The Mental Health of Frontline Workers in Canada;

A Grounded Theory Study

by

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Abstract

The mental health of frontline workers in Canada suffered during the COVID-19 pandemic, and this current study sought to help discern how to better support workers now and under future comparable circumstances. Semi-structured interviews were conducted with 41 public safety personnel and healthcare workers, collectively referred to as frontline workers, from across Canada. The themes that emerged included: 1) frontline workers are facing many mental health challenges (e.g., unresolved trauma, psychological stress injuries, moral distress, burnout, suicidality); 2) mental health supports (e.g., at various levels - family, psychoeducation, peers, policies) are crucial for supporting workers; 3) there are important interactions between mental health and organizational stressors (e.g., chronic staff shortages, stigma, bullying, sanctuary trauma); and, 4) there are key differences of experiences across diverse social locations (e.g., gender, Indigeneity, class). A theoretical model of multi-level recommendations was generated to contribute to forging a way forward, including humanizing service delivery organizations, embedding mental health literacy into workplace training and culture, and prioritizing mental health knowledge as a driver of policy decision-making.

Acknowledgements

I would like to thank the frontline workers who contributed to the study by participating in interviews. I hope that through this work their contributions will help frontline workers and their families going forward. I extend gratitude to the people at the Canadian Institute of Public Safety Research and Treatment for their important work and for hiring me to assist in research in 2022. I would like to give thanks for my co-advisors Dr. Andrew Hatala and Dr. Javier Mignone, and committee members Dr. Kerstin Roger and Dr. R. Nicholas Carleton, as well as my external examiner Dr. Ellen MacEachen for guiding me in my learning. I want to thank everyone at the Faculty of Graduate Studies, the Department of Community Health Sciences, and the broader community at the University of Manitoba for an inspiring place to work. The Canadian Institutes of Health Research granted me a doctoral award for which I am grateful and without which this study would not have been possible.

Photo by Lindsay Allen

I am grateful to live and work on Treaty 1 territory. I acknowledge my participants came from Indigenous territories across Canada. I recognize land acknowledgements as one part of a larger transformation and ongoing dialogue with Indigenous Nations. I want to acknowledge the Indigenous lands and waters that support my life and the lives of my loved ones in the traditional territories of Mi'kmaq, Anishnaabe, Nehiyawak, Haudenosaunee, Squamish, Coahuiltecan, and other Indigenous Peoples across Turtle Island

(North America). I am grateful for the guidance from the late Elder Dr. Dave Courchene Nii Gaani Aki Innini (Leading Earth Man) who inspired me to pursue a PhD in community health when I was assisting at the Turtle Lodge International Center for Indigenous Education and Wellness in Sagkeeng First Nation. His passing was an enormous loss on many levels and to many people, and it changed the course of my studies. I give thanks for my family and friends, my Nokomis (Grandmothers) Sundance family, and my Vipassana sangha (community), and above and within all, I give thanks to the source of life, our Creator, architect of infinity and oneness.

Dedication

I would like to dedicate this study to those coming next, with hope for a culture of well-being, sustainability, and state-of-the-art public safety and healthcare, free of structural violence. I would also like to dedicate this study to those who have already endured violence, and those experiencing violence now, may you find peace and be well and happy.

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Terms of Reference

Frontline workers

The term ‘frontline workers’ is used to refer to a special subset of ‘essential workers.’ The latter are understood as people whose work is crucial to keep open and operating despite of a crisis like the COVID-19 pandemic. The former are essential workers who are required to be physically present to carry out their work.

Healthcare workers (HCW)

The term ‘healthcare worker’ is used to refer to all kinds of health professionals who provide care, treatment, and advice based on formalized training any of a variety of disciplines, such as nurses, physicians, medical assistants, physical therapists, occupational therapists, allied health professionals, public health officers, healthcare aides, residential care workers, home care workers, social workers, and spiritual care providers.

Public safety personnel (PSP)

As per Heber et al. (2023), ‘public safety personnel’ is a term developed to be inclusive of all those working to ensure the safety and security of the general population, whether they are on the frontlines or not. The term ‘PSP’ is used to collectively reference all first responders and related public safety professions, including but not limited to firefighters (career and volunteer), paramedics, correctional workers, border services officers, public safety communicators and dispatchers, Indigenous emergency managers, operational intelligence personnel, paramedics, police officers (municipal, provincial, federal), and search and rescue personnel.

Note: Where research is cited that is specific to a particular group or subgroup of frontline workers, HCWs, or PSP, the specificity will be maintained. Where all groups are considered collectively, the term ‘frontline worker’ will be used broadly and inclusively.

