the abuse of trust experienced in the context of MST (Lofgreen et al., 2017; Smidt & Platt, 2018; Carroll et al., 2018; Livingstone et al., 2019; Schuyler et al., 2020), 2SLGBTQIA+ community members may struggle to reconcile their experience (Cunningham, 2021) and begin to hide their gender identity or sexual orientation (McNamara & Wilson, 2020; Croteau et al., 2008; Dworkin, 2000). This action has deleterious effects on cognitive and behavioural health (Pachankis, 2007) and can elicit a complex biopsychosocial cascade of events (Kimerling et al., 2010). The impact of this betrayal is worse for those with greater trust in the institution of the military (i.e., institutional betrayal trauma) (Smith & Freyd, 2014; Monteith et al., 2016) and can ultimately exact a

complete loss of faith in themselves, others, and the institution of the military (Jinkerson, 2016; Litz et al., 2009).

Institutional Perpetuation of Harm. While 2SLGBTQIA+ military members devote their lives to service, the military's failure to protect or intervene in experiences of MST simultaneously disenfranchises them (Eichler, 2016). Indeed, the pervasiveness of MST towards 2SLGBTQIA+ community members has normalized the use of sexual violence against them (Herek et al., 2009). The legacy of discriminatory military policies and heteronormative military culture forces the suppression of identity (Eleazar, 2023). This phenomenon is described by Social Dominance Socialization, whereby the hierarchical social structure is upheld by discriminating against those of a lower social standing (Nicol, Charbonneau, & Boies, 2007). To survive in a hostile military climate, 2SLGBTQIA+ military members must maintain a state of hypervigilance (Burks, 2011; Wilson-Burford, 2013; Mattocks et al., 2013; Cunningham, 2021; Eleazar, 2022). They must rely on strategic behaviours (e.g., developing contingency plans and identifying "battle buddies") (Eleazar, 2023) to avoid MST.

In the context of disclosure within this cultural context, many 2SLGBTQIA+ community members avoid disclosures of MST due to the fear of being disbelieved, invalidated, or historically, even discharged (Burks, 2011; Cunningham, 2021; McDonald, 2020; Senter, 2020), or for more subtle reasons, including fear of betraying the institution they consider to be family (Smith & Freyd, 2013, 2014). Whether by omission (i.e., in their failure to protect, prevent, or adequately respond to MST) (Brown, 2021) or commission (i.e., actively punishing or retaliating against those who have disclosed MST) (Dardis et al., 2018), military institutions bear the responsibility for the deleterious impacts MST has exacted on the 2SLGBTQIA+ community (i.e., institutional betrayal) (Monteith et al., 2016).

Future Directions

Health Care. In meeting the needs of 2SLGBTQIA+ MST survivors, military healthcare providers are the gatekeepers who support access to better potential health outcomes and psychosocial healing (Eleazar, 2022). Authors have noted that while military health providers may be experienced in delivering MST-relevant treatment to some populations, they may lack sensitivity to the specific needs of 2SLGBTQIA+ community members (Pachankis & Goldfried, 2004; Strom et al., 2012). When being assessed for MST, assessors may rely overly on stereotypical narratives of sexual violence (Ramirez & Bloeser, 2018; Burbank, 2022), including that victims of sexual violence are "passive, weak, fearful, helpless [and] battered" (Walker, 2016, p. 239). Another commonly held belief is that because military personnel are combat-trained, they should be capable of fighting back (Burbank, 2022). Thus, when being assessed for MST, 2SLGBTQIA+ survivors may be forced to engage in a "performance of victimhood and a performance of disability" (Burbank, 2022, p. 214).

Research has demonstrated that, through welcoming, affirming, and inclusive health care provision, health providers can act as a protective mechanism against the negative mental health impacts of MST (Klemmer, 2022). One author recommended that, to effectively treat MST in 2SLGBTQIA+ populations, a critical and in-depth understanding of minority-related healthcare needs is required, including knowledge of an individual person's coping skills and their degree of community and social support (Herek, 2016). Cultural competency training and nondiscriminatory healthcare practices (i.e., Anti-Stigma, Anti-Oppressive Practice) (Kauth & Shipherd, 2016; Carey et al., 2022; Milano, 2019) are two other recommended initiatives.

Other critical imperatives surround rebuilding social connection for 2SLGBTQIA+ community members, following experiences of MST, to support psychosocial healing (Lofgreen

et al., 2017; McDonald, 2020; Senter, 2020). Indeed, Eleazar (2022) identified a lack of community inclusivity as among the most impactful post-traumatic outcomes of MST. Therapeutic initiatives should consider the combination of transdiagnostic and trauma-focused therapies which acknowledge intersectional experiences of stress (Resick, Monson, & Chard, 2016). For example, Silverberg's (2019) "Trauma-Sensitive Yoga Peer Support Group" supported sexual violence survivors in healing through a socially inclusive support group alongside evidence-based trauma treatment. Participants in this group achieved an amelioration of trauma symptoms, increased feelings of self-regulation and self-awareness, and a heightened sense of interpersonal connection (Silverberg, 2019). Another example, the "Living Out Loud/Laughing Out Loud" support group (Ramirez et al., 2013), demonstrated how, through deliberate recognition and celebration of LGBTQ+ military membership, efficacious social connection and healing was achieved for participants.

Another area of need is improving clinical assessment of MST in 2SLGBTQIA+ populations. Military health professionals must guard against misdiagnosis and/or compensation gatekeeping (e.g., denial of compensatory support with the refusal of an examination) (Webermann et al., 2023). For example, military healthcare providers, in the context of an MST and compensation assessment, may inappropriately attribute the etiological origin of PSTD to childhood trauma, as opposed to MST, precluding the ability to access disability compensation (Burbank, 2022; Newman, 2015). One recently developed tool, the Military Minority Stress Scale (Goldbach et al., 2023), offers a potential solution, measuring MST in relation to minority stressors and associated health outcomes. Victim advocacy services can support 2SLGBTQIA+ MST survivors by providing different reporting options (Lee et al., 2014). Furthermore, military healthcare providers can guard against tokenism (i.e., "perfunctory or symbolic efforts to engage

communities or patients" (Hahn et al., 2017; Poulin et al., 2018) or false allyship (i.e., allyship with a lack of explicit consent) (Callaghan, 2020).

Reparation. While some aspects of reparation have been achieved (e.g., Canadian LGBTQ military class actions) (Smith, 2020), these represent the first step in repairing the wounds of MST in the 2SLGBTQIA+ military community. Importantly, reparation efforts must guard against a "displacement of queerness" (Connell, 2022, p. 13), including shifting policy focus merely inclusion focused, at the expense of input of the community it serves (Williams, Giuffre, & Dellinger, 2009). Thus, reparation efforts must be person-centered (Cho, 2020), driven by 2SLGBTQIA+ military community members' input (Brown et al., 2022). Consultative workshops can consult directly with stakeholders, achieving personal healing through the validation of individual experience (McKinnon, Tam-Seto, & Imre-Millei, 2023). Ongoing reparation efforts must examine how to best repair fractured social bonds (Carey, 2022). Authors have also imperatives including, the need for military leaderships to model openness of identity and military success, for military institutions to demonstrate greater objectivity about the negative impacts of MST on 2SLGBTQIA+ military members' military careers, and the need to normalize diverse identity as part of "counter-culture presence" (McNamara et al., 2020, p.13).

Research Practice. Importantly, while developing an understanding 2of SLGBTQIA+ experiences of MST is crucial, this research cannot be conducted at the expense of participant safety. In guarding against tokensim, researchers must utilize practices that are equitable and attentive to gender identity and sexual orientation by using analytic frameworks such as Sex- and Gender-Based Analysis (Government of Canada, 2018a) and Gender-Based Analysis Plus (GBA+) (Government of Canada, 2022; Cameron & Tedds, 2023). Qualitative research may support these endeavors, assisting researchers in understanding 2SLGBTQIA+ MST experiences

through their own words (Brown et al., 2022). Another imperative is quantifying the degree to which MST relates distinct types of minority stress (e.g., ethnic, intergenerational, etc.) (Livingstone et al., 2019). Researchers must actively consider the impacts of MST on identity concealment and mental health outcomes (Eleazar, 2023). Finally, longitudinal and cross-sectional research should examine how the inclusion of affirming healthcare impacts MST outcomes for different members of the 2SLGBTQIA+ military community (O'Leary & Marcelli, 2022).

Limitations. The findings of this scoping review have some limitations. Given most articles were conducted with U.S. populations, these results may be culturally dependent and not completely generalizable to 2SLGBTQIA+ experiences in other countries. While our findings were bolstered by the inclusion of many databases, we may not have included all relevant sources, as our search strategy would only have captured those articles that fit our specific inclusion criteria. Some article types were not considered (e.g., academic textbooks, book chapters, news articles) in this review. While this search was inclusive of August 2023, ongoing research cannot be commented on. Another limitation was the lack of standardization of 2SLGBTQIA+ terminology, limiting the degree of generalizability of these findings to all members of this community. Finally, as it is beyond the capacity of a scoping review to comment on the quality of the research overviewed, the present review cannot comment on the quality of the research examined.

Conclusion

This scoping review examined the breadth and depth of the present literature on the experiences of MST in the 2SLGBTQIA+ military community. It highlighted the toll that MST places on 2SLGBTQIA+ military members' physical and mental health and how it contributes to

barriers to help-seeking. It also examined social factors, including harm to interpersonal relationship dynamics, harm to individual and occupational identity, and the negative impacts of military culture on social well-being. Finally, it overviewed recommendations for how to counteract MST in the 2SLGBTQIA+ military community, including cultural support recommendations, health care recommendations, policy recommendations, and research recommendations. Despite the significant negative impacts of MST on the 2SLGBTQIA+ military community, there is ample opportunity for collaborative improvements at the level of institution, healthcare, and research, with the goal of creating a more inclusive and affirming military culture for all military community members.

Table 2: Summary of Studies

Authors	Published Year	Study Purpose	Study Type	2SLGBTQIA+ Terminology
Ahuja, A.; Ortega, S.; Belkin, A.; Neira, P.M.	2019	Examined LGBTQ-related military issues, including MST and sexually discriminatory policies and their impacts.	Position/Perspective Paper	LGBTQ
Alford, B.; Lee, S.J.	2016	Examined MST and sexually discriminatory policy impact and implications for LGBT military members	Position/Perspective Paper	LGBT
Averill, L.A; Eubanks Fleming, C.J.; Holens, P.L.; Larsen, S.E.	2015	Discussed health risk factors, including MST, for LGBT military members, as well as health care utilization behaviours	Position/Perspective Paper	LGBT
Banner, F.	2012	Examined impacts of MST and sexually discriminatory policies, prejudice, and sexual orientation based discrimination impact in LG service members	Position/Perspective Paper	LGBT
Beckman, K.; Shipherd, J.; Simpson, T.; Lehavot, K.	2018	Study examined frequency of MST as well as incidence rates of other mental health outcomes of TG veterans.	Survey Study; Questionnaires	No acronym
Belkin, A	2001	Discussed impact of MST and sexual orientation-based discrimination and policy implications for military cohesion for LG service members	Position/Perspective Paper	No acronym
Belkin, A	2003	Discussed legacy of MST and sexual orientation based discrimination for gay service members	Position/Perspective Paper	No acronym
Bell, M.E.; Turchik, J.A.; Karpenko, J.A.	2014	Examined impacts of MST and harassment on health and functioning for LG service members	Narrative Review	No acronym
Bloeser, K.	2016	Discusses LG military experiences of MST, as related to minority stress, occupational stress, and PTSD.	Survey Study	LGBT

Blosnich, J.R.; Hilgeman, M.M.; Cypel, Y.S.; Akhtar, F.Z.; Fried, D.; Ishii, E.K.; Schneiderman, A.; Davey, V.J.	2022	Study examined role of potentially traumatic events, including MST, probable PTSD, and health-related quality of life in LGB veterans.	Secondary analysis of larger data set	LGB
Bonner, K.B.; Segal D.R.	2005	Article discusses impact of MST-related discrimination and policy on military effectiveness for LG service members	Position/Perspective Paper	No acronym
Bonnes, S.	2021	Study discussed MST, through lens of intersectionality, for LGBT service members	Position/Perspective Paper	LGBT
Booth, B.M.; Davis, T.D.; Cheney, A.M.; Mengeling, M.A.; Torner, J.C.; Sadler, A.G.	2012	Study examined MST-related experiences of in-military rape and substance use for women service members with female sexual partners.	Survey Study	No acronym
Booth, B.M..; Mengeling, M.; Torner, J.; Sadler, A.G.	2011	Study examined impact of in-military rape on health outcomes for women service members with female sexual partners	Survey Study	No acronym
Bovin M.J.; B.S.K.; Kleiman S.E.; Brown M.E.; Brown L.G.; Street A.E.; Rosen R.C.; Keane T.M.; Marx B.P.	2019	Study examined how MST related to demographics characteristics of male and female military veterans, including LGB and other-identifying service members.	Survey Study; Interviews	No acronym
Bowling, K.L.; Firestone, J.M.; Harris, R.J.	2005	Article discussed awareness of harassment and discrimination within the US military for LGBT personnel.	Position/Perspective Paper	No acronym
Brown, A; Millman, H; Easterbrook, B; Heber, A; Park, R; Lanius, R; Nazarov, A; Jetly, R; Stanley-Aikens, R; Sanderson, C; Hutchins, C; Darte, K; Hall, AL; Bremault-Phillips, S; Smith-MacDonald, L; Doak, D; Oakley, T; Nicholson, AA; Pichtikova, M; Smith, P; Mulligan, A; Byerlay, C; McKinnon, MC	2022	Study addressed approaches to cultural change in the experience of sexual misconduct, including implications for LGBTQIA2S+ service members.	Position/Perspective Paper	LGBTQIA2S+

Brown, G.R; Jones, K.T.	2015	Study examined health disparities of TG veterans related to MST.	Secondary analysis of larger data set	TG
Brown, G.R.; Jones, K.T.	2016	Study examined justice involved TG veterans with histories of sexual trauma/MST as related to health and life outcomes.	Secondary analysis of larger data set	TG
Browne, K.C.; Dolan, M.; Simpson, T.L.; Fortney, J.C.; Lehavot, K.	2018	Study addressed cannabis use for LB veterans who had experienced sexual trauma during their military service	Survey Study	No acronym
Burks, D.J.	2011	Review exploring impact of exclusionary military policies on LGB service members, including impacts such as sexual stigma and sexual prejudice.	Narrative Review	LGB
Calkins, A.; Cefalu, M.; Schell, T.L.; Cottrell, L.; Meadows, S.O.; Collins, R.L.	2023	Study examined active duty LGBTQ+ military populations as related to sexual abuse experienced while in the military	Secondary analysis of larger data set	LGBTQ+
Cameron, R.P.; Mona, L.R.; Syme, M.L.; Cordes, C.C.; Fraley, S.S.; Chen, S.S.; Klein, L.S.; Welsh, E.; Smith, K.; Lemos, L.	2011	Study discussed LGBT military social context and MST as well as health-related correlates	Narrative Review	LGB
Carroll, K.K.; Lofgreen, A.M.; Weaver, D.C.; Held, P.; Klassen, B.J.; Smith, D.L.; Karnik, N.S.; Pollack, M.H.; Zalta, A.K.	2018	Study examined LGB experiences of MST and post-traumatic cognitions	Interview Study	No acronym
Chang, C.J; Fischer, I.C; Depp, C.A; Norman, S.B; Livingston, N.A; Pietrzak, R.H.	2023	Study discussed MST-related experiences for sexual minority veterans, including LBP and other-identity service members	Survey Study	No acronym
Cochran, B.N.; Balsam, K.; Flentje, A.; Malte, C.A.; Simpson, T.	2013	Study examined LGB service members mental health as related to military sexual misconduct	Survey Study	LGB
Connell, C.	2022	Study discussed sexual harassment of LGBT service members in post-DADT military culture	Interview Study	LGBT

Cunningham, N.	2021	Study discussed perpetrator behaviours in DADT for gay service members	Secondary analysis of larger data set	No acronym
Dallocchio, M.	2021	Study discussed identity through an intersectional lens, but included discussion of LGBTQ veteran experiences and sexual-orientation-based discrimination	Narrative Review	LGBTQ
Damiano, C.M.	1999	Article discussed harassment of lesbian service members under DADT and the institutional perpetuation of harassment	Position/Perspective Paper	No acronym
Eichert, D.	2019	Discussed role of hypermasculinity and gender-based discrimination, including gay service members.	Position/Perspective Paper	LGBTQ+
Eichler, M., Smith-Evans, K., Spanner, L., and Tam-Seto, L.	2021	Study examined military to civilian transition related to sexual and gender-based issues in military personnel, including LGBT personnel.	Scoping review	LGBTQ2
Eichler, M.	2016	Perspective paper on MST and its impacts on gender-based issues, including for LGBTQ personnel.	Position/Perspective Paper	LGBTQ
Eleazer J.R.; Marchant L.; Kizewski A.; Gross G.; Warren A.; McCubbin L.	2023	Study on resilience of TG service members in relation to MST	Interview Study	LGBTQ+
Estrada, A.X; Laurence, J.H	2009	Study discussed sexual-orientation-based harassment and anti-stigma training techniques, particularly with respect to DADT and LG service members.	Survey Study	No acronym
Estrada, A.X..; Dirosa, G.A..; Decostanza, A.H.	2013	Study of gay U.S. military personnel and MST behaviours including prejudice, harassment, and discrimination.	Narrative Review	LGBT

Fletcher, O.V.; Chen, J.A.; van Draanen, J.; Frost, M.C.; Rubinsky, A.D.; Blosnich, J.R.; Williams, E.C.	2022	Study of TG veterans, substance use, economic stressors, and MST.	Secondary analysis of larger data set	LGBTQ
Gibson, C.J;. Gray, K.E.; Katon, J.G.; Simpson, T.L.; Lehavot, K.	2016	Study on MST and demographic criteria of women veterans, including LGB veterans.	Survey Study	No acronym
Goldbach, J.; Castro, C.; Goldbach, J.T; Castro, C.A.	2016	Study on impact of DADT on LGBT service members.	Narrative Review	LGBT
Gorman, K.R.; Kearns, J.C.; Pantalone, D.W.; Bovin, M.J.; Keane, T.M.; Marx, B.P.	2021	Study on deployment related stressors for LB service members and MST.	Narrative Review	SMG
Gurung, S.; Ventuneac, A.; Rendina, H. J.; Savarese, E.; Grov, C.; Parsons, J.T.	2018	Study on prevalence of MST for LGBT military personnel.	Survey Study	LGBT
Hajizadeh, M.; Aiken, A.; Cox, C.	2019	Study examined MST in the Canadian Armed Forces, including LGBT service members.	Secondary analysis of larger data set	LGBT
Hebrank, K.; Fortson, B.; Pigott, T.; Dipetrillo, B.; Self-Brown, S.	2022	This study analyzed results from an MST Canadian Armed Forces survey by gender identity and sexual orientation.	Meta-Analysis	LGBTQIA+
Herek, G.M.	1993	Study examined dynamics of military sexual assault risk factors, including TG and non-heterosexual-orientation service members.	Position/Perspective Paper	No acronym
Jasuja G.K.; Reisman J.I.; Rao S.R.; Wolfe H.L.; Hughto J.M.W.; Reisner S.L.; Shipherd J.C.	2023	Study examining health disparities in TG and GD veterans, including relationship to MST.	Secondary analysis of larger data set	LGBT
Jeffery, D.D.; Beymer, M.R.; Mattiko, M.J.; Shell, D.	2021	Study of health behaviours of homosexual and bisexual active duty military personnel, including MST during military service for lesbian service members.	Secondary analysis of larger data set	LGB

Johnson, W.B.; Rosenstein, J.E..; Buhrke, R.A..; Haldeman, D.C.	2015	Discussion of sexual stigma, prejudice, and victimization for LGB military personnel and health care considerations.	Narrative Review	LGB
Kameg, B.	2020	Discussion of historical and current cultural policies related to MST for LGBT service members.	Position/Perspective Paper	LGBTQ
Kauth M.R.; Meier C.; Latini D.M.	2014	Discussion on sexual health related issues for lesbian, bisexual, and gay veterans related to MST-based experiences	Narrative Review	LGB
Kauth, M.R.	2012	Explores sexual health related to MST and DADT for veterans' sexual health and functioning, including LGB veterans.	Editorial	No acronym
Kerrigan, M.F.	2012	Examines DADT as related to TG service members, discrimination, and MST.	Position/Perspective Paper	LGBT
Klemmer, C.L.; Schuyler, Ashley C; Mamey, Mary Rose; Schrager, Sheree M; Castro, Carl Andrew; Goldbach, Jeremy; Holloway, Ian W	2020	Examines dimensions of MST and health care utilization for active duty LGBT service members	Survey Study	LGBT
Lehavot, K.; Simpson, T.L.	2013	Discussion of MST for lesbian and bisexual service members in relation to PTSD	Narrative Review	LGB
Lehavot, K.; Simpson, T.L.	2014	Discussion of institutional discrimination and stigma towards LB service veterans	Survey Study	LGB
Lindsay, J.A.; Keo-Meier, C.; Hudson, S.; Walder, A.; Martin, L.A.; Kauth, M.R.	2016	Examines MST in TG veterans and health outcomes.	Secondary analysis of larger data set	No acronym
Livingston, N.A.; Berke, D.S.; Ruben, M.A.; Matza, A.R.; Shipherd, J.C.	2019	Qualitative study about LGBT experiences of MST-related discrimination and harassment.	Interview Study	LGBT
Livingston, W.S.; Fargo, J.D.; Blais, R.K.	2022	Examines prevalence rates of health outcomes of MST in TG veterans.	Secondary analysis of larger data set	No acronym

Lofgreen, A.M.	2020	Discussion of MST including clinical issues for LGBT service members.	Editorial	LGBTQ+
Lofgreen, A.M.; Carroll, K.K.; Dugan, S.A.; Karnik, N.S.	2017	Discussion of care-related concerns for victims of MST, including LGBTQ military community members.	Narrative Review	LGBT
Lucas, C.L.; Goldbach, J.T.; Mamey, M.R.; Kintzle, S.; Castro, C.A.	2018	Study of rates of MSA and mental health difficulties in LGB veterans.	Survey Study	LGB
Matarazzo, B.B; Barnes, S.M.; Pease, J.L.; Russell, L.M.; Hanson, J.E.; Soberay, K.A.; Gutierrez, P.M.	2014	Study on suicide risk for LGBT service members, including MST-related discrimination and victimization.	Scoping review	LGBT
Mattocks, K.M.; Sadler, A.; Yano, E.M.; Krebs, E.E.; Zephyrin, L.; Brandt, C.; Kimerling, R.; Sandfort, T.; Dichter, M.E.; Weiss, J.J.; Allison, J.; Haskell, S.	2013	Survey paper that examined sexual victimization, healthcare utilization and mental health of LB service members.	Survey Study	No acronym
McDonald, J.L.; Ganulin, M.L.; Dretsch, M.N.; Taylor, M.R.; Cabrera, O.A.	2020	Study examined Study examined health behaviour and utilization, as well as perceived prejudice and social factors of MST, in LGB veterans.	Survey Study	LGBT
McNamara, K.A.; Gribble, R.; Sharp, M.; Alday, E.; Corletto, G.; Lucas, C.L.; Castro, C.A..; Fear, N.T..; Goldbach, J.T..; Holloway, I.W.	2021	Study examined military sexual assault and sociodemographic data in a sample of bisexual veterans.	Survey Study	LGBT
McNamara, K.A.; Lucas, C.L.; Goldbach, J.T.; Kintzle, S.; Castro, C.A.	2019	Study on MST and perceived belonging for LGBT serving military members.	Survey Study	LGB
Milano C	2006	Perspective paper on discharge related to DADT of a gay service member.	Position/Perspective Paper	No acronym

Moody, R.L.; Savarese, E.; Gurung, S.; Rendina, H.J.; Parsons, J.T.	2020	Study on MST, psychological distress, and alcohol use for LGB military personnel.	Secondary analysis of larger data set	LGB
Moradi, B	2006	Discusses LG experiences of MST related to historical discriminatory military policies	Survey Study	No acronym
Moradi, B.	2009	Discusses MST-based harassment and military cohesion for LGBT service members.	Survey Study	LGBT
Paulson J.L.; Florimbio A.R.; Rogers T.A.; Hartl Majcher J.; Bennett D.C.; Sexton M.B.	2022	Examined MST and environmental and social factors impacting sexual and gender minority veterans.	Interview Study	LGBTQ
Poulin, C; Gouliquer, L; Moore, J	2009	Qualitative examination of psychological, physical, and social impacts of MST-based discrimination for homosexual female military personnel.	Interview Study	LGBT
Poulin, C.; Gouliquer, L.; McCutcheon, J.	2018	Study on LG soldiers' experiences of MST-based discrimination in a military context with policy recommendations.	Interview Study	LGBTQ
Powell, H.A..; Stinson, R.D..; Erbes, C.	2022	Study on affirmative health care needs for TG and GD veterans with former experiences of MST.	Narrative Review	TGD
Rashkovsky, K.; Solano, I.; Khalifian, C.; Morland, L.A.; Knopp, K.	2022	Study on MST and interpersonal/romantic relationship functioning for LGB Veterans	Survey Study	LGB
Rich, C.; Schutten, J.; Rogers, R.	2012	Discussion of DADT and risks posed to LG service members in heteronormative military environment	Position/Perspective Paper	LGBTQ
Schuyler, A.C.; Klemmer, C.; Mamey, M.R.; Schrager, S.M.; Goldbach, J.T.; Holloway, I.W.; Castro, C.A.	2020	Study on experiences of MST in LGBT service members.	Survey Study	LGBT
Schvey, N.A.; Klein, D.A.; Pearlman, A.T.; Kraff, R.I.; Riggs, D.S.	2020	Study on MST-related stigma for TG service members and mental health and psychosocial functioning.	Survey Study	LGBT

Senter, A.D.	2020	Examine rates of military sexual trauma (MST) among LGBT veterans and service members.	Survey Study	LGBTQ
Sexton, M.B.; Davis, M.T.; Anderson, R.E.; Bennett, D.C.; Sparapani, E.; Porter, K.E.	2018	Examined dimensions of sexual and gender minority status, suicide, and MST	Interview Study	LGBT
Shipherd, J.C.; Darling, J.E.; Klap, R.S.; Rose, D.; Yano, E.M.	2018	Examined LGBT-related experiences of MST-based harassment and health care utilization	Survey Study	LGBT
Shipherd, J.C.; Lynch, K.; Gatsby, E.; Hinds, Z.; DuVall, S.L.; Livingston, N.A.	2021	Examined minoritized sexual orientation veterans' experiences of MST-based discrimination.	Quantitative; Secondary analysis of larger data set	LGBTQ+
Shipherd, J.C.; Ruben, M.A.; Livingston, N.A.; Curreri, A.; Skolnik, A.A.	2018	Examined MST-based discrimination and treatment experiences in LGBT veterans.	Pilot Study	LGBT
Simpson, T.L.; Balsam, K.F.; Cochran, B.N.; Lehavot, K.; Gold, S.D.	2013	Examined barriers to care for veterans with LGB veterans who reported experiences of MST-based stigma during military service.	Survey Study	GLB
Tannahill, H.S.; Barrett, T.S.; Zalta, A.K.; Tehee, M.; Blais, R.K.	2023	Examined post traumatic cognitions related to in-military rape of sexual minority (non-heterosexual identifying) military members.	Survey Study	No acronym
Tucker, R.P.; Testa, R.J.; Reger, M.A.; Simpson, T.L.; Shipherd, J.C.; Lehavot, K.	2019	Study explored gender minority experiences of suicidal ideation related to gender-based discrimination during military service.	Survey Study	No acronym
Turchik, J.A..; McLean, C.; Rafie, S.; Hoyt, T.; Rosen, C.S.; Kimerling, R.	2013	Study examined barriers to care for military veterans endorsing MST, including gay service members.	Interview Study	No acronym
Valentine, S.E; Shipherd, J.C.; Smith, A.M.; Kauth, M.R.	2021	Study looked at health disparities for LGBT service military personnel, including MST-based discrimination in military health care settings.	Program Evaluation Project	LGBT

Vaughn, J.N.	2015	Qualitative study of lesbian service women's experiences of discrimination and sexual identity suppression under DADT.	Interview Study	LGB
Walker, P.R.	2021	Study of MST-based discrimination's impact on LGBTQ+ service members experiences of intimate partner violence and health care utilization.	Interview Study	No acronym
Warren, A.R.; Relyea, M.R.; Gross, G.M.; Eleazer, J.R.; Goulet, J.L.; Brandt, C.A.; Haskell, S.G.; Portnoy, G.A.	2023	Study on intimate partner violence and MST for LGB veterans.	Survey Study	LGB
Watkins, E.Y.	2022	Position paper on health disparities for LGBT military personnel related to MST-based discriminatory policies.	Position/Perspective Paper	LGBT
Wilder, H.; Wilder, J.	2012	Position paper on suicide risk for LGB service members following repeal of DADT and healthcare support and service provision recommendations	Position/Perspective Paper	LGB
Wilsey, C.N.	2020	Study on health disparities for sexual minority MST survivors.	Program Evaluation Project	LGBT
Wilson-Buford, K.	2013	Examined impact of discriminatory military court proceedings on sexual minority service members related to MST.	Position/Perspective Paper	No acronym

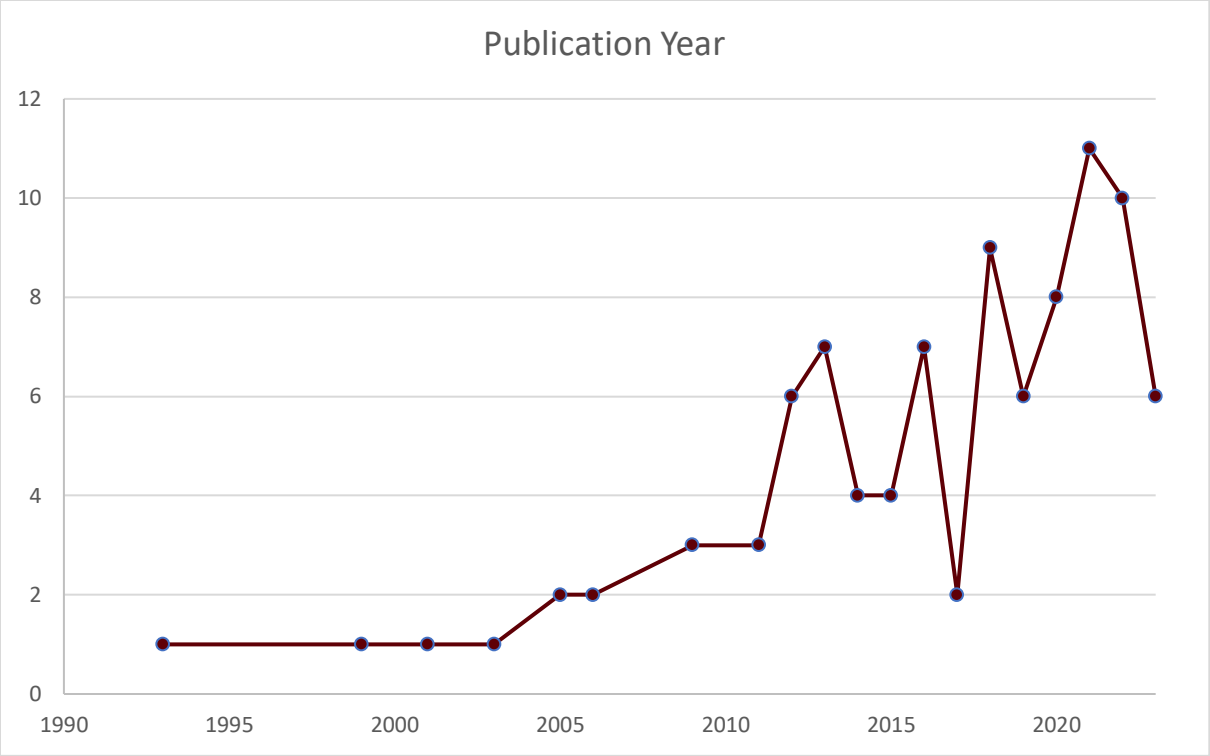

Figure 4: Publication Year

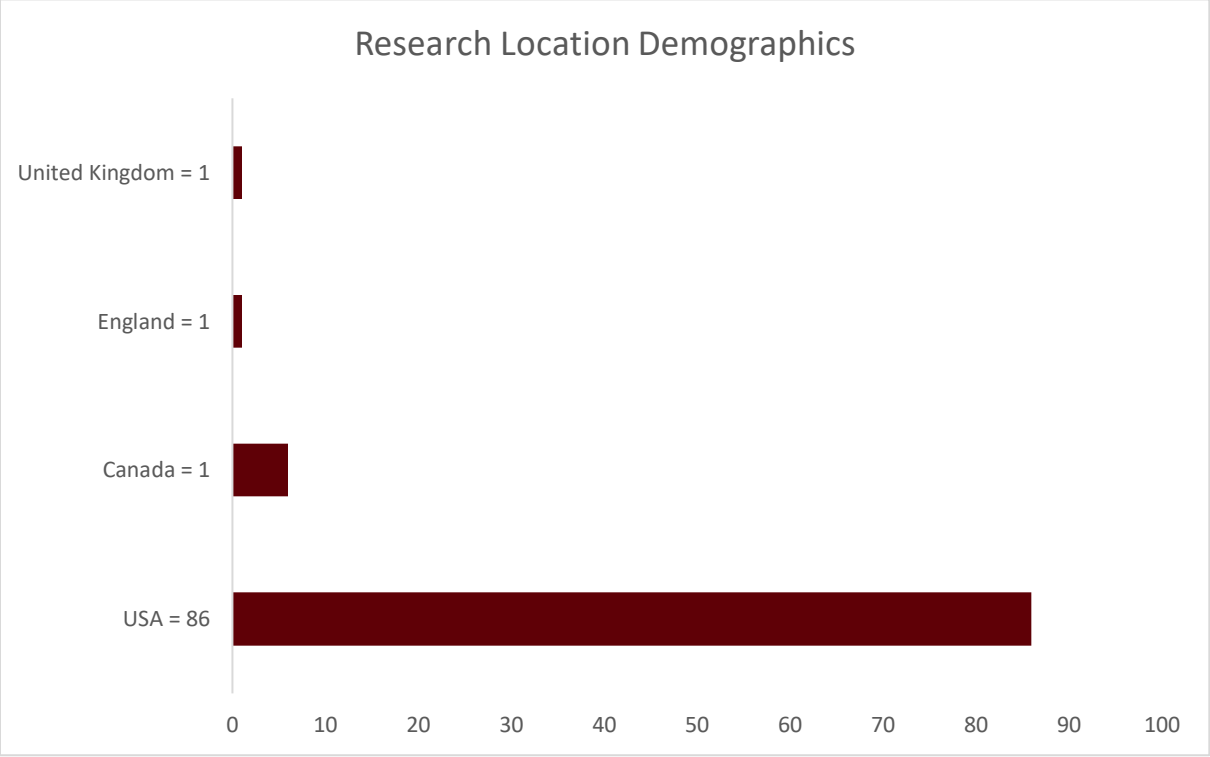

Figure 5: Location Demographics

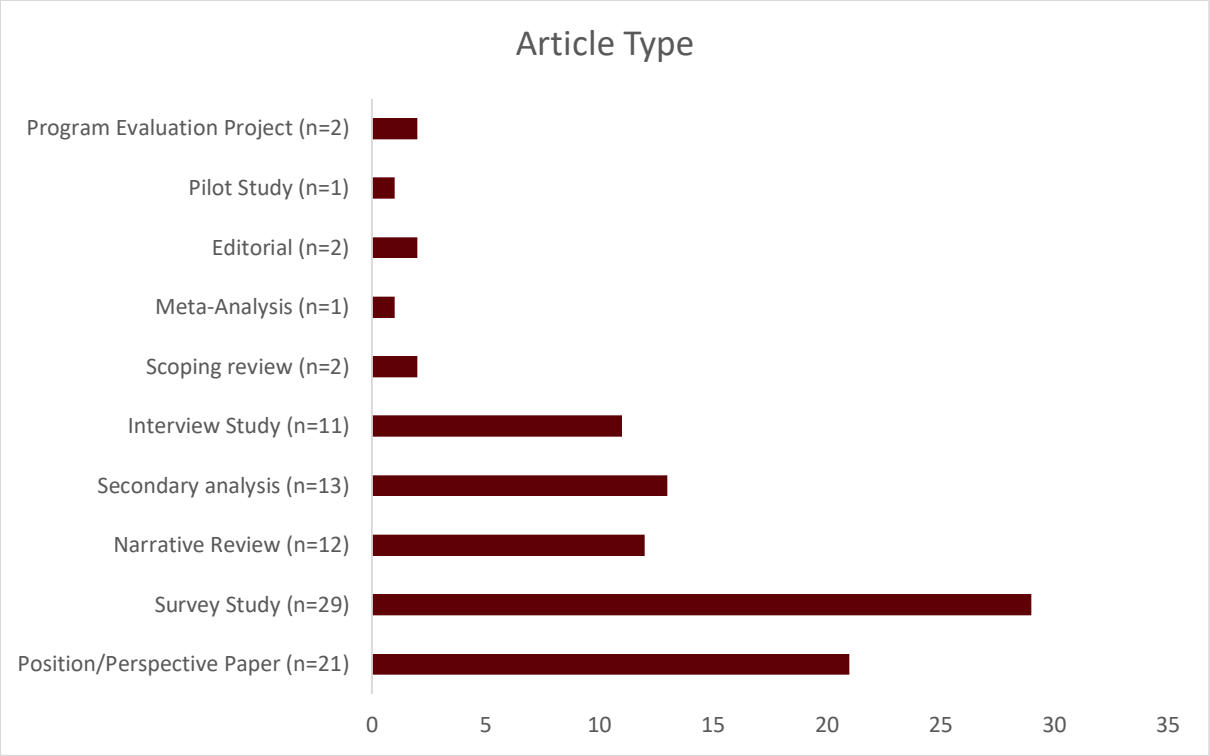

Figure 6: Article Type

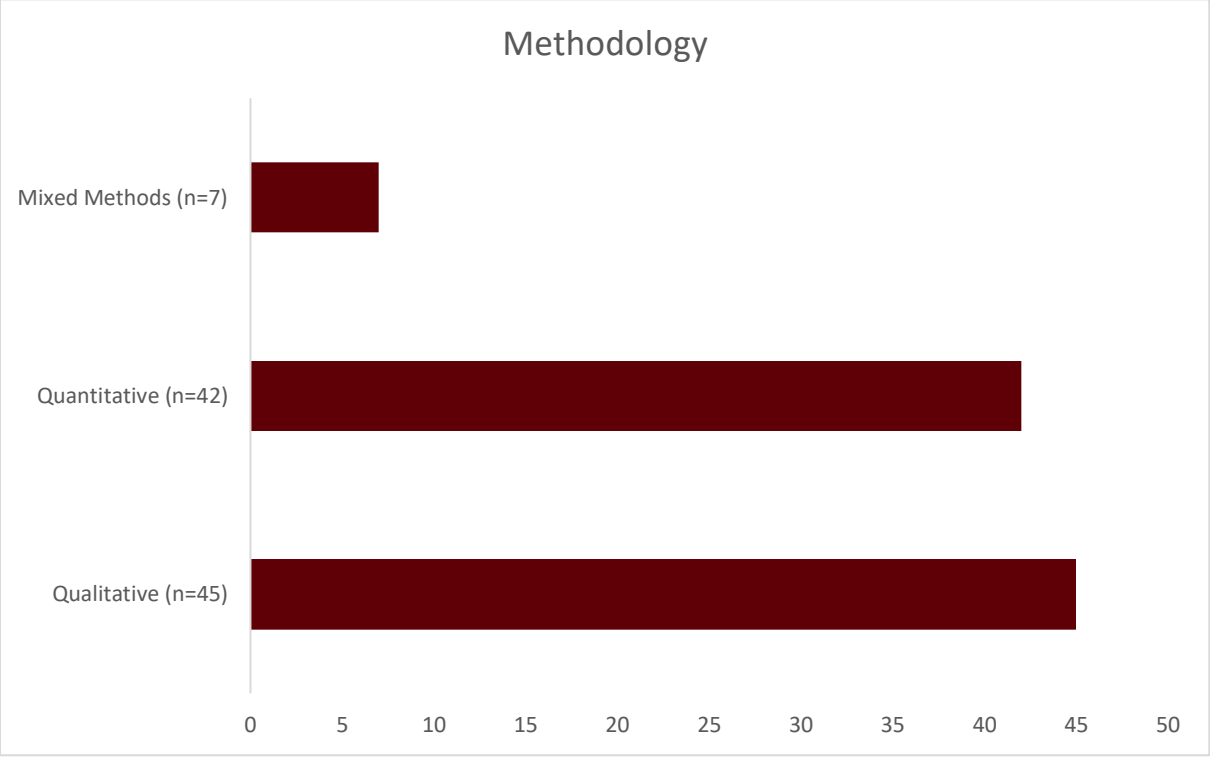

Figure 7: Article Methodology

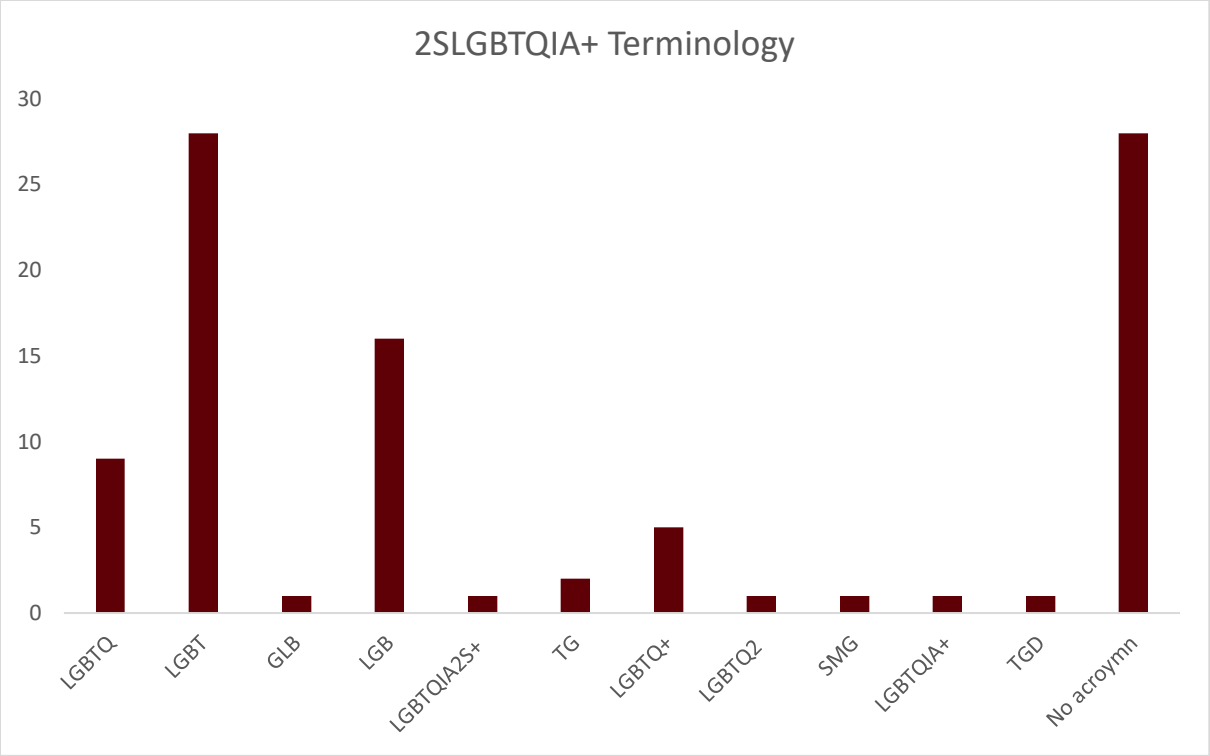

Figure 8: Use of 2SLGBTQIA+ Terminology

Table 3: Search Strategy

MEDLINE <August 23, 2023>

1	Military Personnel/ or militar*.mp.	102370
2	reserve*.mp.	103739
3	"national guard*".mp.	1048
4	soldier*.mp.	12787
5	"special force*".mp.	345
6	marine*.mp.	126745
7	"coast guard*".mp.	282
8	"air forc*".mp.	4489
9	navy.mp.	4901
10	naval.mp.	11954
11	exp Veterans/ or veteran*.mp.	51813
12	army.mp.	17292
13	"armed force*".mp.	7387
14	"sex* trauma*".mp. or exp Sexual Trauma/	1334
15	exp sex offenses/ or exp rape/	27690
16	"sex* violen*".mp.	5668
17	“sex* harass*”.mp. or exp Sexual Harassment/	3451
18	exp Military Sexual Trauma/ or "military sex* trauma*".mp.	423
19	"sex* assault*".mp.	7326
20	genderqueer*.mp.	163
21	"gender queer*".mp.	34
22	exp "sexual and gender minorities"/	16744

23	genderfluid.mp. 13
24	"gender fluid*".mp. 61
25	exp intersex persons/ or intersex*.mp. 3801
26	exp Gender Identity/ 24144
27	asexual*.mp. 11556
28	exp Transgender Persons/ or transgender*.mp. 12996
29	pansexual*.mp. 144
30	exp lesbian/ or exp lesbianism/ or exp Homosexuality, Female/ or Lesbian*.mp. 23467
31	gay.mp. or exp Homosexuality/ or exp Homosexuality, Male/ 41386
32	lgbtq*.mp. 2764
33	2slgbtq*.mp. 53
34	queer*.mp. 2680
35	"two spirit*".mp. 164
36	exp Bisexuality/ or bisexual*.mp. 13720
37	homosexual*.mp. or exp Homosexuality/ 41043
38	"gender dysphor*".mp. 2210
39	exp Transsexualism/ or transexual*.mp. 4638
40	1 or 2 or 3 or 4 or 5 or 6 or 7 or 8 or 9 or 10 or 11 or 12 or 13 392056
41	14 or 15 or 16 or 17 or 18 or 19 35997
42	20 or 21 or 22 or 23 or 24 or 25 or 26 or 27 or 28 or 29 or 30 or 31 or 32 or 33 or 34 or 35 or 36 or 37 or 38 or 39 97019
43	40 and 41 and 42 72

Chapter 5: Conclusions

The World Health Organization defines health as a state of "complete physical, mental, and social well-being" (Grad, 2002, p. 981). As a part of public safety and national security vocations, PSP and MP face extensive exposure to potentially traumatic experiences, whereby they actively put their health at risk as part of their on-the-job service. While some consider traumatic exposures to be "occupational hazards" of these positions (Komarovskaya et al., 2011; Berger et al., 2012), rather than being merely hazards, such traumatic exposures can result in overwhelmingly negative impacts on mental, health, social, and functional well-being, in the form of OSI (Richardson et al., 2008; Oliphant, 2016). Due to structural barriers inherent in the organizational environment to which they belong (e.g., MST), PSP and MP who experience OSI may avoid help-seeking and instead, become susceptible to the impact of OSI on their health and overall functioning (Ricardelli et al., 2018).

In Chapter 2, through conducting semi-structured interviews with PSP, we endeavoured to capture the self-described mental health and functional impacts of an OSI (i.e., PTSD) in a treatment-seeking PSP population. The results of our interpretive phenomenological analysis revealed rich narrative descriptions of their PTSD symptom expression that neatly mapped onto the primary criteria of PTSD, as outlined by the DSM-5-TR (Easterbrook et al., 2022; Weathers et al., 2013). These themes strongly denote person-specific factors that mediate the expression of OSI for PSP (Edgelow et al., 2023). They also hold important implications for our understanding of how operational stress is experienced by PSP, as well as its relationship to how trauma-related symptoms and PSTD symptom clusters are expressed in this population.

Not only do operational stressors implicate OSI, but so do organizational stressors. Chapter 3 outlined the impact of an organizational stressor on an equity-deserving population of

military service members, woman—identifying MP. In Chapter 3, we sought to outline the gendered impact of an operational stressor, MST, on woman-identifying military Veteran's experiences of operational deployment and on operational functioning. Through semi-structured interviews, participants noted when MST was an active part of a given deployment experience, it undermined their experiences of military cohesion in three primary ways: it devalued the contribution of their service, weakened their feelings of acceptance from fellow unit members, and lessened feelings of integration with fellow team members. In contrast, when MST was not present as part of their deployment experience, participants relayed the opposite, that is, that they felt valued, accepted, and integrated with fellow unit members. Thus, in operational deployment contexts, MST represents a significant barrier to operational effectiveness, threatening both those it disproportionately targets (e.g., woman-identifying MP) and the purpose of the operational mission itself.

In Chapter 4, we expanded our understanding of the impact of OSI on equity-deserving groups by outlining how this same organizational stressor, MST, is experienced by the 2SLGBTQIA+ military population. Utilizing a scoping review of the literature, we sought to capture the breadth and depth of the present research on the topic, with the goal of informing future research initiatives and identifying present gaps in knowledge. Our results provided a comprehensive examination of how trauma-related stressors (i.e., MST-related stressors) resulted in detrimental impacts to important domains of functioning, including health, social, and functional impacts, further emphasizing the far-reaching implications of MST across multiple populations of equity-deserving MP.

5.1 Implications

Treatment Targets for PTSD-Related OSI in PSP and MP Populations

In this dissertation, we aimed to investigate how PSP and MP experience mental and functional outcomes of OSI, as well as the role that operational and organizational stressors play in these outcomes. Chapter 2 outlined person-specific experiences of PTSD-related symptoms, providing insights into how PSP subjectively experience PTSD symptoms. These results hold important weight for clinicians working with PSP populations, particularly for those with PTSD or related mental health OSI. They emphasize the consideration of person-specific factors in PTSD diagnosis and treatment (Edgelow et al., 2023), as well as consideration of the etiological origins, clinical course, and symptom expression associated with the individual expressions of PTSD in PSP. Importantly, PSP may experience a different range or expression of PTSD than do civilians with the same diagnosis, particularly as extreme forms of stress are a regular part of their occupational duties (Kilpatrick et al., 2013).

It is important to note that the PSP interviewed in Chapter 2 were treatment-seeking and actively in PTSD programming; thus, other PSP with PTSD OSI may not show the same degree of insight (e.g., non-treatment seeking PSP or those in an earlier stage of change). Related to insight, these participants demonstrated considerable understanding of how their symptoms were expressed, as well as the factors which precipitated (e.g., operational factors) and maintained them (e.g., organizational factors). Nontreatment seeking PSP may struggle with achieving this same degree of insight, such as those who struggle to tolerate distress or uncomfortable emotions, which is critical for processing traumatic memories (Foa et al., 2008). PTSD negatively impacts emotional regulation (Klemanski et al, 2012; Price et al., 2006), autobiographical memory (Brown et al., 2014), attention (Vasterling et al., 2002), perspective

taking (Mazza et al., 2006), and adaptive interpersonal functioning (Cook et al., 2004); thus, it is critical that care providers target and address these symptom clusters, particularly for PSP who may be attending treatment in the process of returning to work, as their symptoms may be simultaneously re-triggered by contextual triggers in the workplace (Waddell et al., 2020).

Particularly important symptom treatment targets for PSP are guilt and shame, which tend to be more complex in their presentation for this population (Klemanski et al., 2012; Price et al., 2006), particularly as PSP face a greater degree of morally injurious occupational stressors than many other vocations (Roth et al., 2023). Guilt and shame exacerbate the processing of other emotions, resulting in increased rates of self-deprecation, negative worldview, and distorted autobiographical narrative (Brown et al., 2014; Mazza et al., 2006). Indeed, in Chapter 2, our results indicated contextual examples of how guilt and shame interfere with functional and social PTSD outcomes for PSP, including difficulty managing "anger problems" (e.g., "losing control" and "flying off the handle)", or how, due to their OSI, they now lack the "skills" necessary to partake in activities of daily living. These difficulties lead to a generalized feeling of "vulnerability", where participants described struggling with interpersonal relationships (e.g., friends and family), including experiencing guilt in the context of these difficulties, particularly towards the impact of their injury on their children.

Existing research suggests that negative emotional outcomes of OSI in PSP, including emotional symptoms of guilt, shame, and anger are particularly associated with symptoms of moral injury (Jinkerson, 2016; Roth et al., 2023), particularly in the context of a lack of organizational support. In Chapter 2, participants described symptoms related to moral injury and the cumulative nature of morally injurious events, related to their OSI, as relating to a lack of organizational support (e.g., "they don't care one single bit"). They linked these symptoms (e.g.,

betrayal) to their personal sacrifice of service being unrecognized or unappreciated by their organizations. Thus, addressing symptoms of moral injury in the context of organizational stress represents another critical treatment target for clinicians treating PTSD-related OSI in PSP. Clinicians can also consider the use of moral injury-specific assessment tools, such as the Moral Injury Assessment for Public Safety Personnel (MIA-PSP) (Roth et al., 2023), to support their understanding of the person-specific symptoms of moral injury in PSP and MP.

To address these symptoms, clinicians and allied healthcare providers should consider multipronged approaches to the mental, social, and functional impacts of OSI. Non-pharmacological and non-psychotherapeutic treatment options for PTSD should be provided (Strauss et al., 2011). Particularly for OSI stemming from MST, alternative and efficacious treatment options may include those that incorporate somatic processing, such as trauma-sensitive yoga (Zaccari et al., 2022) and trauma-informed yoga (Braun et al., 2021). Indeed, sexual-trauma-related yoga, while an understudied treatment in military populations, is suggested to be potentially as effective as Cognitive Processing Therapy (Chopin et al., 2020), a gold-standard treatment method for PTSD in military populations (Kelly et al., 2021). Such standardized treatment protocols (i.e., CPT) are subject to high rates of attrition for MP (Eftekari, Crowly, & Rosen, 2020) and have variable effectiveness, whereby 60-70% continue to meet PTSD criteria following a course of treatment (Steenkamp et al., 2015). Thankfully, integrative treatments for PTSD treatment for MP are actively being pursued by some military health associations, such as the U.S. Veterans Administration (Etingen et al., 2023). Organizational support, such as from supervisors and leadership, can help to reduce OSI-based stigma in workplace culture and support a reduction in culture-based stress levels for PSP (Carleton et al., 2020). Social support can also come from family and friends, which research has shown to be

protective against some of the extreme negative outcomes of PTSD OSI (i.e., suicide) (Genest, Ricciardelli, & Carleton, 2021).

Finally, another critical implication of Chapter 2 pertains to the descriptive value of participants' self-described PTSD symptomology through the lens of the DSM-V PTSD criteria. Research has consistently shown that PTSD is a multidimensional disorder with a variety of accompanying emotional symptoms (e.g., guilt, shame) that are independent of anxiety spectrum disorders (Friedman et al., 2011). As opposed to its predecessor, the DSM-IV, which classified PTSD within Anxiety-related Disorders, the DSM-VPTSD was classified in a new category, Trauma and Stressor-Related Disorders. This new classification represented a distinct change in the previous clinical conceptualization of PTSD's etiological symptom expression, as it did not define the disorder's symptoms as being related to the context from which the symptoms emerged (i.e., a Criterion A event) (Pai, Suris, & North, 2017). Particularly given the iterative nature of refining diagnostic criteria (North et al., 2009), our results hold important weight for the future understanding and conceptualization of PTSD symptomology. Chapter 2 provided distinct and descriptive examples of the range of Criterion A events which underscored PSP's PTSD diagnoses, as well as descriptive examples of the range and expression of other criteria symptoms (e.g., Criteria B-E). It is our hope that these results will prove useful in further refining DSM criteria's accurate description of PTSD symptom expression, particularly related to PTSD expression in unique populations or occupational environments, such as that of PSP.

Impacts of MSM and MST on Equity-Deserving Military Personnel

The impacts of organizational stressors, such as MST and MSM, are particularly detrimental for equity-deserving populations. Chapter 3 outlined the impacts of MSM on the functional experiences (i.e., military cohesion) of a group of equity-deserving woman-identifying

Veterans. Despite being asked only about their experiences of operational deployment (and not about experiences of MSM), participants described pervasive experiences of MSM as negatively impacting the functional performance of their military unit. They also described the OSI-related impacts of MSM on their emotional and social functioning.

MSM has been highlighted as one of the highest risks to group cohesion, team morale, and military readiness (Castro et al., 2015). As opposed to uniting group members, MSM deconstructs the social bonds within military units that are crucial for military cohesion. Its prevalence relates to the highly patriarchal and hypermasculine ideals that characterize military culture (e.g., dominance, aggression, and self-sufficiency) (Castro et al., 2015; Lankford, 2012; Cotter, 2016). These ideals uphold the disparate impacts of MSM on equity-deserving groups (Deschamps, 2015) and normalize the use of MSM-related behaviours (e.g., rape jokes, sexual innuendoes, and derogatory sexualized remarks) that target these populations. Despite improvements in these aspects of military culture in recent (e.g., greater attention being paid to intersectional experiences of MSM) (Eichler et al., 2021), more work is required to adequately support equity-deserving groups who are unduly burdened by MSM's impact. This finding was reflected in the results of Chapter 3, in which nearly all participants interviewed reported experiences of MSM as negatively impacting their experiences of military cohesion with fellow man-identifying service members.

Chapter 3 revealed thematic examples of how participants felt undervalued, unaccepted, and unintegrated with their military units, which imparted deeply painful emotions of betrayal and disappointment. These painful emotional states reflect the morally injurious emotions described by PSP participants in Chapter 2 (i.e., betrayal), who described similar feelings towards the lack of support from their organizations in their experience of OSI. Unsurprisingly, a

lack of institutional support is associated with worse psychological outcomes for survivors of MST (Smith & Freyd, 2013, 2017; Monteith et al., 2016), emphasizing the need for a greater understanding of the gendered impact of institutional betrayal for MP who experience MSM/MST.

In the experience of being undervalued, participants in Chapter 3 described a sense of "ever-present dread" in which they perceived their own value as being lessened by the expectation that they conform to a hypermasculine standard of behaviour. Feeling undervalued is acutely painful for MP whose feelings of personal worth are often deeply connected to their occupational identity in the context of military service (Monteith et al., 2016). Thus, in the context of MSM, woman-identifying participants are prevented from the reasonable expectation of their contribution of service, that is, finding value in their work. In contrast, when MSM was not present, participants reported increased confidence in performing their duties, resulting in feelings of self-efficacy and agency, and thus, establishing the value (e.g., feeling "empower[ed]") of their work.

In the experience of a lack of acceptance, participants reported wanting to avoid "standing out" to protect against exposure to MSM. Simultaneously, they noted how this resulted in a sense of grief due to their being treated with a set of "different rules… and behaviour". A lack of acceptance prevented feelings of "belonging" to their group, thereby preventing effective military cohesion. Indeed, authors have noted "belongingness" as critical to a collective military identity (Skopp et al., 2011), relating it to feelings of social acceptance, which boost individual self-esteem and interpersonal effectiveness in the context of military cohesion (Burroughs & Ruth, 2022). Indeed, in Chapter 3, participants noted a greater sense of kinship with their unit members and increased social support in deployment contexts in which MSM was absent.

Participants in Chapter 3 also described how, in the context of MSM, expectations of conformity lead to their feeling unintegrated with fellow man-identifying group members. This expectation of conformity was adhered to by some participants for the sake of "survival"; however, it culminated in painful emotional experiences, including feeling "isolated", "left out" and "lonely". This outcome may have resulted from attempts at coping with perceived threats to their identity as women in a hypermasculine environment. Research with woman-identifying military personnel has found that, in experiences of MSM and hypermasculinity, they may cope with painful emotions by isolating themselves (Mattocks et al., 2012). However, this isolation also exacerbates other negative psychosocial outcomes, preventing connection with fellow unit members around them (Mattocks et al., 2012), which, in deployment contexts, is imperative for both personal well-being and group-level solidarity (Ragsdale et al., 2021). Future research could examine the dynamics of social connection within MP contexts to support experiences of healing post-MST (Cloitre, Jackson, & Schmidt, 2016; Presteon et al., 2023).

Both Chapters 3 and 4 underscore the role of hypermasculinity as a governing ideological tenant within military culture. Another question worthy of future inquiry is whether hypermasculine personality types (e.g., a macho personality constellation) (Mosher & Sirkin, 1982) play a role in maintaining MST within military culture and clarifying its role in disproportionately impacting non-hypermasculine MP. For example, Mosher & Sirkin (1984) suggest that personality features of toxic hypermasculinity are characterized by three main personality constellations: "callous sex attitudes", underlying beliefs in "violence as manly", and "danger as exciting". In future, the Hypermasculinity Inventory (Mosher & Sirkin, 1984) could be administered to a population of non-hypermasculine-identifying and hypermasculine-

identifying MP to delineate the presence of hypermasculine personality types within a given military body.

Chapter 4 examined what we currently know about how this same organizational stressor, MST, is experienced by another equity-deserving service minority, the 2SLGBTQIA+ military population, while highlighting significant gaps in the state of the literature on this topic. The scoping review identified how most of the current research examining experiences of MST within the 2SLGBTQIA+ military population is limited to one geographical region, the USA. Results also highlighted a variable use of terminology (i.e., variations of the acronym LGBT) describing members of this population, limiting the specificity of conclusions of this review to describe the experiences of different members of the 2SLGBTQIA+ military community. While it is understood that the term 2SLGBTQIA+ is an ever-evolving term, further attempts to standardize and/or connect language across research would permit an improved ability to examine intersectional experiences of MST in this community. Also, due to the considerable number of papers identified through our search strategy (i.e., 94 papers), future research examining the specific themes identified (e.g., barriers to health) is needed to elucidate their intersectional implications for individual members of this community (e.g., transgendered experiences of health-related implications of MST).

Not dissimilar to the impacts of MSM on woman-identifying veterans in Chapter 3, Chapter 4 noted MST as contributing to a devaluing the service of 2SLGBTQIA+ MP (Moody et al., 2020; Klemmer, 2020; Wilson-Buford, 2013). It linked this devaluation to the precedent created by the prejudicial standard of discriminatory military policies which unfairly targeted 2SLGBTQIA+ persons (Cunningham, 2021). Unfortunately, institutional change addressing MST's undue impact on equity-deserving groups has been slow (Klemmer et al., 2020). These

stressors relate to "structural stigma" (e.g., targeted discrimination) (Klemmer et al., 2020, p. 4) inherent in militaristic environments. The "Perpetrator Hypothesis" (Castro & Goldbach, 2018) extends the applicability of the Minority Stress Model (Meyer, 2003) to militaristic society and describes the complex interplay between MST, equity-deserving community membership, and negative health and social outcomes (Moody et al., 2020; Klemmer et al., 2020). Due to greater degrees of MST-related hostility and discrimination (Hajizadeh et al., 2019), 2SLGBTQIA+ MP may internalize these social judgments as being tied to their identity (Klemmer et al., 2020). The chronicity of these stressors results in detrimental psychosocial and health-related outcomes for 2SLGBTQIA+ military community members (Chodzen et al., 2019; Klemmer et al., 2018; Lehavot & Simpson, 2014).

2SLGBTQIA+ service members also experience stigma when accessing needed healthcare support following experiences of MST (Mark et al., 2019). By being denied fair and equitable social support, these service members face additive stressors in their healing from MST (Senter, 2020). For example, military healthcare services are often ill-prepared to provide adequate affirming healthcare services (Johnson et al., 2015; Rerucha et al., 2018). Thus, to contend with the inordinate impacts of MST for 2SLGBTQIA+ community members, healthcare providers and policymakers need to address these barriers. One such barrier is the denial of monetary support in the case of disability following MST, which has historically required a diagnosis of PTSD to be provided by a clinician (U.S. Department of Veterans Affairs, 2020). 2SLGBTQIA+ community members often face increased difficulty in being provided monetary dispersal for MST (Veterans Legal Services Clinic, 2013). This difficulty relates to the requirement that a clinician perform a thorough review of service treatment and post-military medical records for MST-related indicators (Webermann et al., 2023). These indicators may

include a service member's history of social conduct, fiscal responsibility, substance use issues, mental health difficulties, or even a history of sexually transmitted infections (Meisler & Gianoli, 2022; Webermann et al., 2023). Should a history of sexually transmitted infections be discovered, the service member is required to complete a formal health examination to determine the reliability of their claim (Webermann et al., 2023). Veterans Affairs, and similar military healthcare organizations, can avoid retraumatizing via forms of MST testing by providing commensurate training in affirming healthcare practices (Webermann et al., 2023) and continuing education on the systemic factors which perpetuate MST for 2SLGBTQIA+ community members (Shipherd et al., 2018; Messinger et al., 2021).

With respect to research recommendations, there is a need to improve epidemiological research with equity-deserving groups (Gurung et al., 2018; Hebrank, 2022), to specify and standardization how MST is defined (Sexton et al., 2018), and a need for increased qualitative research, to support safety in disclosures of MST (Livingstone et al., 2019).

Importantly, Chapters 2 and 3 both describe theory-generating exploratory research studies (Casula et al., 2021) with the goal of informing ongoing research initiatives into intersectional experiences of MST. Qualitative exploratory research is not limited by a lack of a priori theories (Reiter, 2017) but rather is designed to be flexible to glean the theoretical structure inherent within the data (Gilgun, 2015). Thus, the results of qualitative studies must be interpreted through relating their inherent conceptual themes, within context, as opposed to quantitative studies, which relate through the comparison of statistical data (Pope, Mays, & Popay, 2007). The present research achieves this objective, providing critically important insights into the lived experiences of MST in equity-deserving communities of service. Thus, Chapters 2 and 3, rather than being limited by the lack of comparability of statistical results, are

strengthened by the similarity of contextual themes describing how MST results in a similar description of impact in two separate equity-deserving populations.

5.2 Limitations

This dissertation has some limitations that should be acknowledged. While Chapter 2 investigated a variety of PSP professions (e.g., police, fire, ambulance), it did not delineate or measure differences between occupations and their self-described impact on PSTD symptoms. Also, Chapter 2 did not consider the impact of intersectional factors, such as gender identity or sexual orientation, on the impact of OSI in PSP populations. Thus, it is possible that our aggregate sample of PSP was not sensitive to subtle variations in symptom expression within this population. Furthermore, given that participants were all treatment-seeking inpatients with severe symptom expression, their symptoms may not be comparable to the broader PSP population (e.g., those with less severe or minimal/no symptom expression, those who are non-treatment seeking, and/or those in an earlier stage of change).

With respect to Chapter 3, the topic of MST as an organizational stressor naturally emerged spontaneously from semi-structured interview questions about the gendered experiences of operational deployment. Thus, it is possible that participants' spontaneous descriptions (i.e., uncued) of MST resulted in a more limited description of its impact. Also, given that the sample was small (n=15), and limited to woman-identifying participants, the results are not generalizable to all gender minority populations. However, given that it is beyond the scope of qualitative research to generalize to individual populations, the goal of the present research was not to speak to the experiences of participants outside of our samples (Morse, 1999). However, the contextual knowledge gained from this study (i.e., the symptom-specific expressions of PSTD) could be

examined against that of other similar populations of PSP with PTSD (e.g., treatment-seeking, inpatient populations) or against civilian populations.

By the nature of the research question posed in Chapter 4 (i.e., to broadly describe experiences of MST in the 2SLGBTQIA+ military community), the results are limited to describing a collective experience of individual members of this community; thus, they are unable to describe intersectional aspects of this experience. Also, as Chapter 4 only examined papers based in Five-Eyes countries, it cannot speak to experiences of 2SLGBTQIA+ military communities in other nations, which may have different results based on contrasting sociopolitical landscapes. This review also only examined research between the years 1990-2023 and thus does not describe research outside of that time range. Finally, Study 3 cannot comment on the quality of the research studies included in this review, as that question is not captured as part of a scoping review.

5.3 Future Directions

An important next step is developing an improved understanding of the delineations of PSTD symptomology in PSP. Study 1 highlighted the complexity of PMIE that PSP may experience, as well as the personal impact of PSTD symptoms, an outcome only achievable through examining the self-described lived experience of this population. Our understanding of symptom expression in PSP was enriched, supporting the potential of improved treatment outcomes for clinicians who can actively consider how PTSD symptomology may differ based on individual symptom expression (Breslau et al., 2005). Future research should compare lived experiences among different patient groups within PSP, including outpatient populations or non-treatment-seeking populations, to elucidate population-specific responses to treatment. Another area of ongoing research interest is the degree of responsivity of PSP, depending on the degree of

treatment-seeking behaviour in each population. For example, if a given PSP is in an earlier stage-of-change, they may not yet be actively treatment seeking and may instead be treatment avoidant. Researchers could focus on opportunities for earlier stage interventions (i.e., pre-treatment seeking) (Nijdam, Vermetten, &McFarlane, 2023), such as through support groups for PSP not yet seeking PTSD treatment.

Importantly, the identification of PTSD in initial stages may be difficult due to the limited predictability of acute stress reactions post-trauma in the eventual development of PTSD symptoms (Bryant, 2011). Diagnosis of PTSD in MP is particularly complex, with 25% of PTSD-related outcomes post-deployment being delayed in their onset (Smid et al., 2009). Predictive statistical methods which incorporate known risk factors (e.g., history of interpersonal trauma, education level) have been shown to be successful in predicting PTSD severity (Shalev et al., 2019). Machine learning is another novel approach being utilized to advantageous effect, whereby in one sample of PSTD patients, algorithmic models accurately predicted a 90% non-remittance rate of PTSD symptoms 12 months post-assessment (Schultebraucks et al., 2020).

Another potential avenue of future research is examining individual differences in PTSD symptom expression in a single occupational domain of PSP (e.g., nurses) or those who have held more than one service occupation (e.g., those who have changed careers from military to PSP or vice versa). One such study found that PSP with former military training, as opposed to those without, faced a significantly higher risk of having been exposed to PPTE (Groll et al., 2019), which was linked to a greater risk of developing PTSD, as well as other mental health disorders. These authors highlighted that future research could examine the range, nature, and length of the roles of military PSP, as well as the details of traumatic exposures (Groll et al., 2019).

Researchers have highlighted the need for more conclusive qualitative findings of gender or sex-based differences in the mental health experiences of occupational categories of PSP (Krakauer, Stelnicki, & Carleton, 2020). Future research should consider how gender identity and sexual orientation relate to the experience of PTSD in PSP. Indeed, equity-deserving groups (e.g., the 2SLGBTQIA+ MP or PSP) may face differential experiences of the mental health toll of service, given the undue burdens associated with organizational stressors in their work environments (Meyer, 2003). It could also examine whether equity-deserving group membership and the toll of service relate to a greater likelihood of moral injury.

Finally, PSP research should also engage in a further examination of the experience of mental health and occupational stress to inform ongoing program and policy implementation. Importantly, these endeavours should be linked back to mental health outcomes and treatment options, such as the role of protective factors in supporting PSP in the face of extreme exposure to occupational stress and promoting help-seeking behaviours. One recent study (Szeto et al., 2019) utilized an anti-stigma program to promote resiliency in first responders, finding that it increased understanding of mental health, reduced avoidance behaviours, and promoted help-seeking behaviours. Indeed, resilience training programs have been shown to promote an enhanced ability to engage in discussions of mental health and workplace stress management, as well as to reduce feelings of stigma towards mental health, supporting treatment-seeking behaviours (Papazoglou & Andersen, 2014).

Future research should continue to qualitatively examine gender-based impacts of MST for woman-identifying and 2SLGBTQIA+ service members and similar communities. Such endeavours are particularly important, given the emphasis on increased research efforts into the impacts of MST for equity-deserving military populations (Eichler et al., 2021). Future research

could consider the long-term impact of MST on pre- and post-deployment health and functioning. Chapter 3 only examined how retrospectively perceived the impact of MST on their operational deployment experiences; it did not consider the long-term impact of those experiences (i.e., post-deployment), nor did it consider impacts from pre-deployment. Future research should consider the impact of MST on pre- and post-deployment health and functioning for other equity-deserving communities as well.

Research should consider the impact of ongoing equity, diversity, and inclusion training (Messinger et al., 2021; Mark et al., 2019) as it relates to MST and achieving systemic change in military culture. It should evaluate the effectiveness of such programming in fostering prosocial connections between the 2SLGBTQIA+ military community and other military community members (Levahot et al., 2013; Lofgreen et al., 2021). Military policymakers must actively employ tenants of cultural competency (i.e., intersectional methods) in supporting reparation efforts for equity-deserving groups who have been disproportionately impacted by MST. Policymakers need to place an increased focus on funding for equity-based MST programming. Examples include the Brief Warrior Renew Program (Katz & Sawyer, 2020), which centers on increasing functional coping techniques (e.g., relationships) for emotional outcomes of MST, including anger, anxiety, and self-blame. Another Canadian initiative, the Believe, Empower, Support, Together Program (B.E.S.T.), is a trauma-informed training program aimed at increasing literacy about MST at all levels of CAF leadership (Imre-Millei, Tam-Seto, & McKinnon, 2023). The goals of this program include creating a safe context for those with lived experience of MSM and MST to communicate with leadership, engage stakeholders, provide supportive tools for disclosures, and finally, guide ongoing cultural change.

5.4 General Conclusions

The results of this dissertation provide critical insights into the differential impacts of operational stressors (e.g., on-the-job PTE) and organizational stressors (i.e., MST) on domains of OSI injuries (i.e., mental, physical, social, and functional) for PSP and MP. It contributed to a better understanding of how personal factors (e.g., equity-deserving community) may differentially influence experiences of OSI. Chapters 2 and 3 contribute to a larger body of qualitative research describing the emotional, social, and functional implications of OSI for PSP and MP. Chapters 3 and 4 results underscore the impact of a specific organizational stressor, MST, on these implications for two populations of equity-deserving MP (i.e., woman-identifying, 2SLGBTQIA+). It is our hope that this dissertation will support ongoing research and policy efforts recognizing the monumental sacrifice provided by PSP and MP, as well as support members of these communities in their experience of OSI. Finally, we also hope this dissertation will help ongoing efforts to address the experiences of equity-deserving community members who are unduly burdened with the impact of organizational stressors, such as MST.

References for Unpublished Works

Agius, S. J. (2013). Qualitative research: its value and applicability. The Psychiatrist, 37(6), 204-206.

Abraham TH, Finley EP, Drummond KL, Haro EK, Hamilton AB, Townsend JC, Littman AJ, Hudson T. (2021). A method for developing trustworthiness and preserving richness of qualitative data during team-based analysis of large data sets. American Journal of Evaluation. 42(1):139-56. https://doi.org/10.1177/1098214019893784

Ahuja, A., Ortega, S., Belkin, A., & Neira, P. M. (2019). Trans in the United States military: Fighting for change. Journal of Gay & Lesbian Mental Health, 23(1), 3-26.

Araújo, T. M. D., Souza, F. D. O., Helioterio, M. C., Andrade, K. V. F. D., Pinho, P. D. S., & Werneck, G. L. (2023). The high prevalence of infectious diseases among health workers indicates the need for improving surveillance. *Revista Brasileira de Saúde Ocupacional*, *48*, e17.

Alford, B., & Lee, S. J. (2016). Toward complete inclusion: Lesbian, gay, bisexual, and transgender military service members after repeal of Don't Ask, Don't Tell. Social Work, 61(3), 257-265.

Altemeyer, B. (1998). The other "authoritarian personality". In Advances in experimental social psychology (Vol. 30, pp. 47-92). Academic Press.

Alvinius, A., & Holmberg, A. (2019). Silence-breaking butterfly effect: Resistance towards the military within# MeToo. Gender, Work & Organization, 26(9), 1255-1270.

American Psychological Association. (2012). Guidelines for psychological practice with lesbian, gay, and bisexual clients. American Psychologist, 67, 10 – 42. doi:10.1037/a0024659

American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.)

Andersen, J. P., & Blosnich, J. (2013). Disparities in adverse childhood experiences among sexual minority and heterosexual adults: results from a multi-state probability-based sample. PloS one, 8(1), e54691. https://doi.org/10.1371/journal.pone.0054691.

Andresen, F. J., & Blais, R. K. (2019). Higher self-stigma is related to lower likelihood of disclosing military sexual trauma during screening in female veterans. *Psychological Trauma: Theory, Research, Practice, and Policy*, *11*(4), 372.

Angehrn, A., Krakauer, R. L., & Carleton, R. N. (2020). The impact of intolerance of uncertainty and anxiety sensitivity on mental health among public safety personnel: When the uncertain is unavoidable. Cognitive Therapy and Research, 44, 919-930.

Arbour, L. (2022). Report of the Independent External Comprehensive Review of the Department of National Defence and the Canadian Armed Forces. (Ottawa: Department of National Defence). Available from: https://www.canada.ca/en/department-national-defence/corporate/reports-publications/report-of-the-independent-external-comprehensive-review.html

Arkin, W., & Dobrofsky, L. R. (1978). Military socialization and masculinity. *Journal of Social issues*, *34*(1), 151-168.

Arksey, H., & O'Malley, L. (2005). Scoping studies: Toward a methodological framework.

Army, U. S. (1983). FM 22-100, Military Leadership. *Washington, DC*.

Ash, A., Skuljan, J., Scott, L., Martin, W., Wright, V., & Bessell, T. (2010). A Summary of 5-Eyes Research Collaboration into SSA. of the Advanced Maui Optical and Space Surveillance Technologies Conference (AMOS), Maui, Hawaii.

Ashforth, B. E., & Kreiner, G. E. (2002). Normalizing emotion in organizations: Making the extraordinary seem ordinary. *Human Resource management review*, *12*(2), 215-235.

Averill, L. A., Fleming, C. E., Holens, P. L., & Larsen, S. E. (2015). Research on PTSD prevalence in OEF/OIF Veterans: expanding investigation of demographic variables. European Journal of Psychotraumatology, 6(1), 27322.

Babineau, J. (2014). Product review: Covidence (systematic review software). Journal of the Canadian Health Libraries Association/Journal de l'Association des bibliothèques de la santé du Canada, 35(2), 68-71.

Baily. (2021, December 13). Anand apologizes to survivors of military sexual misconduct, says Ottawa 'failed' to protect them. Globe and Mail. Retrieved August 12, 2023, from https://www.theglobeandmail.com/politics/article-anand-apologizes-to-survivors-of-military-sexual-misconduct-says/

Banner, F. (2012). It's Not All Flowers and Daisies: Masculinity, Heteronormativity and the Obscuring of Lesbian Identity in the Repeal of Don't Ask, Don't Tell. Yale JL & Feminism, 24, 61.

Barth, S. K., Kimerling, R. E., Pavao, J., McCutcheon, S. J., Batten, S. V., Dursa, E., ... & Schneiderman, A. I. (2016). Military sexual trauma among recent veterans: Correlates of sexual assault and sexual harassment. American journal of preventive medicine, 50(1), 77-86.

Basham, V. (2016). Gender and militaries: the importance of military masculinities for the conduct of state sanctioned violence. *Handbook on gender and war*, 29-46.

Bastian, L. D., Lancaster, A. R., & Reyst, H. E. (1996). Department of Defense 1995 sexual harassment survey. Department of Defense.

Beckman, K., Shipherd, J., Simpson, T., & Lehavot, K. (2018). Military sexual assault in transgender Veterans: Results from a nationwide survey. Journal of Traumatic Stress, 31(2), 181-190.

Belkin, A. (2001). The Pentagon's gay ban is not based on military necessity. Journal of Homosexuality, 41(1), 103-119.

Belkin, A. (2003). Don't Ask, Don't Tell: Is the Gay Ban Based on Military Necessity?. The US Army War College Quarterly: Parameters, 33(2), 4.

Belkin, A., & Bateman, G. (Eds.). (2003). Don't ask, don't tell: Debating the gay ban in the military. Lynne Rienner Publishers.

Bell, M. E., & Reardon, A. (2011). Experiences of sexual harassment and sexual assault in the military among OEF/OIF veterans: Implications for health care providers. Social Work in Health Care, 50(1), 34-50.

Bell, M. E., Turchik, J. A., & Karpenko, J. A. (2014). Impact of gender on reactions to military sexual assault and harassment. Health & social work, 39(1), 25-33

Bennett, B. T. (2018). *Understanding, assessing, and responding to terrorism: Protecting critical infrastructure and personnel*. John Wiley & Sons.

Berger, W., Coutinho, E. S. F., Figueira, I., Marques-Portella, C., Luz, M. P., Neylan, T. C., ... & Mendlowicz, M. V. (2012). Rescuers at risk: a systematic review and meta-regression analysis of the worldwide current prevalence and correlates of PTSD in rescue workers. *Social psychiatry and psychiatric epidemiology*, *47*, 1001-1011.

Berger, R. (2015). Now I see it, now I don't: researcher's position and reflexivity in qualitative research. Qualitative Research, 15(2), 219–234. https://doi.org/10.1177/1468794112468475

Biskupski-Mujanovic, S. (2022). The “lucky ones” and those that weren’t: sexual misconduct in the Canadian Armed Forces. Canadian Foreign Policy Journal, 28(2), 144-159.

Block, S. R., & Liberzon, I. (2016). Attentional processes in posttraumatic stress disorder and the associated changes in neural functioning. *Experimental neurology*, *284*, 153-167.

Bloeser, K. (2016). Occupational, minority, and posttraumatic stress among veterans who identify as lesbian, gay, or bisexual. [Doctoral Dissertation, New York University] ProQuest Information & Learning.

Blosnich, J. R., Gordon, A. J., & Fine, M. J. (2015). Associations of sexual and gender minority status with health indicators, health risk factors, and social stressors in a national sample of young adults with military experience. Annals of epidemiology, 25(9), 661-667.

Blosnich, J. R., Hilgeman, M. M., Cypel, Y. S., Akhtar, F. Z., Fried, D., Ishii, E. K., ... & Davey, V. J. (2022). Potentially traumatic events and health among lesbian, gay, bisexual, and heterosexual Vietnam veterans: Results from the Vietnam Era Health Retrospective Observational study. Psychological Trauma: Theory, Research, Practice, and Policy, 14(4), 568.

Bonner, K. B., & Segal, D. R. (2005). The “Don't Ask, Don't Tell” Policy and Military Performance. Psychological reports, 97(1), 74-76.

Bonnes, S. (2021). An intersectional approach to military sexual violence. Sociology compass, 15(12), e12939.

Bonnes, S., & Tosto, S. A. (2023). Prosecuting military sexual assault: the entanglement of military discourse and victim stereotypes in prosecutor case strategies. Feminist criminology, 15570851231197913.

Booth, B. M., Mengeling, M., Torner, J., & Sadler, A. G. (2011). Rape, sex partnership, and substance use consequences in women veterans. Journal of Traumatic Stress, 24(3), 287-294.

Booth, B. M., Davis, T. D., Cheney, A. M., Mengeling, M. A., Torner, J. C., & Sadler, A. G. (2012). Physical health status of female veterans: contributions of sex partnership and in-military rape. Psychosomatic medicine, 74(9), 916-924.

Bovin, M. J., Black, S. K., Kleiman, S. E., Brown, M. E., Brown, L. G., Street, A. E., ... & Marx, B. P. (2019). The impact of assessment modality and demographic characteristics on endorsement of military sexual trauma. Women's Health Issues, 29, S67-S73.

Bowers, A. M. V., & Bieschke, K. J. (2005). Psychologist's clinical evaluations and attitudes: An examination of the influence of gender and sexual orientation. Professional Psychology: Research and Practice, 36, 97–103. doi:10.1037/0735-7028.36.1.97

Bowling, K. L., Firestone, J. M., & Harris, R. J. (2005). Analyzing questions that cannot be asked of respondents who cannot respond. Armed Forces & Society, 31(3), 411-437.

Bradley, P., MacIntyre, A., Carrick, D., Connelly, J., & Wetham, D. (2017). Solving the military moral bystander problem with ethics instruction. *Making the Military Moral: Contemporary Challenges and Responses in Military Ethics Education. London, UK: Routledge*, 31-51.

Braun, V., & Clarke, V. (2022). Conceptual and design thinking for thematic analysis. Qualitative Psychology, 9(1), 3.

Breitenbecher, K. H. (2001). Sexual revictimization among women: A review of the literature focusing on empirical investigations. Aggression and Violent Behaviour, 6(4), 415-432.

Breslau, N., Troost, J. P., Bohnert, K., & Luo, Z. (2013). Influence of predispositions on post-traumatic stress disorder: does it vary by trauma severity?. *Psychological medicine*, *43*(2), 381-390.

Brewin, C. R., Andrews, B., & Valentine, J. D. (2000). Meta-analysis of risk factors for posttraumatic stress disorder in trauma-exposed adults. Journal of consulting and clinical psychology, 68(5), 748.

Brignone, E., Gundlapalli, A. V., Blais, R. K., Carter, M. E., Suo, Y., Samore, M. H., Kimerling, R., &

Brown, A., Millman, H., Easterbrook, B., Heber, A., Park, R., Lanius, R., ... & McKinnon, M. C. (2022). Working together to address sexual misconduct in the Canadian Armed Forces. Journal of Military, Veteran and Family Health, 8(s1), 85-93.

Brown, G. R., & Jones, K. T. (2015). Health correlates of criminal justice involvement in 4,793 transgender veterans. LGBT health, 2(4), 297-305.

Brown, G. R., & Jones, K. T. (2016). Mental health and medical health disparities in 5135 transgender veterans receiving healthcare in the Veterans Health Administration: A case–control study. LGBT health, 3(2), 122-131.

Brown, V. A. R. (2021). Integrating gender and cultural perspectives in Canada's Professional Military Education: transforming military culture through informed leadership (Doctoral dissertation, Carleton University).

Brown, A. D., Addis, D. R., Romano, T. A., Marmar, C. R., Bryant, R. A., Hirst, W., & Schacter, D. L. (2014). Episodic and semantic components of autobiographical memories and imagined future events in post-traumatic stress disorder. *Memory*, *22*(6), 595-604.

Browne, K. C., Dolan, M., Simpson, T. L., Fortney, J. C., & Lehavot, K. (2018). Regular past year cannabis use in women veterans and associations with sexual trauma. Addictive behaviors, 84, 144-150.

Bryan, C. J., Bryan, A. O., Anestis, M. D., Anestis, J. C., Green, B. A., Etienne, N., ... & Ray-Sannerud, B. (2016). Measuring moral injury: Psychometric properties of the moral injury events scale in two military samples. *Assessment*, *23*(5), 557-570.

Bryant, R. A., Friedman, M. J., Spiegel, D., Ursano, R., & Strain, J. (2011). A review of acute stress disorder in DSM-5. Depression and Anxiety.

Bullough, V. L. (2002). Before stonewall: Activists for gay and lesbian rights in historical context. Psychology Press.

Burbank, R. (2021). Stigmatizing Narratives in Military Sexual Trauma Cases. Kan. JL & Pub. Pol'y, 31, 185.

Burczycka, M. (2019). Sexual misconduct in the Canadian Armed Forces Primary Reserve, 2018. Statistics Canada= Statistique Canada.

Burroughs, C. J. T., & Ruth, C. S. G. (2022). Cohesion in the Army. *Military Review*, *1*.

Burks, D. J. (2011). Lesbian, gay, and bisexual victimization in the military: An unintended consequence of "Don't Ask, Don't Tell"? American Psychologist, 66(7), 604.

Butler, J. (2006). Gender trouble: Feminism and the subversion of identity. Routledge. https://doi.org/10.4324/9780203824979

Calkins, A., Cefalu, M., Schell, T. L., Cottrell, L., Meadows, S. O., & Collins, R. L. (2023). Sexual assault experiences in the active-component army: variation by year, gender, sexual orientation, and installation risk level. Rand health quarterly, 10(3).

Callaghan, W. (2020). Missing the point: A critical reflection on operation HONOUR and reactions to military sexual misconduct by veterans of the Canadian Armed Forces. Atlantis, 41(2), 72-87.

Cameron, A. I., & Tedds, L. M. (2023). Canada's GBA+ framework in a (post) pandemic world: Issues, tensions, and paths forward. Canadian Public Administration, 66(1), 7-27.

Cameron, R. P., Mona, L. R., Syme, M. L., Clemency Cordes, C., Fraley, S. S., Chen, S. S., ... & Lemos, L. (2011). Sexuality among wounded veterans of Operation Enduring Freedom (OEF), Operation Iraqi Freedom (OIF), and Operation New Dawn (OND): Implications for rehabilitation psychologists. Rehabilitation Psychology, 56(4), 289.

Campbell, T. A., Nelson, L. A., Lumpkin, R., Yoash-Gantz, R. E., Pickett, T. C., & McCormick, C. L. (2009). Neuropsychological measures of processing speed and executive functioning in combat veterans with PTSD, TBI, and comorbid TBI/PTSD. *Psychiatric Annals*, *39*(8).

Campbell, K. A., Orr, E., Durepos, P., Nguyen, L., Li, L., Whitmore, C., ... & Jack, S. M. (2021). Reflexive thematic analysis for applied qualitative health research. The Qualitative Report, 26(6), 2011-2028.

Canadian Institute for Public Safety Research and Treatment (CIPSRT). (2020a). COVID-19 Readiness Resource Project (CRRP), 2020, from https://www.cipsrt-icrtsp.ca/covid-19/

Carey, F. R., LeardMann, C. A., Lehavot, K., Jacobson, I. G., Kolaja, C. A., Stander, V. A., ... & Millennium Cohort Study Team. (2022). Health disparities among lesbian, gay, and bisexual service members, and veterans. American Journal of Preventive Medicine, 63(4), 521-531.

Carian, E. K., & Johnson, A. L. (2022). The agency myth: Persistence in individual explanations for gender inequality. Social Problems, 69(1), 123-142.

Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D. M., ... & Asmundson, G. J. (2018). Mental disorder symptoms among public safety personnel in Canada. *The Canadian Journal of Psychiatry*, *63*(1), 54-64.

Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., LeBouthillier, D. M., Duranceau, S., ... & Asmundson, G. J. (2018). Suicidal ideation, plans, and attempts among public safety personnel in Canada. *Canadian Psychology/Psychologie canadienne*, *59*(3), 220.

Carleton, R. N., Afifi, T. O., Taillieu, T., Turner, S., Krakauer, R., Anderson, G. S., ... & McCreary, D. R. (2019). Exposures to potentially traumatic events among public safety personnel in Canada. *Canadian Journal of Behavioural Science/Revue canadienne des sciences du comportement*, *51*(1), 37.

Carroll, K. K., Lofgreen, A. M., Weaver, D. C., Held, P., Klassen, B. J., Smith, D. L., ... & Zalta, A. K. (2018). Negative posttraumatic cognitions among military sexual trauma survivors. Journal of Affective Disorders, 238, 88-93.

Castro, C. A., & Goldbach, J. (2018). The perpetrator hypothesis: Victimization involving LGBT service members. Military and veteran mental health: A comprehensive guide, 145-156.

Castro, C. A., Kintzle, S., Schuyler, A. C., Lucas, C. L., & Warner, C. H. (2015). Sexual assault in the military. Current psychiatry reports, 17, 1-13.

Casula, M., Rangarajan, N., & Shields, P. (2021). The potential of working hypotheses for deductive exploratory research. *Quality & Quantity*, *55*(5), 1703-1725.

Chang, C. J., Fischer, I. C., Depp, C. A., Norman, S. B., Livingston, N. A., & Pietrzak, R. H. (2023). A disproportionate burden: Prevalence of trauma and mental health difficulties among sexual minority versus heterosexual US military veterans. Journal of psychiatric research, 161, 477-482.

Chief of Defence Staff. (2009). Duty With Honour – The Profession of Arms in Canada. https://www.canada.ca/en/department-national-defence/corporate/reports-publications/duty-with-honour-2009.html

Cloitre, M., Jackson, C., & Schmidt, J. A. (2016). STAIR for strengthening social support and relationships among veterans with military sexual trauma and PTSD. *Military medicine, 181*(2), e183-e187.

Cochran, B. N., Balsam, K., Flentje, A., Malte, C. A., & Simpson, T. (2013). Mental health characteristics of sexual minority Veterans. Journal of Homosexuality, 60(2-3), 419-435.

Cochran, S. D., Drescher, J., Kismodi, E., Giami, A., García-Moreno, C., & Reed, G. M. (2014). Proposed declassification of disease categories related to sexual orientation in ICD-11: Rationale and evidence from the Working Group on Sexual Disorders and Sexual Health. Bull. World Health Organ, 92, 672-679.

Cole, E. R. (2009). Intersectionality and research in psychology. American psychologist, 64(3), 170.

Coll, J. E., Weiss, E., & Metal, M. (2011). The influence of military culture and veteran worldviews on mental health treatment: Practice implications for combat veteran help-seeking and wellness. The International Journal of Health, Wellness and Society, 1(2), 75.

Colquhoun, H. L., Levac, D., O'Brien, K. K., Straus, S., Tricco, A. C., Perrier, L., ... & Moher, D. (2014). Scoping reviews: time for clarity in definition, methods, and reporting. Journal of clinical epidemiology, 67(12), 1291-1294.

Connell, C. (2022). Queer Social Control and the Homonormative Bargain: Sexual Harassment in the Era of Open LGBT Military Service. Social Problems, spac024.

Connelly, L. M., & Peltzer, J. N. (2016). Underdeveloped themes in qualitative research: Relationship with interviews and analysis. Clinical nurse specialist, 30(1), 52-57.

Corneil, W., Beaton, R., Murphy, S., Johnson, C., & Pike, K. (1999). Exposure to traumatic incidents and prevalence of posttraumatic stress symptomatology in urban firefighters in two countries. Journal of Occupational Health Psychology, 4, 131–141. http://dx.doi.org/10.1037/ 1076-8998.4.2.131

Costello, K. (2022). Distress Tolerance and Institutional Betrayal Factors Related to Posttraumatic Stress Outcomes in Military Sexual Trauma (MST). Hofstra University.

Cotter, A. (2016). Sexual misconduct in the Canadian Armed Forces, 2016. Statistics Canada.

Cotter, A. (2019). Sexual misconduct in the Canadian Armed Forces regular force. Statistics Canada. https://www150.statcan.gc.ca/n1/pub/85603x/85603x2019002eng.htm.htt

Cotter, A., & Savage, L. (2019). Gender-based violence and unwanted sexual behaviour in Canada. Initial findings from the Survey of Safety in Public and Private Spaces. Juristat: Canadian Centre for Justice Statistics, 1-49.

Crabb, S., & Chur-Hansen, A. (2009). Qualitative research: why psychiatrists are well-placed to contribute to the literature. Australasian Psychiatry, 17(5), 398-401.

Cramer, R. J., Miller, A. K., Amacker, A. M., & Burks, A. C. (2013). Openness, right-wing authoritarianism, and antigay prejudice in college students: A mediational model. Journal of Counseling Psychology, 60(1), 64.

Creswell, J. W., Hanson, W. E., Clark Plano, V. L., & Morales, A. (2007). Qualitative research designs: Selection and implementation. The counseling psychologist, 35(2), 236-264.

Croteau, J. M., Bieschke, K. J., Fassinger, R. E., & Manning, J. L. (2008). Counseling psychology and sexual orientation: History, selective trends, and future directions. In S. D. Brown & R.

W. Lent (Eds.), Handbook of counseling psychology (4th ed., pp. 194 –211). New York, NY: Wiley.

Cunningham, K. C. (2020). Shame and guilt in PTSD. In *Emotion in posttraumatic stress disorder* (pp. 145-171). Academic Press.

Cunningham, N. (2021). Dynamics of Male-on-Male Penetrative Sexual Assaults in the United States Army [Doctoral dissertation, Walden University].

Currier, J. M., Holland, J. M., & Malott, J. (2015). Moral injury, meaning making, and mental health in returning veterans. *Journal of clinical psychology*, *71*(3), 229-240.

D'Elia, A. T. D., Juruena, M. F., Coimbra, B. M., Mello, M. F., & Mello, A. F. (2022). Increased immuno-inflammatory mediators in women with post-traumatic stress disorder after sexual assault: 1-Year follow-up. Journal of psychiatric research, 155, 241-251.

Dallocchio, M. (2021). Women veterans: examining identity through an intersectional lens. Journal of Military, Veteran and Family Health, 7(S1), 111-121.

Damiano, C. M. (1998). Lesbian Baiting in the Military: Institutionalized Sexual Harassment under Don't Ask, Don't Tell, Don't Pursue. Am. UJ Gender Soc. Pol'y & L., 7, 499.

Dardis, C. M., Reinhardt, K. M., Foynes, M. M., Medoff, N. E., & Street, A. E. (2018). “Who are you going to tell? Who’s going to believe you?” Women’s experiences disclosing military sexual trauma. Psychology of Women Quarterly, 42(4), 414-429.

Davis, K. D., & McKee, B. (2004). Women in the military: Facing the warrior framework. Challenge and change in the military: Gender and diversity issues, 52-75.

Davis, K.D., (2013). Standing Committee on the Status of Women. House of Commons Canada. Retrieved from: https://www.ourcommons.ca/DocumentViewer/en/41-1/FEWO/meeting-58/evidence

Davis, K. D. (2022). Socio-cultural dynamics in gender and military contexts: Seeking and understanding change. Journal of Military, Veteran and Family Health, 8(s1), 66-74.

De Angelis, K., Sandhoff, M., Bonner, K., & Segal, D. R. (2013). Sexuality in the military. *International handbook on the demography of sexuality*, 363-381.

Department of Defense. (2017). 2016 workplace and gender relations survey among active-duty service members. Washington, DC.

Department of Defense. (2019). 2018 workplace and gender relations survey among active-duty service members. Washington, DC.

Department of National Defence. (2023, August 15). *Military sexual trauma (MST)* [Review of *Military sexual trauma (MST)*]. https://www.va.gov/health-care/health-needs-conditions/military-sexual-trauma/

Deschamps, M. (2015). External review into sexual misconduct and sexual harassment in the Canadian Armed Forces. External Review Authority; March27, 2015. Available from: http://www.forces.gc.ca/assets/FORCES_ Internet/docs/en/caf-community-support servicesharassment/era-final-report-(april-20-2015)-eng.pdf.

Dickstein, B. D., Vogt, D. S., Handa, S., & Litz, B. T. (2010). Targeting self-stigma in returning military personnel and veterans: A review of intervention strategies. Military Psychology, 22(2), 224-236.

Doucette, C. E., Morgan, N. R., Aronson, K. R., Bleser, J. A., McCarthy, K. J., & Perkins, D. F. (2023). The effects of adverse childhood experiences and warfare exposure on military sexual trauma among veterans. Journal of interpersonal violence, 38(3-4), 3777-3805.

Dougherty, T. (2021). Sexual misconduct on a scale: gravity, coercion, and consent. Ethics, 131(2), 319-344.

Drescher J. (2015). Out of DSM: Depathologizing Homosexuality. Behavioural sciences (Basel, Switzerland), 5(4), 565–575. https://doi.org/10.3390/bs5040565.

Drescher, K. D., Foy, D. W., Kelly, C., Leshner, A., Schutz, K., & Litz, B. (2011). An exploration of the viability and usefulness of the construct of moral injury in war veterans. Traumatology, 17(1), 8-13.

Duncanson, C. (2015). Hegemonic masculinity and the possibility of change in gender relations. *Men and Masculinities*, *18*(2), 231-248.

Dunivin, K. O. (1994). Military culture: Change and continuity. Armed Forces & Society, 20(4), 531-547.

Dutra, L., Grubbs, K., Greene, C., Trego, L. L., McCartin, T. L., Kloezeman, K., & Morland, L. (2010). Women at war: Implications for mental health. Journal of Trauma & Dissociation, 12(1), 25-37.

Dworkin, S. H. (2000). Individual therapy with lesbian, gay, and bisexual clients. In R. P. Perez, K. A. DeBord, & K. J. Bieschke (Eds.), Handbook of counseling and psychotherapy with lesbian, gay, and bisexual clients (pp. 157–181). Washington, DC: American Psychological Association. doi:10.1037/10339-007

Easterbrook, B., Ricciardelli, R., Sanger, B. D., Mitchell, M. M., McKinnon, M. C., & Carleton, R. N. (2022). Longitudinal study of Canadian correctional workers' wellbeing, organizations, roles, and knowledge (CCWORK): Baseline demographics and prevalence of mental health disorders. *Frontiers in Psychiatry*, *13*, 874997.

Easterbrook, B., Brown, A., Millman, H., Blyderveen, S. V., Lanius, R., Heber, A., ... & O'Connor, C. (2022). The mental health experience of treatment-seeking military members and public

safety personnel: A qualitative investigation of trauma and non-trauma-related concerns. *Health promotion and chronic disease prevention in Canada*, *42*(6), 252.

Edgelow, M., Fecica, A., Kohlen, C., & Tandal, K. (2023). Mental health of public safety personnel: Developing a model of operational, organizational, and personal factors in public safety organizations. *Frontiers in Public Health*, *11*, 1140983.

Eftekhari, A., Crowley, J. J., Mackintosh, M. A., & Rosen, C. S. (2020). Predicting treatment dropout among veterans receiving prolonged exposure therapy. *Psychological Trauma: Theory, Research, Practice, and Policy*, *12*(4), 405.

Eichert, D. (2019). "Homosexualization" revisited: an audience-focused theorization of wartime male sexual violence. International Feminist Journal of Politics, 21(3), 409-433.

Eichler, M. (2014). Militarized masculinities in international relations. Brown J. World Aff., 21, 81.

Eichler, M. (2016). Learning from the Deschamps Report: why military and Veteran researchers ought to pay attention to gender. Journal of Military, Veteran and Family Health, 2(1), 5-8.

Eichler, M. (2020). How Gender Became a Defence Issue: A Feminist Perspective on Canadian Military and Defence Policy. Turbulent Times, Transformational Possibilities?: Gender and Politics Today and Tomorrow, 141.

Eichler, M. (2021). Seeing sex, gender, and intersectionality in military, Veteran, and family health research. Journal of Military, Veteran and Family Health, 7(S1), 1-2.

Eichler, M., George, T., & Taber, N. (2022). The Arbour Report and Beyond. Transforming Military Cultures (TMC) Network.

Eichler, M., Smith-Evans, K., Spanner, L., & Tam-Seto, L. (2021). Mind the gap: Sex, gender, and intersectionality in military-to-civilian transitions.

Ein, N., Plouffe, R. A., Liu, J. J., Gervasio, J., Baker, C., Carleton, R. N., ... & Richardson, J. D. (2023). Physical and psychological challenges faced by military, medical and public safety personnel relief workers supporting natural disaster operations: a systematic review. *Current Psychology*, 1-16.

Eleazer, J. R., Marchant, L., Kizewski, A., Gross, G., Warren, A., & McCubbin, L. (2022). "We've been here all along:" The collective resilience of transgender and gender diverse US service members. Psychological services.

Ellemers, N., & Van der Toorn, J. (2015). Groups as moral anchors. *Current Opinion in Psychology*, *6*, 189-194.

Estrada, A. X., & Laurence, J. H. (2009). Examining the impact of training on the homosexual conduct policy for military personnel. Military Psychology, 21(1), 62-80.

Estrada, A. X., Dirosa, G. A., & Decostanza, A. H. (2016). Gays in the US military: Reviewing the research and conceptualizing a way forward. Evolution of Government Policy Towards Homosexuality in the US Military, 193-221.

Etingen, B., Smith, B. M., Zeliadt, S. B., Kaitz, J. E., Barker, A. M., Hyde, J. K., ... & Bokhour, B. G. (2023). VHA whole health services and complementary and integrative health therapies: A gateway to evidence-based mental health treatment. *Journal of general internal medicine*, 1-8.

Fargo, J. D. (2016). Differential risk for homelessness among US male and female Veterans with a positive screen for military sexual trauma. JAMA psychiatry, 73(6), 582-589.

Farnsworth, J. K., Drescher, K. D., Evans, W., & Walser, R. D. (2017). A functional approach to understanding and treating military-related moral injury. *Journal of Contextual Behavioral Science*, *6*(4), 391-397.

Fassinger, R. E. (2008). Workplace diversity and public policy: Challenges and opportunities for psychology. American Psychologist, 63, 252–268. doi:10.1037/0003-066X.63.4.252

Feinstein, B. A. (2020). The rejection sensitivity model as a framework for understanding sexual minority mental health. Archives of Sexual Behaviour, 49(7), 2247-2258.

Feitz, L., & Nagel, J. (2008). The militarization of gender and sexuality in the Iraq War. Women in the Military and in Armed Conflict, 201-225.

Finney, C., Stergiopoulos, E., Hensel, J., Bonato, S., & Dewa, C. S. (2013). Organizational stressors associated with job stress and burnout in correctional officers: a systematic review. *BMC public health*, *13*, 1-13.

Firing, K., Karlsdottir, R., & Christian Laberg, J. (2009). Social influence in military leadership training. *Leadership & Organization Development Journal*, *30*(8), 709-721.

Fitzgerald, L. F., Hulin, C. L., & Drasgow, F. (1997). Antecedents and consequences of sexual harassment in organizations: A test of an integrated model. Journal of Applied Psychology, 82(4), 578-589.

Flentje, A., Kober, K. M., Carrico, A. W., Neilands, T. B., Flowers, E., Heck, N. C., & Aouizerat, B. E. (2018). Minority stress and leukocyte gene expression in sexual minority men living with treated HIV infection. Brain, behaviour, and immunity, 70, 335-345.

Fletcher, O. V., Chen, J. A., van Draanen, J., Frost, M. C., Rubinsky, A. D., Blosnich, J. R., & Williams, E. C. (2022). Prevalence of social and economic stressors among transgender veterans with alcohol and other drug use disorders. SSM-Population Health, 19, 101153.

Foa, E. B., Chrestman, K. R., & Gilboa-Schechtman, E. (2008). *Prolonged exposure therapy for adolescents with PTSD emotional processing of traumatic experiences, therapist guide*. Treatments That Work.

Fox, J., & Pease, B. (2012). Military deployment, masculinity, and trauma: Reviewing the connections. *The Journal of Men's Studies*, *20*(1), 16-31.

Frankfurt, S. B., DeBeer, B. B., Morissette, S. B., Kimbrel, N. A., La Bash, H., & Meyer, E. C. (2018). Mechanisms of moral injury following military sexual trauma and combat in post-9/11 US war veterans. Frontiers in psychiatry, 9, 520.

Friedman, M. J., Resick, P. A., Bryant, R. A., Strain, J., Horowitz, M., & Spiegel, D. (2011). Classification of trauma and stressor-related disorders in DSM-5. Depression and anxiety, 28(9), 737–749. https://doi.org/10.1002/da.20845.

Frost, D. M., & Meyer, I. H. (2023). Minority stress theory: Application, critique, and continued relevance. Current Opinion in Psychology, 101579.

Gallanter, T. & Bozeman WP. (2002). Firefighter illnesses and injuries at a major fire disaster. Prehospital Emerg Care, 6(1), 22–6.

Garbern, S. C., Ebbeling, L. G., & Bartels, S. A. (2016). A systematic review of health outcomes among disaster and humanitarian responders. *Prehospital and disaster medicine*, *31*(6), 635-642.

Garrett, L. H. (2011). Sexual assault in the workplace. AAOHN journal, 59(1), 15-22.

Genest, C., Ricciardelli, R., & Carleton, R. N. (2021). Correctional work: Reflections regarding suicide. *International journal of environmental research and public health*, *18*(8), 4280.

Gerber, M. R., Iverson, K. M., Dichter, M. E., Klap, R., & Latta, R. E. (2014). Women veterans and intimate partner violence: Current state of knowledge and future directions. Journal of Women's Health, 23(4), 302-309.

Gibson, C. J., Gray, K. E., Katon, J. G., Simpson, T. L., & Lehavot, K. (2016). Sexual assault, sexual harassment, and physical victimization during military service across age cohorts of women veterans. Women's health issues, 26(2), 225-231.

Gilgun, J. F. (2015). Deductive qualitative analysis as middle ground: Theory-guided qualitative research. *Amazon Digital Services LLC, Seattle, WA, USA*.

Gilmore, A. K., Brignone, E., Painter, J. M., Lehavot, K., Fargo, J., Suo, Y., ... & Gundlapalli, A. V. (2016). Military sexual trauma and co-occurring posttraumatic stress disorder, depressive disorders, and substance use disorders among returning Afghanistan and Iraq veterans. *Women's Health Issues*, *26*(5), 546-554.

Gizzi, M. C., & Rädiker, S. (Eds.). (2021). The practice of qualitative data analysis: Research examples using MAXQDA. BoD–Books on Demand.

Goldbach, J. T., & Castro, C. A. (2016). Lesbian, Gay, Bisexual, and Transgender (LGBT) Service Members: Life After Don't Ask, Don't Tell. Current psychiatry reports, 18(6), 56. https://doi.org/10.1007/s11920-016-0695-0

Goldbach, J. T., Schrager, S. M., Mamey, M. R., Klemmer, C., Holloway, I. W., & Castro, C. A. (2023). Development and Validation of the Military Minority Stress Scale. International Journal of Environmental Research and Public Health, 20(12), 6184.

Gómez, J. M. (2012). Cultural betrayal trauma theory: The impact of culture on the effects of trauma. In Blind to Betrayal. Retrieved from https://sites.google.com /site/betrayalbook /betrayal-research-news/cultural-betrayal.

Gómez, J. M. (2017). *Cultural betrayal trauma theory* (Doctoral dissertation, University of Oregon).

Gómez, J. M. (2019). Isn't it all about victimization?(intra) cultural pressure and cutural betrayal trauma in ethnic minority college women. *Violence against women*, *25*(10), 1211-1225.

González-Prats, M. C. (2017). Accountability, complacency, or obfuscation? An analysis of the US military's prevention and response efforts to military sexual trauma. Public Integrity, 19(5), 483-499.

Gorman, K. R., Kearns, J. C., Pantalone, D. W., Bovin, M. J., Keane, T. M., & Marx, B. P. (2022). The impact of deployment-related stressors on the development of PTSD and depression among sexual minority and heterosexual female veterans. Psychological trauma: theory, research, practice, and policy, 14(5), 747.

Gouliquer, L. (2000). Negotiating sexuality: Lesbians in the Canadian military. Womens Bodies, Womens Lives: Health, Well-Being.

Gouliquer, L., Kinsman, G., & Roy, M. (2016). The We Demand an Apology Network.

Government of Canada (2018, June 7). How CIHR is supporting the integration of SGBA. https://cihr-irsc.gc.ca/e/50837.html

Government of Canada (2020 July 22). About operation honour [Internet]. https://www.canada.ca/en/department-national-defence/services/benefits-military/conflict-misconduct/operation-honour/about-operation-honour.html#milestones

Government of Canada (2022, June 16) What is Gender-based Analysis Plus. https://women-gender-equality.canada.ca/en/gender-based-analysis-plus.html

Government of Canada, S. C. (2019, May 22). Sexual misconduct in the Canadian Armed Forces Regular Force, 2018. https://www150.statcan.gc.ca/n1/pub/85-603-x/85-603-x2019002-eng.htm

Grad, F. P. (2002). The preamble of the constitution of the World Health Organization. *Bulletin of the World Health Organization*, *80*, 981-981.

Gradus, J. L., Street, A. E., Kelly, K., & Stafford, J. (2008). Sexual harassment experiences and harmful alcohol use in a military sample: Differences in gender and the mediating role of depression. Journal of Studies on Alcohol and Drugs, 69(3), 348-351.

Grady, J., Banford-Witting, A., Kim, A., & Davis, S. (2018). Differences in unit cohesion and combat-related mental health problems based on attachment styles in US military veterans. Contemporary Family Therapy, 40, 249-258.

Griffin, B. J., Purcell, N., Burkman, K., Litz, B. T., Bryan, C. J., Schmitz, M., ... & Maguen, S. (2019). Moral injury: An integrative review. *Journal of traumatic stress*, *32*(3), 350-362.

Griffith, J. (2007). Further considerations concerning the cohesion-performance relation in military settings. Armed Forces & Society, 34(1), 138-147.

Groll, D. L., Ricciardelli, R., Carleton, R. N., Anderson, G., & Cramm, H. (2020). A cross-sectional study of the relationship between previous military experience and mental health disorders in currently serving public safety personnel in Canada. *The Canadian Journal of Psychiatry*, *65*(5), 330-337.

Gross, G. M., Cunningham, K. C., Moore, D. A., Naylor, J. C., Brancu, M., Wagner, H. R., Elbogen, E B., Calhoun, P. S., VA Mid-Atlantic MIRECC Workgroup, & Kimbrel, N. A. (2019). Does deployment-related military sexual assault interact with combat exposure to predict posttraumatic stress disorder in female Veterans? Traumatology, 25(1), 66-71.

Gurung, S., Ventuneac, A., Rendina, H. J., Savarese, E., Grov, C., & Parsons, J. T. (2018). Prevalence of military sexual trauma and sexual orientation discrimination among lesbian,

gay, bisexual, and transgender military personnel: A descriptive study. Sexuality research and social policy, 15, 74-82.

Hahn, D. L., Hoffmann, A. E., Felzien, M., LeMaster, J. W., Xu, J., & Fagnan, L. J. (2017). Tokenism in patient engagement. Family practice, 34(3), 290-295.

Hajizadeh, M., Aiken, A., & Cox, C. (2019). Risk factors associated with sexual misconduct in the Canadian Armed Forces: does it vary by sex and environmental command?. Archives of sexual behaviour, 48, 2581-2594.

Halberstam, J. (1998). Female masculinity. Duke University Press.

Hannan, S. M., Zimnick, J., & Park, C. (2021). Consequences of sexual violence among college students: Investigating the role of PTSD symptoms, rumination, and institutional betrayal. *Journal of Aggression, Maltreatment & Trauma*, *30*(5), 586-604.

Hart, C. G. (2021). Trajectory guarding: Managing unwanted, ambiguously sexual interactions at work. American Sociological Review, 86(2), 256-278.

Hatzenbuehler, M. L. (2009). How does sexual minority stigma "get under the skin"? A psychological mediation framework. Psychological bulletin, 135(5), 707.

Heber A, Testa V, Groll D, et al. Glossary of terms: A shared understanding of the common terms used to describe psychological trauma, version 3.0. Health Promot Chronic Dis Prev Can. 2023;43(10/11).

Hebrank, K., Fortson, B., Pigott, T., DiPetrillo, B., Self-Brown, S., & Gilmore, A. (2022). Risk Factors of Sexual Assault Victimization within the US Military. Master's Thesis, Georgia State University.

Heidari, S., Babor, T. F., De Castro, P., Tort, S., & Curno, M. (2016). Sex and gender equity in research: rationale for the SAGER guidelines and recommended use. Research integrity and peer review, 1(1), 1-9.

Herbert, S. (1998). Police subculture reconsidered. Criminology, 36(2), 343-370.

Herek, G. M. (1993). Sexual orientation and military service: A social science perspective. American Psychologist, 48(5), 538.

Herek, G. M., Gillis, J. R., & Cogan, J. C. (1999). Psychological sequelae of hate-crime victimization among lesbian, gay, and bisexual adults. Journal of consulting and clinical psychology, 67(6), 945

Herek, G. M., & Garnets, L. D. (2007). Sexual orientation and mental health. Annual Review of Clinical Psychology, 3, 353–375. doi:10.1146/ annurev.clinpsy.3.022806.091510

Herek, G. M. (2016). A nuanced view of stigma for understanding and addressing sexual and gender minority health disparities. LGBT health, 3(6), 397-399.

Holloway, I., & Galvin, K. (2017). Qualitative research in nursing and healthcare (4th ed.). Chichester, West Sussex, UK: Wiley Blackwell.

Holliday, R., & Monteith, L. L. (2019). Seeking help for the health sequelae of military sexual trauma: A theory-driven model of the role of institutional betrayal. *Journal of Trauma & Dissociation*, *20*(3), 340-356.

Höpfl, H. J. (2003). Becoming a (virile) member: Women and the military body. Body & Society, 9(4), 13-30.

Horsburgh, D. (2003). Evaluation of qualitative research. *Journal of Clinical Nursing*, *12*, 307–312. https://doi.org/10.1136/ebn.6.2.36

Howard III, J. W., & Prividera, L. C. (2006). Gendered Nationalism: A Critical Analysis of Militarism, Patriarchy, and the Ideal Soldier. Texas Speech Communication Journal, 30(2).

Ibbitson, J. (2016). Justin Trudeau to apologize for historic persecution of gay Canadians. *The Globe and Mail*, *11*.

Iniewicz, G., Sałapa, K., Wrona, M., & Marek, N. (2017). Minority stress among homosexual and bisexual individuals: From theoretical concepts to research tools: The Sexual Minority Stress Scale. Archives of Psychiatry and Psychotherapy, 19(3).

Institute of Medicine. (2014). Treatment for posttraumatic stress disorder in military and veteran populations: Final assessment. The National Academies Press. https://doi. org/10.17226/18724.

Ivarsson, S., Estrada, A. X., & Berggren, A. W. (2005). Understanding men's attitudes toward women in the Swedish Armed Forces. Military psychology, 17(4), 269-282.

Iversen, A. C., Fear, N. T., Simonoff, E., Hull, L., Horn, O., Greenberg, N., ... & Wessely, S. (2007). Influence of childhood adversity on health among male UK military personnel. The British Journal of Psychiatry, 191(6), 506-511.

Jamieson, N., Usher, K., Maple, M. & Ratnarajah, D. (2020a). Invisible wounds and suicide: Moral injury and veteran mental health. International Journal of Mental Health Nursing, 29, 105–109.

Jamieson, N., Maple, M., Ratnarajah, D., & Usher, K. (2020b). Military moral injury: A concept analysis. *International journal of mental health nursing*, *29*(6), 1049-1066.

Jamieson, N., Usher, K., Ratnarajah, D., & Maple, M. (2021). Walking forwards with moral injury: Narratives from ex-serving Australian defence force members. Journal of Veterans Studies.

Jasuja, G. K., Reisman, J. I., Rao, S. R., Wolfe, H. L., Hughto, J. M., Reisner, S. L., & Shipherd, J. C. (2023). Social Stressors and Health Among Older Transgender and Gender Diverse Veterans. LGBT health, 10(2), 148-157.

Jeffery, D. D., Beymer, M. R., Mattiko, M. J., & Shell, D. (2021). Health behaviour differences between male and female US military personnel by sexual orientation: the importance of disaggregating lesbian, gay, and bisexual groups. Military medicine, 186(5-6), 556-564.

Jinkerson, J. D. (2016). Defining and assessing moral injury: A syndrome perspective. Traumatology, 22(2), 122.

Johnson, W. B., Rosenstein, J. E., Buhrke, R. A., & Haldeman, D. C. (2015). After "Don't Ask Don't Tell": Competent care of lesbian, gay, and bisexual military personnel during DoD policy.

Jordan, A. H., Eisen, E., Bolton, E., Nash, W. P., & Litz, B. T. (2017). Distinguishing war-related PTSD resulting from perpetration-and betrayal-based morally injurious events. *Psychological Trauma: Theory, Research, Practice, and Policy*, *9*(6), 627.

Kameg, B. (2020). Gender Dysphoria in United States Veterans and Military Personnel: Historical Context and Current Policies. Journal of Psychosocial Nursing and Mental Health Services, 58(8), 5-8.

Kang, H., Dalager, N., Mahan, C., & Ishii, E. (2005). The role of sexual assault on the risk of PTSD among Gulf War veterans. Annals of epidemiology, 15(3), 191-195.

Karim, S. (2017). Reevaluating peacekeeping effectiveness: Does gender neutrality inhibit progress?. International interactions, 43(5), 822-847.

Katz, L. S., Bloor, L. E., Cojucar, G., & Draper, T. (2007). Women who served in Iraq seeking mental health services: Relationships between military sexual trauma, symptoms, and readjustment. Psychological Services, 4(4), 239.

Katz, L. S., & Sawyer, W. N. (2020). Pragmatic trial of brief warrior renew group therapy for military sexual trauma in VA primary care. *Psychological Services*, *17*(4), 433.

Kauth, M. R. (2012). Introduction to special issue on veterans' sexual health and functioning. International Journal of Sexual Health, 24(1), 1-5.

Kauth, M. R., Meier, C., & Latini, D. M. (2014). A review of sexual health among lesbian, gay, and bisexual veterans. Current Sexual Health Reports, 6, 106-113.

Kauth, M. R., & Shipherd, J. C. (2016). Transforming a system: Improving patient-centered care for sexual and gender minority veterans. LGBT health, 3(3), 177-179.

Kauth, M. R., Barrera, T. L., & Latini, D. M. (2019). Lesbian, gay, and transgender Veterans' experiences in the Veterans Health Administration: Positive signs and room for improvement. Psychological Services, 16(2), 346.

Kelly, U. A. (2021). Barriers to PTSD treatment-seeking by women veterans who experienced military sexual trauma decades ago: The role of institutional betrayal. *Nursing Outlook*, *69*(3), 458-470.

Kenagy, G. P. (2005). Transgender health: Findings from two needs assessment studies in Philadelphia. Health & social work, 30(1), 19-26.

Kerrigan, M. F. (2012). Transgender discrimination in the military: The new don't ask, don't tell. Psychology, Public Policy, and Law, 18(3), 500.

Kilpatrick, D. G., Resnick, H. S., Milanak, M. E., Miller, M. W., Keyes, K. M., & Friedman, M. J. (2013). National estimates of exposure to traumatic events and PTSD prevalence using DSM-IV and DSM-5 criteria. *Journal of traumatic stress*, *26*(5), 537-547.

Kimerling, R., Gima, K., Smith, M. W., Street, A., & Frayne, S. (2007). The Veterans Health Administration and military sexual trauma. American journal of public health, 97(12), 2160-2166.

Kimerling, R., Street, A. E., Pavao, J., Smith, M. W., Cronkite, R. C., Holmes, T. H., & Frayne, S. M. (2010). Military-related sexual trauma among Veterans Health Administration patients returning from Afghanistan and Iraq. American journal of public health, 100(8), 1409-1412.

King, A. C. (2013). The female soldier. The US Army War College Quarterly: Parameters, 43(2), 3.

King, A. (2016). The female combat soldier. European Journal of International Relations, 22(1), 122-143.

Kinsman, G., & Gentile, P. (2010). The Canadian war on queers national security as sexual regulation. UBC Press.

Kirschner, P. A., Sweller, J., Kirschner, F., & Zambrano, J. (2018). From cognitive load theory to collaborative cognitive load theory. International Journal of Computer Supported Collaborative Learning, 13(2), 213–233. https:// doi.org/10.1007/s11412-018-9277-y

Klemmer, C. L., Schuyler, A. C., Mamey, M. R., Schrager, S. M., Castro, C. A., Goldbach, J., & Holloway, I. W. (2022). Health and service-related impact of sexual and stalking victimization during United States military service on LGBT service members. Journal of interpersonal violence, 37(9-10), NP7554-NP7579.

Kleykamp, M., Montgomery, S., Pang, A., & Schrader, K. (2021). Military identity and planning for the transition out of the military. *Military Psychology*, *33*(6), 372-391.

Klingensmith, K., Tsai, J., Mota, N., Southwick, S. M., & Pietrzak, R. H. (2014). Military sexual trauma in US veterans: Results from the National Health and Resilience in Veterans Study. The Journal of clinical psychiatry, 75(10), 11944.

Komarovskaya, I., Maguen, S., McCaslin, S. E., Metzler, T. J., Madan, A., Brown, A. D., ... & Marmar, C. R. (2011). The impact of killing and injuring others on mental health symptoms among police officers. *Journal of psychiatric research*, *45*(10), 1332-1336.

Konik, J., & Cortina, L. M. (2008). Policing gender at work: Intersections of harassment based on sex and sexuality. Social Justice Research, 21, 313-337.

Kovitz, M. (2021). Sexual (mis)conduct in the Canadian forces. *Critical Military Studies*, *7*(1), 79–99. https://doi.org/10.1080/23337486.2018.1494883

Krakauer, R. L., Stelnicki, A. M., & Carleton, R. N. (2020). Examining mental health knowledge, stigma, and service use intentions among public safety personnel. *Frontiers in psychology*, *11*, 949.

Kramer, R. M., & Brewer, M. B. (1984). Effects of group identity on resource use in a simulated commons dilemma. Journal of personality and social psychology, 46(5), 1044-1057.

Lamiani, G., Borghi, L., & Argentero, P. (2017). When healthcare professionals cannot do the right thing: A systematic review of moral distress and its correlates. *Journal of health psychology*, *22*(1), 51-67.

Lambert, E. G., Hogan, N. L., & Allen, R. I. (2006). Correlates of correctional officer job stress: The impact of organizational structure. *American journal of criminal justice*, *30*, 227-246.

Lambert, E. G., Hogan, N. L., & Tucker, K. A. (2009). Problems at work: Exploring the correlates of role stress among correctional staff. *The Prison Journal*, *89*(4), 460-481.

Lane, C., Sewell, D. D., Singh, E., Heidari, S. N., & Smilowitz, S. T. (2019). Gay and Grey IX: Turning Red, White, and Blue: How a History of Military Sexual Trauma Impacts the Lives of Older LGBT Veterans: Session 111. The American Journal of Geriatric Psychiatry, 27(3), S10-S11.

Lane, R., Tarzi, E., Post, K., Gauldin, E., & Fosher, K. (2018). Marine Corps Organizational

Lange, T. M., Hilgeman, M. M., Portz, K. J., Intoccia, V. A., & Cramer, R. J. (2020). Pride in all Who Served: Development, Feasibility, and Initial Efficacy of a Health Education Group For LGBT Veterans. Journal of Trauma & Dissociation., 21(4), 484–504. https://doi.org/10.1080/15299732.2020.1770147

Lankford, A. (2012). An analysis of sexual assault in the US military, 2004-2009. Journal of Military and Strategic Studies, 14(2).

Laws, H., Mazure, C. M., McKee, S. A., Park, C. L., & Hoff, R. (2016). Within-unit relationship quality mediates the association between military sexual trauma and posttraumatic stress symptoms in veterans separating from military service. Psychological trauma: Theory, research, practice, and Policy, 8(5), 649.

Lee, Y. J., Bernstein, K., Lee, M., & Nokes, K. M. (2014). Bullying in the nursing workplace: Applying evidence using a conceptual framework. Nursing Economics, 32(5), 255.

Lehavot, K., & Simpson, T. L. (2014). Trauma, posttraumatic stress disorder, and depression among sexual minority and heterosexual women veterans. Journal of counseling psychology, 61(3), 392.

Lentz, L. M., Smith-MacDonald, L., Malloy, D., Carleton, R. N., & Brémault-Phillips, S. (2021). Compromised conscience: A scoping review of moral injury among firefighters, paramedics, and police officers. *Frontiers in psychology*, *12*, 639781.

Levac, D., Colquhoun, H., & O'Brien, K. K. (2010). Scoping studies: Advancing the methodology. Implementation Science, 5(1), 1–9. https://doi.org/10.1186/1748-5908-5-69.

Levahot, K., & Simoni, J. M. (2011). The impact of minority stress on mental health and substance use among sexual minority women. Journal of consulting and clinical psychology, 79(2), 159.

Levahot, K., & Simpson, T. L. (2013). Incorporating lesbian and bisexual women into women veterans' health priorities. Journal of general internal medicine, 28, 609-614.

Lim, N. Q. (2017). *An ethnographic exploration of moral agency in emergency medicine*. Columbia University.

Levi-Belz, Y., & Zerach, G. (2022). "How can they treat it if they can't identify it?": Mental health professionals' knowledge and perspectives of moral injury. *Psychological trauma: theory, research, practice, and policy*.

Lindsay, J. A., Keo-Meier, C., Hudson, S., Walder, A., Martin, L. A., & Kauth, M. R. (2016). Mental health of transgender veterans of the Iraq and Afghanistan conflicts who experienced military sexual trauma. Journal of Traumatic Stress, 29(6), 563-567.

Litz, B. T., Stein, N., Delaney, E., Lebowitz, L., Nash, W. P., Silva, C., & Maguen, S. (2009). Moral injury and moral repair in war veterans: A preliminary model and intervention strategy. Clinical psychology review, 29(8), 695-706.

Livingston, N. A., Berke, D. S., Ruben, M. A., Matza, A. R., & Shipherd, J. C. (2019). Experiences of trauma, discrimination, microaggressions, and minority stress among trauma-exposed

LGBT Veterans: Unexpected findings and unresolved service gaps. Psychological Trauma: Theory, Research, Practice and Policy., 11(7), 695–703.

Livingston, W. S., Fargo, J. D., & Blais, R. K. (2022). Depression symptoms as a potential mediator of the association between disordered eating symptoms and sexual function in women service members and veterans. Military Psychology, 34(6), 687-696.

Lofgreen, A. M., Carroll, K. K., Dugan, S. A., & Karnik, N. S. (2017). An overview of sexual trauma in the US military. Focus, 15(4), 411-419.

Lofgreen, A. M. (2020). Providing Care to Survivors of Military Sexual Trauma. Psychiatric Annals, 50(10), 424-425.

Lopes, J., McKinnon, M. C., & Tam-Seto, L. (2023). Adding insult to injury: Exploring the relation between moral injury and military sexual trauma. Journal of Military, Veteran and Family Health, (aop), e20220045.

Lucas, C. L., Goldbach, J. T., Mamey, M. R., Kintzle, S., & Castro, C. A. (2018). Military sexual assault as a mediator of the association between posttraumatic stress disorder and depression among lesbian, gay, and bisexual Veterans. Journal of traumatic stress, 31(4), 613-619.

Lucero, G. (2018). From sex objects to sisters-in-arms: Reducing military sexual assault through integrated basic training and housing. Duke J. Gender L. & Pol'y, 26, 1.

Luterek, J. A., Bittinger, J. N., & Simpson, T. L. (2011). Posttraumatic sequelae associated with military sexual trauma in female Veterans enrolled in VA outpatient mental health clinics. Journal of Trauma & Dissociation, 12(3), 261-274.

MacKenzie, M. (2009). Securitization and desecuritization: Female soldiers and the reconstruction of women in post-conflict Sierra Leone. Security Studies, 18(2), 241-261.

MacKenzie, M. H. (2012). Let women fight: ending the US military's female combat ban. Foreign Aff., 91, 32.

MacKenzie, M., & Foster, A. (2017). Masculinity nostalgia: How war and occupation inspire a yearning for gender order. Security Dialogue, 48(3), 206-223.

Makwana, N. (2019). Disaster and its impact on mental health: A narrative review. *Journal of family medicine and primary care*, *8*(10), 3090.

Mark, K. M., McNamara, K. A., Gribble, R., Rhead, R., Sharp, M. L., Stevelink, S. A., ... & Fear, N. T. (2019). The health and well-being of LGBTQ serving and ex-serving personnel: a narrative review. International Review of Psychiatry, 31(1), 75-94.

Marshall, A. D., Panuzio, J., & Taft, C. T. (2005). Intimate partner violence among military veterans and active duty servicemen. Clinical psychology review, 25(7), 862–876. https://doi.org/10.1016/j.cpr.2005.05.009

Matarazzo, B. B., Barnes, S. M., Pease, J. L., Russell, L. M., Hanson, J. E., Soberay, K. A., & Gutierrez, P. M. (2014). Suicide risk among lesbian, gay, bisexual, and transgender military personnel, and veterans: What does the literature tell us?. Suicide and Life-Threatening Behavior, 44(2), 200-217.

Mattocks, K. M., Sadler, A., Yano, E. M., Krebs, E. E., Zephyrin, L., Brandt, C., ... & Haskell, S. (2013). Sexual victimization, health status, and VA healthcare utilization among lesbian and bisexual OEF/OIF veterans. Journal of general internal medicine, 28, 604-608.

Mazza, M., Giusti, L., Albanese, A., Mariano, M., Pino, M. C., & Roncone, R. (2012). Social cognition disorders in military police officers affected by posttraumatic stress disorder after the attack of An-Nasiriyah in Iraq 2006. *Psychiatry research*, *198*(2), 248-252.

Mazza, M., Tempesta, D., Pino, M. C., Nigri, A., Catalucci, A., Guadagni, V., ... & Ferrara, M. (2015). Neural activity related to cognitive and emotional empathy in post-traumatic stress disorder. *Behavioural brain research*, *282*, 37-45.

Mays, N., Roberts, E., & Popay, J. (2004). Synthesising research evidence. In Studying the organisation and delivery of health services (pp. 200-232). Routledge.

McCormack, L., & Bennett, N. L. (2023). Relentless, aggressive, and pervasive: Exploring gender minimization and sexual abuse experienced by women ex-military veterans. Psychological Trauma : Theory, Research, Practice and Policy., 15(2), 237–246. https://doi.org/10.1037/tra0001157

McDermott, M. J., & Garofalo, J. (2004). When advocacy for domestic violence victims backfires: Types and sources of victim disempowerment. Violence against women, 10(11), 1245-1266.

McDonald, J. L., Ganulin, M. L., Dretsch, M. N., Taylor, M. R., & Cabrera, O. A. (2020). Assessing the well-being of sexual minority soldiers at a military academic institution. Military medicine, 185(Supplement_1), 342-347.

McKinnon, M., Tam-Seto, L., & Imre-Millei, B. Institutional Support After Military Sexual Trauma: The Experiences of Canadian Women Service Members.

McKinnon, M. C., Boyd, J. E., Frewen, P. A., Lanius, U. F., Jetly, R., Richardson, J. D., & Lanius, R. A. (2016). A review of the relation between dissociation, memory, executive functioning and social cognition in military members and civilians with neuropsychiatric conditions. *Neuropsychologia*, *90*, 210-234.

McLean, C. P., & Foa, E. B. (2017). Emotions and emotion regulation in posttraumatic stress disorder. *Current opinion in psychology*, *14*, 72-77.

McNamara, K. A., Lucas, C. L., Goldbach, J. T., Kintzle, S., & Castro, C. A. (2019). Mental health of the bisexual veteran. Military Psychology, 31(2), 91-99.

McNamara, G., & Wilson, C. (2020). Lesbian, gay, and bisexual individuals experience of mental health services-a systematic review. The Journal of Mental Health Training, Education and Practice, 15(2), 59-70.

McNamara, K. A., Gribble, R., Sharp, M. L., Alday, E., Corletto, G., Lucas, C. L., ... & Holloway, I. W. (2021). Acceptance matters: Disengagement and attrition among LGBT personnel in the US military. Journal of Military, Veteran and Family Health, 7(S1), 76-89.

Meisler, A. W., & Gianoli, M. O. (2022). The Department of Veterans Affairs disability examination program for PTSD: Critical analysis and strategies for remediation. *Psychology, Public Policy, and Law*.

Mengeling, M. A., Booth, B. M., Torner, J. C., & Sadler, A. G. (2014). Reporting sexual assault in the military: Who reports and why most servicewomen don't. American journal of preventive medicine, 47(1), 17-25. https://doi.org/10.1016/j.amepre.2014.03.001

Mercer, S. W., McConnachie, A., Maxwell, M., Heaney, D., & Watt, G. C. (2005). Relevance and practical use of the Consultation and Relational Empathy (CARE) Measure in general practice. Family practice, 22(3), 328-334.

Meredith, L. S., Sherbourne, C. D., Gaillot, S. J., Hansell, L., Ritschard, H. V., Parker, A. M., & Wrenn, G. (2011). Promoting psychological resilience in the U.S. military. Rand Health Quarterly, 1(2), 1–158. https://www.rand.org/ pubs/monographs/MG996.html

Messinger, A. M., Guadalupe-Diaz, X. L., & Kurdyla, V. (2022). Transgender polyvictimization in the US Transgender Survey. Journal of interpersonal violence, 37(19-20), NP18810-NP18836.

Meyer, I. H. (2003). Prejudice, social stress, and mental health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. Psychology of Sexual Orientation and Gender Diversity, 1, 3–26. http:// dx.doi.org/10.1037/2329-0382.1.S.3.

Meyer, I. H. (2007). Prejudice and discrimination as social stressors. *The health of sexual minorities: Public health perspectives on lesbian, gay, bisexual, and transgender populations*, 242-267.

Meyer, I. H., & Frost, D. M. (2013). Minority stress and the health of sexual minorities.

Middleton, K., & Craig, C. D. (2012). A systematic literature review of PTSD among female veterans from 1990 to 2010. *Social Work in Mental Health*, *10*(3), 233-252.

Milano, A. P. (2019). Inclusion and readiness: in support of LGBTQ-affirming military healthcare. Columbia Social Work Review, 17(1), 28-35.

Milano, C. (2006). 'Don't Ask, Don't Tell' Leads to Nurse's Discharge: Decorated lesbian RN sues the US Air Force. AJN The American Journal of Nursing, 106(7), 19.

Miles, M. B., & Huberman, A. M. (1994). Qualitative data analysis: An expanded sourcebook. Sage.

Minden, D. (2022, September 23). Independent External Comprehensive Review of the Department of National Defence and the Canadian armed FORC... Canada.ca. Retrieved March 20, 2023, from https://www.canada.ca/en/department-national-defence/news/2022/06/independent-external-comprehensive-review-of-the-department-of-national-defence-and-the-canadian-armed-forces--final-report-and-next-steps.html.

Mitchell, J., Boettcher-Sheard, N., Duque, C., & Lashewicz, B. (2018). Who Do We Think We Are? Disrupting Notions of Quality in Qualitative Research. Qualitative Health Research, 28(4), 673–680. https://doi.org/10.1177/1049732317748896

Mondragon, S. A., Wang, D., Pritchett, L., Graham, D. P., Plasencia, M. L., & Teng, E. J. (2015). The influence of military sexual trauma on returning OEF/OIF male Veterans. Psychological services, 12(4), 402-411.

Monteith, L. L., Bahraini, N. H., Matarazzo, B. B., Soberay, K. A., & Smith, C. P. (2016). Perceptions of institutional betrayal predict suicidal self-directed violence among veterans exposed to military sexual trauma. *Journal of clinical psychology*, *72*(7), 743-755.

Monteith, L. L., Gerber, H. R., Brownstone, L. M., Soberay, K. A., & Bahraini, N. H. (2019). The phenomenology of military sexual trauma among male Veterans. Psychology of Men & Masculinities, 20(1), 115.

Monteith, L. L., Holliday, R., Schneider, A. L., Miller, C. N., Bahraini, N. H., & Forster, J. E. (2021). Institutional betrayal and help-seeking among women survivors of military sexual trauma. Psychological Trauma: Theory, Research, Practice, and Policy, 13(7), 814.

Moody, R. L., Savarese, E., Gurung, S., Rendina, H. J., & Parsons, J. T. (2020). The mediating role of psychological distress in the association between harassment and alcohol use among lesbian, gay, and bisexual military personnel. Substance use & misuse, 55(12), 2055-2063.

Moradi, B. (2006). Perceived sexual-orientation-based harassment in military and civilian contexts. Military Psychology, 18, 39 – 60.

Moradi, B. (2009). Sexual orientation disclosure, concealment, harassment, and military cohesion: Perceptions of LGBT military veterans. Military Psychology, 21(4), 513-533.

Morral, A. R., Gore, K. L., & Schell, T. L. (2015). Sexual Assault and Sexual Harassment in the US Military: Volume 3. Estimates for Coast Guard Service Members from the 2014 RAND Military Workplace Study. RAND.

Morral, A. R., & Schell, T. L. (2021). Sexual Assault of Sexual Minorities in the US Military. Boston, MA: RAND.

Morris, E. E., Smith, J. C., Farooqui, S. Y., & Surís, A. M. (2014). Unseen battles: The recognition, assessment, and treatment issues of men with military sexual trauma. *Trauma, Violence, & Abuse*, 15(2), 94-101.

Morse, J. M. (1999). Qualitative generalizability. *Qualitative health research*, *9*(1), 5-6.

Mosher, D. L., & Sirkin, M. (1984). Measuring a macho personality constellation. *Journal of research in personality*, *18*(2), 150-163.

Mota, N., Bolton, S. L., & Sippel, L. M. (2022). Mental health services for occupational trauma: Decreasing stigma and increasing access. *Frontiers in Health Services*, *2*, 1041953.

Moustakas, C. (1994). Phenomenological research methods. Thousand Oaks, CA, USA: SAGE Publications Inc

Naclerio, A. L. (2015). Medical issues for women warriors on deployment. Women at war, 49-77.

National Defence (2019, March 8). Canadian Armed Forces progress report #4 addressing sexual misconduct [Internet]. Ottawa (ON): Government of Canada. https://www.canada.ca/en/department-national-defence/corporate/reports-publications/sexual-misbehaviour/progress-report-four.html

NATO, Human Factors & Medicine (HFM) Panel. (2022). Understanding Military Culture to Support Organizational Change. https://events.sto.nato.int/index.php/upcoming-events/upcoming-eventstimeline/download.file/2849.

Nazarov, A., Jetly, R., McNeely, H., Kiang, M., Lanius, R., & McKinnon, M. C. (2015). Role of morality in the experience of guilt and shame within the armed forces. *Acta Psychiatrica Scandinavica*, *132*(1), 4-19.

Newman, J. (2015). Identity and narrative: turning oppression into client empowerment in social security disability cases. *Alb. L. Rev.*, *79*, 373.

Nicol, A. A., Charbonneau, D., & Boies, K. (2007). Right-wing authoritarianism and social dominance orientation in a Canadian military sample. *Military Psychology*, *19*(4), 239-257.

North, C. S., Suris, A. M., Davis, M., & Smith, R. P. (2009). Toward validation of the diagnosis of posttraumatic stress disorder. *The American journal of psychiatry*, *166*(1), 34–41. https://doi.org/10.1176/appi.ajp.2008.08050644

O'Brien, C., Keith, J., & Shoemaker, L. (2015). Don't tell: Military culture and male rape. Psychological Services, 12(4), 357.

Office of the Auditor General of Canada. (2018). "Report 5—Inappropriate Sexual Behaviour—Canadian Armed Forces." 2018 Fall Reports of the Auditor General of Canada to the Parliament of Canada.

O'Leary, K. B., & Marcelli, M. (2022). Mental Health Outcomes Among Transgender Veterans and Active-Duty Service Members in the United States: A Systematic Review. Federal Practitioner, 39(10), 418.

O'Keefe, D. F., Son Hing, L. S., & Catano, V. (2023). Unethical behaviour in the military: The role of supervisor ethicality, ethical climate, and right-wing authoritarianism. Military Psychology, 35(1), 58-75.

Oliphant, R. (2016). Healthy minds, safe communities, supporting our public safety officers through a national strategy for operational stress injuries: Report of the Standing Committee on Public Safety and National Security.

Pachankis, J. E., & Goldfried, M. R. (2004). Clinical issues in working with lesbian, gay, and bisexual clients. Psychotherapy: Theory, Research, Practice, Training, 41, 227–246. doi:10.1037/0033-3204.41.3 .227

Pachankis, J. E. (2007). The psychological implications of concealing a stigma: a cognitive-affective-behavioural model. Psychological bulletin, 133(2), 328.

Pachankis, J. E., Hatzenbuehler, M. L., Rendina, H. J., Safren, S. A., & Parsons, J. T. (2015). LGB-affirmative cognitive-behavioural therapy for young adult gay and bisexual men: A randomized controlled trial of a transdiagnostic minority stress approach. Journal of consulting and clinical psychology, 83(5), 875.

Pai, A., Suris, A. M., & North, C. S. (2017). Posttraumatic stress disorder in the DSM-5: Controversy, change, and conceptual considerations. Behavioral sciences, 7(1), 7.

Palm Center. (2021, April 6). Biden policy on transgender troops explained. Retrieved from https://www.palmcenter.org/publication/biden-policy-on-transgender-troops-explained/

Papazoglou, K. (2013). Conceptualizing police complex spiral trauma and its applications in the police field. *Traumatology*, *19*(3), 196-209.

Papazoglou, K., & Andersen, J. P. (2014). A guide to utilizing police training as a tool to promote resilience and improve health outcomes among police officers. *Traumatology: An International Journal*, *20*(2), 103.

Park, J. (2008). A profile of the Canadian Forces (pp. 75-001). Ottawa: Statistics Canada.

Parkins, I. S., Fishbein, H. D., & Ritchey, P. N. (2006). The influence of personality on workplace bullying and discrimination. *Journal of Applied Social Psychology*, *36*(10), 2554-2577.

Paulson, J. L., Florimbio, A. R., Rogers, T. A., Hartl Majcher, J., Bennett, D. C., & Sexton, M. B. (2022). Contrasting ecological contexts among treatment-seeking military sexual assault

survivors: Consideration of relationships with sexual and gender minority identification. Psychological services.

Pearson, A., La Bash, H., & Follette, V. (2010). 2.19 Post-traumatic stress disorder. *The Cambridge handbook of forensic psychology*, 283.

Pershing, J. L. (2003). Why women don't report sexual harassment: A case study of an elite military institution. Gender issues, 21(4), 3-30.

Peters, M. D., Marnie, C., Colquhoun, H., Garritty, C. M., Hempel, S., Horsley, T., ... & Tricco, A. C. (2021). Scoping reviews: reinforcing and advancing the methodology and application. Systematic reviews, 10(1), 1-6.

Pham, M. T., Rajić, A., Greig, J. D., Sargeant, J. M., Papadopoulos, A., & McEwen, S. A. (2014). A scoping review of scoping reviews: advancing the approach and enhancing the consistency. Research synthesis methods, 5(4), 371-385.

Pope, C., Mays, N., & Popay, J. (2007). *Synthesising qualitative and quantitative health evidence: A guide to methods.* McGraw-Hill Education (UK).

Poulin, C. (2001). " The Military Is the Wife and I Am the Mistress": Partners of Lesbians in the Canadian Military. Atlantis: Critical Studies in Gender, Culture & Social Justice, 26(1), 65-76.

Poulin, C., Gouliquer, L., & Moore, J. (2009). Discharged for homosexuality from the Canadian military: Health implications for lesbians. Feminism & Psychology, 19(4), 496-516.

Poulin, C., & Gouliquer, L. (2012). Clandestine existences and secret research: Eliminating official discrimination in the Canadian military and going public in academia. Journal of Lesbian Studies, 16(1), 54-64.

Poulin, C., Gouliquer, L., & McCutcheon, J. (2018). Violating gender norms in the Canadian military: The experiences of gay and lesbian soldiers. Sexuality Research and Social Policy, 15, 60-73.

Powell, H. A., Stinson, R. D., & Erbes, C. (2022). Transgender and gender diverse veterans' access to gender-related health care services: The role of minority stress. Psychological services, 19(3), 455.

Preston, A. M. M., Saigal, S., Barrie, R., McKinney, H., Mooney, S., & Padala, P. R. (2023). Defeated no more: meaning-making after military sexual trauma. *Military medicine*, *188*(7-8), e1483-e1489.

Price, J. L., Monson, C. M., Callahan, K., & Rodriguez, B. F. (2006). The role of emotional functioning in military-related PTSD and its treatment. *Journal of Anxiety Disorders*, *20*(5), 661-674.

Pyke, K. D. (2018). Institutional betrayal: Inequity, discrimination, bullying, and retaliation in academia. *Sociological Perspectives*, *61*(1), 5-13.

Queirós, C., Passos, F., Bártolo, A., Faria, S., Fonseca, S. M., Marques, A. J., ... & Pereira, A. (2020). Job stress, burnout and coping in police officers: relationships and psychometric properties of the organizational police stress questionnaire. *International journal of environmental research and public health*, *17*(18), 6718.

Ragsdale, J. M., Kochert, J. F., & Beehr, T. A. (2021). News from the front: A monthly study on stress and social support during a military deployment to a war zone. *Journal of Occupational Health Psychology*, *26*(4), 326.

Ramirez, H., & Bloeser, K. (2018). Risk and resilience: A review of the health literature of veterans who identify as LGBT. Gay mental healthcare providers and patients in the military: Personal experiences and clinical care, 9-24.

Ramirez, M. H., Rogers, S. J., Johnson, H. L., Banks, J., Seay, W. P., Tinsley, B. L., & Grant, A. W. (2013). If we ask, what they might tell: Clinical assessment lessons from LGBT military personnel post-DADT. Journal of Homosexuality, 60(2-3), 401-418.

Rashkovsky, K., Solano, I., Khalifian, C., Morland, L. A., & Knopp, K. (2022). Interpersonal trauma histories and relationship functioning among LGB Veteran couples seeking PTSD treatment. Military psychology, 34(4), 494-501.

Reinhardt, K. M., Smith, C. P., & Freyd, J. J. (2016). Came to serve, left betrayed: MST and the trauma of betrayal. *Understanding and treating military sexual trauma*, 61-78.

Reinhardt, K. M., McCaughey, V. K., Vento, S. A., & Street, A. E. (2023). In their own words: women Veterans identify the personal consequences of military sexual trauma victimization. Violence against women, 10778012221147909.

Reiter, B. (2017). Theory and methodology of exploratory social science research.

Rerucha, C. M., Runser, L. A., Ee, J. S., & Hersey, E. G. (2018). Military healthcare providers' knowledge and comfort regarding the medical care of active duty lesbian, gay, and bisexual patients. *Lgbt Health, 5*(1), 86-90.

Resick, P. A., Monson, C. M., & Chard, K. M. (2016). Cognitive processing therapy for PTSD: A comprehensive manual. Guilford Publications.

Ricciardelli, R., Czarnuch, S., Carleton, R. N., Gacek, J., & Shewmake, J. (2020). Canadian public safety personnel and occupational stressors: How PSP interpret stressors on duty. *International Journal of Environmental Research and Public Health, 17*(13), 4736.

Rich, C., Schutten, J. K., & Rogers, R. A. (2012). “Don't drop the soap”: Organizing sexualities in the repeal of the US military's “Don't ask, Don't tell” policy. Communication Monographs, 79(3), 269-291.

Richardson, K. M., & Rothstein, H. R. (2008). Effects of occupational stress management intervention programs: a meta-analysis. *Journal of occupational health psychology*, *13*(1), 69.

Rodriguez, L., King, P. R., & Buchholz, L. J. (2023). Associations among military sexual trauma, positive alcohol expectancies, and coping behaviours in female veterans. Psychological trauma: theory, research, practice, and policy.

Romaniuk, J. R., & Loue, S. (2017). Military sexual trauma among men: A review of the literature and a call for research. Best Practices in Mental Health, 13(1), 81-105.

Rosen, L. N., & Martin, L. (1998). Sexual harassment, cohesion, and combat readiness in US Army support units. Armed Forces & Society, 24(2), 221-244.

Rosenstein, J. E. (2015). Military sexual assault prevention and male rape myth acceptance. Military behavioral health, 3(4), 207-211.

Roth, S. L., Andrews, K., Protopopescu, A., Lloyd, C., O'Connor, C., Losier, B. J., ... & McKinnon, M. C. (2023). Development and preliminary evaluation of the moral injury assessment for public safety personnel. *Traumatology*, *29*(2), 301.

Rufa, A. K., Carroll, K. K., Lofgreen, A., Klassen, B., Held, P., & Zalta, A. K. (2022). “You're going to look at me differently”: A qualitative study of disclosure experiences among survivors of military sexual assault. *Journal of Traumatic Stress*, *35*(3), 901-913

Saver, M. R., Freund, K. M., Wright, L. M., Tjia, J., & Frayne, S. M. (2008). Healthcare preferences among lesbians: a focus group analysis. Journal of women's health, 17(2), 215-225.

Scheer, J. R., Harney, P., Esposito, J., & Woulfe, J. M. (2020). Self-reported mental and physical health symptoms and potentially traumatic events among lesbian, gay, bisexual, transgender, and queer individuals: The role of shame. Psychology of violence, 10(2), 131.

Schorr, Y., Stein, N. R., Maguen, S., Barnes, J. B., Bosch, J., & Litz, B. T. (2018). Sources of moral injury among war veterans: A qualitative evaluation. *Journal of clinical psychology*, *74*(12), 2203-2218.

Schry, A. R., Hibberd, R., Wagner, H. R., Turchik, J. A., Kimbrel, N. A., Wong, M., Elbogen, E. E., Strauss, J. L., Veterans Affairs Mid-Atlantic Mental Illness, Research, Education and Clinical Center Workgroup, & Brancu, M. (2015). Functional correlates of military sexual assault in male Veterans. Psychological services, 12(4), 384-393.

Schulker, D. (2017). The recent occupation and industry employment patterns of American veterans. *Armed Forces & Society*, *43*(4), 695-710.

Schultebraucks, K., Shalev, A. Y., Michopoulos, V., Grudzen, C. R., Shin, S. M., Stevens, J. S., ... & Galatzer-Levy, I. R. (2020). A validated predictive algorithm of post-traumatic stress course following emergency department admission after a traumatic stressor. *Nature medicine*, *26*(7), 1084-1088.

Schuyler, A. C., Klemmer, C., Mamey, M. R., Schrager, S. M., Goldbach, J. T., Holloway, I. W., & Castro, C. A. (2020). Experiences of sexual harassment, stalking, and sexual assault during military service among LGBT and non-LGBT service members. Journal of traumatic stress, 33(3), 257-266.

Schvey, N. A., Klein, D. A., Pearlman, A. T., Kraff, R. I., & Riggs, D. S. (2020). Stigma, health, and psychosocial functioning among transgender active duty service members in the US military. Stigma and Health, 5(2), 188.

Scott, J. C., Pietrzak, R. H., Southwick, S. M., Jordan, J., Silliker, N., Brandt, C. A., & Haskell, S. G. (2014). Military sexual trauma interacts with combat exposure to increase risk for posttraumatic stress symptomatology in female Iraq and Afghanistan veterans. The Journal of Clinical Psychiatry, 75(6), 11942.

Segal, M. W., Smith, D. G., Segal, D. R., & Canuso, A. A. (2016). The role of leadership and peer behaviors in the performance and well-being of women in combat: Historical perspectives, unit integration, and family issues. Military medicine, 181(1), 28-39.

Selvidge, M. M. (2000). The relationship of sexist events, heterosexist events, self-concealment, and self-monitoring to psychological well-being in lesbian and bisexual women. The University of Memphis.

Senter, A. D. (2020). Military Sexual Trauma Among Lesbian, Gay, Bisexual, and Transgender Veterans and Perceived Barriers to Care [Doctoral dissertation, Adler University].

Sexton, M. B., Davis, M. T., Anderson, R. E., Bennett, D. C., Sparapani, E., & Porter, K. E. (2018). Relation between sexual and gender minority status and suicide attempts among veterans seeking treatment for military sexual trauma. Psychological services, 15(3), 357.

Shalev, A. Y., Gevonden, M., Ratanatharathorn, A., Laska, E., Van Der Mei, W. F., Qi, W., ... & van Zuiden, M. (2019). Estimating the risk of PTSD in recent trauma survivors: results of the International Consortium to Predict PTSD (ICPP). *World Psychiatry*, *18*(1), 77-87.

Sheppard, S. C., Hickling, E. J., Earleywine, M., Hoyt, T., Russo, A. R., Donati, M. R., & Kip, K. E. (2015). Preliminary data suggest rates of male military sexual trauma may be higher than previously reported. Psychological services, 12(4), 344.

Sherman, M. D., Kauth, M. R., Ridener, L., Shipherd, J. C., Bratkovich, K., & Beaulieu, G. (2014). An empirical investigation of challenges and recommendations for welcoming sexual and gender minority Veterans into VA care. Professional Psychology, Research and Practice, 45, 433– 442. http://dx.doi.org/10.1037/a0034826.

Sherman, N. (2007). Stoic warriors: The ancient philosophy behind the military mind. Oxford University Press.

Shields, D. M., Kuhl, D., & Westwood, M. J. (2017). Abject Masculinity and the Military: Articulating a Fulcrum of Struggle and Change. Psychology of Men & Masculinity, 18(3), 215–225. https://doi.org/10.1037/men0000114

Shields, G. S., Sazma, M. A., & Yonelinas, A. P. (2016). The effects of acute stress on core executive functions: A meta-analysis and comparison with cortisol. *Neuroscience & Biobehavioral Reviews*, *68*, 651-668.

Shipherd, J. C., Pineles, S. L., Gradus, J. L., & Resick, P. A. (2009). Sexual harassment in the Marines, posttraumatic stress symptoms, and perceived health: Evidence for sex differences. Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies, 22(1), 3-10.

Shipherd, J. C., Darling, J. E., Klap, R. S., Rose, D., & Yano, E. M. (2018). Experiences in the Veterans' health administration and impact on healthcare utilization: Comparisons between LGBT and non-LGBT women veterans. LGBT health, 5(5), 303-311.

Shipherd, J. C., Lynch, K., Gatsby, E., Hinds, Z., DuVall, S. L., & Livingston, N. A. (2021). Estimating prevalence of PTSD among veterans with minoritized sexual orientations using electronic health record data. Journal of consulting and clinical psychology, 89(10), 856.

Shoemaker, M., von Hlatky, S. (2020). A Feminist Account of Canadian Defence Policy. In: Tremblay, M., Everitt, J. (eds) The Palgrave Handbook of Gender, Sexuality, and Canadian Politics. Palgrave Macmillan, Cham. https://doi.org/10.1007/978-3-030-49240-3_21

Sidanius, J., & Pratto, F. (2003). Social dominance theory and the dynamics of inequality: A reply to Schmitt, Branscombe, & Kappen, and Wilson & Liu. British Journal of Social Psychology, 42(2), 207-213.

Sidanius, J., Cotterill, S., Sheehy-Skeffington, J., Kteily, N., & Carvacho, H. (2017). Social dominance theory: Explorations in the psychology of oppression. The Cambridge handbook of the psychology of prejudice, 149-187.

Siebold, G. L. (2006). Military group cohesion. In T. W. Britt, C. A. Castro, & A. B. Adler (Eds.), Military performance. Military life: The psychology of serving in peace and combat (Vol. 1, pp. 185–201). Praeger Security International.

Silverberg, R. (2019). Trauma Center Trauma-Sensitive Yoga (TC-TSY) Peer Support Groups: An Adjunct Modality in a Feminist Approach to Trauma Treatment for Survivors of Sexual Violence (Doctoral dissertation, Saybrook University).

Simpson, T. L., Balsam, K. F., Cochran, B. N., Lehavot, K., & Gold, S. D. (2013). Veterans administration health care utilization among sexual minority veterans. Psychological services, 10(2), 223.

Skinner, K. M., Kressin, N., Frayne, S., Tripp, T. J., Hankin, C. S., Miller, D. R., & Sullivan, L. M. (2000). The prevalence of military sexual assault among female Veterans' Administration outpatients. Journal of Interpersonal Violence, 15(3), 291-310.

Skopp, N. A., Luxton, D. D., Bush, N., & Sirotin, A. (2011). Childhood adversity and suicidal ideation in a clinical military sample: Military unit cohesion and intimate relationships as protective factors. *Journal of Social and Clinical Psychology*, *30*(4), 361-377.

Sloand, E., Ho, G., Klimmek, R., Pho, A., & Kub, J. (2012). Nursing children after a disaster: A qualitative study of nurse volunteers and children after the Haiti earthquake. *Journal for Specialists in Pediatric Nursing*, *17*(3), 242-253.

Smid, G. E., Mooren, T. T., Van Der Mast, R. C., Gersons, B. P., & Kleber, R. J. (2009). Delayed posttraumatic stress disorder: systematic review, meta-analysis, and meta-regression analysis of prospective studies. *The Journal of clinical psychiatry*, *70*(11), 4091.

Smidt, A. M., & Platt, M. G. (2018). Sexuality and trauma: Intersections between sexual orientation, sexual functioning, and sexual health and traumatic events. Journal of trauma & dissociation, 19(4), 399-402.

Smith, B. N., Shipherd, J. C., Schuster, J. L., Vogt, D. S., King, L. A., & King, D. W. (2011). Posttraumatic stress symptomatology as a mediator of the association between military sexual trauma and post-deployment physical health in women. Journal of Trauma & Dissociation, 12(3), 275-289.

Smith, P. (2008). Meaning and military power: Moving on from Foucault. *Journal of Power*, *1*(3), 275-293.

Smith, C. P., & Freyd, J. J. (2013). Dangerous safe havens: Institutional betrayal exacerbates sexual trauma. Journal of traumatic stress, 26(1), 119-124.

Smith, C. P., & Freyd, J. J. (2014). Institutional betrayal. American Psychologist, 69(6), 575.

Smith, C. P., Cunningham, S. A., & Freyd, J. J. (2016). Sexual violence, institutional betrayal, and psychological outcomes for LGB college students. *Translational Issues in Psychological Science*, *2*(4), 351.

Smith, C. P., & Freyd, J. J. (2017). Insult, then injury: Interpersonal and institutional betrayal linked to health and dissociation. *Journal of Aggression, Maltreatment & Trauma*, *26*(10), 1117-1131

Steenkamp, M. M., Litz, B. T., Hoge, C. W., & Marmar, C. R. (2015). Psychotherapy for military-related PTSD: A review of randomized clinical trials. *Jama*, *314*(5), 489-500.

Strauss, J. L., Coeytaux, R., McDuffie, J., Nagi, A., & Williams, J. (2011). Efficacy of complementary and alternative medicine therapies for posttraumatic stress disorder.

Strom, T. Q., Gavian, M. E., Possis, E., Leskela, J., & Siegel, W. (2012). Cultural and ethical considerations when working with military personnel and Veterans: A primer for VA training programs. Training and Education in Professional Psychology, 6, 67–75. doi:10.1037/a0028275

Surís, A., Lind, L., Kashner, T. M., Borman, P. D., & Petty, F. (2004). Sexual assault in women veterans: An examination of PTSD risk, health care utilization, and cost of care. Psychosomatic Medicine, 66(5), 749-756.

Surís, A., Lind, L., Kashner, T. M., & Borman, P. D. (2007). Mental health, quality of life, and health functioning in women veterans: Differential outcomes associated with military and civilian sexual assault. Journal of interpersonal violence, 22(2), 179-197.

Suris, A., & Lind, L. (2008). Military sexual trauma: A review of prevalence and associated health consequences in Veterans. Trauma, Violence, & Abuse, 9(4), 250-269.

Swim, J. K., Aikin, K. J., Hall, W. S., & Hunter, B. A. (1995). Sexism and racism: Old-fashioned and modern prejudices. Journal of personality and social psychology, 68(2), 199.

Szeto, A., Dobson, K. S., Luong, D., Krupa, T., & Kirsh, B. (2019). Workplace antistigma programs at the Mental Health Commission of Canada: Part 1. Processes and projects. *The Canadian Journal of Psychiatry*, *64*(1_suppl), 5S-12S.

Szymanski, D. M., Kashubeck-West, S., & Meyer, J. (2008). Internalized heterosexism: Measurement, psychosocial correlates, and research directions. The Counseling Psychologist, 36(4), 525-574.

Taber, N. (2005). Learning how to be a woman in the Canadian Forces/unlearning it through feminism: An autoethnography of my learning journey. Studies in Continuing Education, 27(3), 289-301.

Taber, N. (2017). The Canadian armed forces: Battling between operation HONOUR and operation Hop on Her. Critical Military Studies.

Taber, N. (2018). After Deschamps: Men, masculinities, and the Canadian armed forces. Journal of Military, Veteran and Family Health, 4(1), 100-107.

Taber, N. (2022). Profession of Arms Trusted to Serve: Rethinking the CAF Ethos for Culture Change. Retrieved from: http://www.journal.forces.gc.ca/cmj-article-en-page13223.html.

Tannahill, H. S., Barrett, T. S., Zalta, A. K., Tehee, M., & Blais, R. K. (2023). Posttraumatic cognitions differ between men and women after military sexual assault revictimization in their contribution to PTSD symptoms. Journal of interpersonal violence, 38(7-8), 6038-6061.

Tricco, A. C., Zarin, W., Rios, P., Nincic, V., Khan, P. A., Ghassemi, M., ... & Langlois, E. V. (2018). Engaging policy-makers, health system managers, and policy analysts in the knowledge synthesis process: a scoping review. Implementation Science, 13(1), 1-19.

Tucker, R. P., Testa, R. J., Reger, M. A., Simpson, T. L., Shipherd, J. C., & Lehavot, K. (2019). Current and military-specific gender minority stress factors and their relationship with suicide ideation in transgender veterans. Suicide and Life-Threatening Behavior, 49(1), 155-166.

Turchik, J. A., McLean, C., Rafie, S., Hoyt, T., Rosen, C. S., & Kimerling, R. (2013). Perceived barriers to care and provider gender preferences among veteran men who have experienced military sexual trauma: a qualitative analysis. Psychological services, 10(2), 213.

United States Army. (2013). Report to Defense Advisory Committee on Women in the Services. Retrieved from http://dacowits.defense.gov/Portals/48/Documents/Reports/2013/Documents/dacowits%20december%202013%20meeting/December%20Meeting%20Slides.pdf

Vaismoradi, M., & Snelgrove, S. (2019). Theme in qualitative content analysis and thematic analysis.

Vasterling, J. J., Duke, L. M., Brailey, K., Constans, J. I., Allain Jr, A. N., & Sutker, P. B. (2002). Attention, learning, and memory performances and intellectual resources in Vietnam veterans: PTSD and no disorder comparisons. *Neuropsychology*, *16*(1), 5.

Valentine, S. E., & Shipherd, J. C. (2018). A systematic review of social stress and mental health among transgender and gender non-conforming people in the United States. Clinical Psychology Review, 66, 24 –38. http://dx.doi.org/10.1016/j.cpr.2018.03.003.

Valentine, S. E., Shipherd, J. C., Smith, A. M., & Kauth, M. R. (2021). Improving affirming care for sexual and gender minority veterans. Psychological services, 18(2), 205.

Van Epps, G. (2008). Relooking unit cohesion: A sensemaking approach. Military Review, 88, 102- 110.

Van Gilder, B. J. (2019). Femininity as perceived threat to military effectiveness: How military service members reinforce hegemonic masculinity in talk. Western Journal of Communication, 83(2), 151-171.

Vargas, A.F., Hanson, T., Kraus, D., Drescher, K., & Foy, D. (2013). Moral injury themes in combat veterans' narrative responses from the National Vietnam Veterans' Readjustment Study. *Traumatology*, *19*(3), 243-250.

Varljen, P. J. (2001). *Leadership: More than mission accomplishment*. US Army War College.

Vaughn, J. N. (2014). Lived experiences of military lesbians who served during the" Don't Ask, Don't Tell" policy. [Doctoral Dissertation, Morgan State University].

Veterans Affairs (2014). Veterans' Benefits: Counseling and Treatment for Sexual Trauma, 38 U.S.C. § 1720D. Retrieved from https://www.gpo.gov/fdsys/pkg/ USCODE-2014-title38/pdf/USCODE-2014-title38-partII-chap17-subchapII-sec1720D.pdf.

Veterans Affairs. (2019). Military Sexual Trauma - Mental Health. Retrieved from https://www.mentalhealth.va.gov/mentalhealth/msthome/index.asp.

von Hlatky, S., & Imre-Millei, B. (2022). A gender-based analysis of recruitment and retention in the Canadian Army Reserve. *Journal of Military, Veteran and Family Health*, *8*(s1), 46-53.

Voth, M., Chisholm, S., Sollid, H., Jones, C., Smith-MacDonald, L., & Brémault-Phillips, S. (2022). Efficacy, effectiveness, and quality of resilience-building mobile health apps for

military, veteran, and public safety personnel populations: scoping literature review and app evaluation. *JMIR mHealth and uHealth, 10*(1), e26453.

Waddell, E., Lawn, S., Roberts, L., Henderson, J., Venning, A., & Redpath, P. (2020). "Why do you stay?": The lived-experience of partners of Australian veterans and first responders with Posttraumatic Stress Disorder. Health & Social Care in the Community., 28(5), 1734–1742. https://doi.org/10.1111/hsc.12998

Wadham, B., & Connor, J. (2023). Commanding men, governing masculinities: Military institutional abuse and organizational reform in the Australian armed forces. Gender, Work & Organization.

Walker, L. E. (2016). The battered woman syndrome. Springer publishing company.

Walker, P. R. (2021). A Review of Lesbian, Gay, Bisexual, Transgender, and Queer Intimate

Walsh, K., Galea, S., Cerda, M., Richards, C., Liberzon, I., Tamburrino, M. B., ... & Koenen, K. C. (2014). Unit support protects against sexual harassment and assault among national guard soldiers. Women's health issues, 24(6), 600-604.

Ward, R. N., Carlson, K. J., Erickson, A. J., Yalch, M. M., & Brown, L. M. (2021). Associations of humor, morale, and unit cohesion on posttraumatic stress disorder symptoms. Military Psychology, 1-10.

Warnken, H., & Lauritsen, J. (2019). Who experiences violent victimization and who accesses services? Findings from the National Crime Victimization Survey for expanding our reach. Center for Victim Research.

Waruszynski, B. T., MacEachern, K. H., Raby, S., Straver, M., Ouellet, E., & Makadi, E. (2019). Women serving in the Canadian Armed Forces: strengthening military capabilities and operational effectiveness. Canadian Military Journal, 19(2), 24-33.

Waruszynski, B. T. & MacEachern, K. H. (2021). Female Primary Reserve members' perceptions on the attraction, recruitment, employment, and retention of women in the Canadian Armed Forces. Canadian Military Journal, 21(3), 47-52.

Watkins, E. Y. (2022). Lack of Sexual Orientation and Gender Identity Data Masks Important Health Disparities in Department of Defense Surveys. *American Journal of Public Health*, *112*(6), 843-845

Weathers, F. W., Litz, B. T., Keane, T. M., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). The PTSD checklist for DSM-5 (PCL-5). *Scale available from the National Center for PTSD at www. ptsd.va.gov*, *10*(4), 206.

Webermann, A. R., Nester, M. S., Gianoli, M. O., Black, A. C., Rosen, M. I., Mattocks, K. M., & Portnoy, G. A. (2023). Compensation and Pension Exams for Military Sexual Trauma–Related Posttraumatic Stress Disorder: Examiner Perspectives, Clinical Impacts on Veterans, and Strategies. Women's Health Issues.

Weitz, R. (2015). Vulnerable warriors: Military women, military culture, and fear of rape. Gender Issues, 32, 164-183.

Welsh, J. A., Olson, J. R., & Perkins, D. F. (2019). Gender differences in post-deployment adjustment of Air Force personnel: The role of wartime experiences, unit cohesion, and self-efficacy. Military medicine, 184(1-2), e229-e234.

Whitley Jr, B. E., & Lee, S. E. (2000). The relationship of authoritarianism and related constructs to attitudes toward homosexuality 1. Journal of applied social psychology, 30(1), 144-170.

Whitworth, S. (2004). Men, militarism, and UN peacekeeping: A gendered analysis. Lynne Rienner Publishers.

Wilder, H., & Wilder, J. (2012). In the wake of Don't Ask Don't Tell: Suicide prevention and outreach for LGB service members. Military Psychology, 24(6), 624-642.

Willging, C. E., Salvador, M., & Kano, M. (2006). Brief reports: Unequal treatment: Mental healthcare for sexual and gender minority groups in a rural state. Psychiatric Services, 57, 867– 870. http://dx.doi.org/10 .1176/ps.2006.57.6.867.

Williams, K. D. (1997). Social ostracism. In *Aversive interpersonal behaviors* (pp. 133-170). Boston, MA: Springer US.

Williams, C. L., Giuffre, P. A., & Dellinger, K. (2009). The gay-friendly closet. Sexuality Research & Social Policy, 6, 29-45.

Williamson, V., Stevelink, S. A., & Greenberg, N. (2018). Occupational moral injury and mental health: systematic review and meta-analysis. *The British Journal of Psychiatry*, *212*(6), 339-346.

Wilsey, C. N. (2020). A Three Article Study Examining Sexual and Gender Minority Competency of Health Service Providers (Doctoral dissertation, Old Dominion University).

Wilson, S., Guliani, H., & Boichev, G. (2016). On the economics of post-traumatic stress disorder among first responders in Canada. *Journal of Community Safety and Well-Being*, *1*(2), 26-31.

Wilson, M. S., & Sibley, C. G. (2013). Social dominance orientation and right-wing authoritarianism: Additive and interactive effects on political conservatism. *Political Psychology*, *34*(2), 277-284.

Wilson-Buford, K. (2013). From exclusion to acceptance: A case history of homosexuality in the US Court of Military Appeals. Journal of homosexuality, 60(2-3), 250-272.

Winslow, D. (1998). Misplaced loyalties: The role of military culture in the breakdown of discipline in peace operations. Canadian Review of Sociology/Revue Canadienne de Sociologie, 35(3), 345-367.

Woodhill, B. M., & Samuels, C. A. (2004). Desirable and undesirable androgyny: A prescription for the twenty-first century. Journal of Gender Studies, 13(1), 15-28.

Wright, A. J., & Wegner, R. T. (2012). Homonegative microaggressions and their impact on LGB individuals: A measure validity study. Journal of LGBT Issues in Counseling, 6(1), 34-54.

Xu, B. (2023). Negative Posttraumatic Cognitions about Self Mediate the Relation Between Sexual Revictimization and Suicide Risk in a Sample of Military Sexual Assault Survivors (Doctoral dissertation, Arizona State University).

Yahalom, J., Frankfurt, S., & Hamilton, A. B. (2023). Between Moral Injury and Moral Agency: Exploring Treatment for Men with Histories of Military Sexual Trauma. Medicine Anthropology Theory, 10(1), 1-21

Yancey, J. R., Carson, C. N., McGlade, E. C., & Yurgelun-Todd, D. A. (2023). A literature review of mental health symptom outcomes in US veterans and servicemembers following combat exposure and military sexual trauma. *Trauma, Violence, & Abuse*, 15248380231178764.

Yoder, J. D. (1991). Rethinking tokenism: Looking beyond numbers. Gender & society, 5(2), 178-192.

Young, L. M., & Nauta, M. M. (2013). Sexism as a predictor of attitudes toward women in the military and in combat. Military Psychology, 25(2), 166-171.

Zaccari, B., Sherman, A. D., Febres-Cordero, S., Higgins, M., & Kelly, U. (2022). Findings from a pilot study of Trauma Center Trauma-Sensitive Yoga versus cognitive processing therapy

for PTSD related to military sexual trauma among women Veterans. *Complementary Therapies in Medicine*, *70*, 102850.