Chapter 1: Introduction

This introductory chapter provides background information on how I came to be studying the mental health of frontline workers in Canada. The chapter outlines the significance, purpose, and objectives of the current study. A discussion follows with a preliminary literature review that preceded the data analysis, including a methodological note on grounded theory and the timing of literature reviews. The preliminary literature review contains two main topic areas: 1) the unmet mental health training needs of frontline workers; and, 2) gender-based, intersectional, and systemic issues relevant to the mental health of the frontline workforce.

Study Background and Significance

During the COVID-19 pandemic, our house was saturated with anxiety as my family navigated the daily updates of infection and death rates, the vacillating public health restrictions, and the uncertainties of how to manage and how long it would go on. I quit three of my four part-time research assistant jobs so that I could attend to urgent family and community members' mental unwellness, as well as the sequelae of having lost daycare and in-person school for my two kids with very different educational needs. With lockdowns and isolation policies came the widespread, rapid losses to women's paid work which was coined a 'she-cessation' (a recession disproportionately impacting women and unpaid caregivers; CBC, 2021).

I felt compelled to return to the east coast to be close to my family of origin, especially dad who had just been diagnosed with a degenerative neurological condition, but air travel was shut down. Family and community members disagreed on interpretations of and compliance with public health restrictions such as masking, distancing, quarantines, and vaccines, leading to the fragmentation of support networks. Meanwhile, online polarization began to dominate public opinions and discourses in media and social media, and in the vacuum where face-to-face

engagement and dialogue once were, people were pitting against one another with discordant misinformation, disinformation, and malinformation. In a time of mandatory physical isolation, people were being overloaded with conflicting data at historically unprecedented levels, resultant in high levels of uncertainty and fear. My own mental stamina, and the mental health of my family, my friends, and my communities were challenged in ongoing and serious ways. Many showed strength, but many were overcome by grief, anxiety, depression, mental disorders, self-harming, addictions, psychosis, and suicides, including in my closest circles.

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I became very motivated to focus on mental health more intentionally, beyond how it was repeatedly and quickeningly forcing its way into my life through impromptu informal counselling sessions. As a new sense of 'normal' became more routine in the latter stages of the pandemic, a research assistant position came up for a new study on a mental health training program. I was thrilled to become a part of a larger organization of people who have similar concerns and goals. I took a job working with a research team funded by the Public Health Agency of Canada (PHAC) that coordinated with the Canadian Institute of Public Safety Research and Training (CIPSRT). The team was housed at the University of Regina, and I began working remotely from my home in Winnipeg with participants across Canada.

On June 27th of 2022, Posttraumatic Stress Disorder (PTSD) Awareness Day, Dr. Carolyn Bennett – in serving as the federal Minister of Mental Health and Addictions and as Associate Minister of Health – announced substantial investments in several projects to address PTSD and psychological trauma in frontline workers, essential workers, and other people

disproportionately impacted by the COVID-19 pandemic (Government of Canada, 2022a). These initiatives facilitated formal research needing to be done, including the project I assisted with by conducting in-depth interviews with frontline workers. The project was an evaluation of a relatively new psychoeducation program tailored to PSP and HCW.

People living in Canada depend on frontline workers to respond to health emergencies, violence, and crises on a 24/7 basis. Frontline workers are a critical population because they interact with people during some of the most traumatic experiences of their lives and can have major impacts in this regard, for better or for worse. Given this occupationally defined truth, it is alarming then that prior to the exacerbating pressures of the COVID-19 pandemic, 45% of Canadian PSP screened positive for at least one mental disorder, and 28% reported suicidal ideation (Carleton, Afifi, Turner, Taillieu, LeBouthillier, et al., 2018). In 2023, every two out of three PSP screened positive for at least one mental disorder (Carleton, 2024). Prior to the pandemic, Canadian HCW similarly reported poorer mental health than the general population, and in a survey midway through the pandemic, seven out of 10 reported worsening symptoms (Government of Canada, 2021; Hoben et al., 2017).

Unresolved trauma can spread through frontline families and coworkers. In an analysis of open-ended survey questions of 828 PSP, it was evident that the intake of "extensive trauma, directly and vicariously, acutely and cumulatively" at work tends to permeate PSP home life (Ricciardelli et al., 2018, p. 567). Posttraumatic stress injuries correspond with mental distress, self-medicating, numbing, and lashing out, which tend to wear down on PSP's relationships with their spouses and with their children (Gilmartin, 2021; Ricciardelli et al., 2018). The families of HCW are often similarly burdened by traumas that their loved ones carry home from work (Beck et al., 2023; Tekin et al., 2022). Coworkers pass along vicarious psychological

trauma through their organizations, and their 'work families' may be more deeply connected than the research has yet recognized (Bloom & Farragher, 2011, 2013).

There is no established 'best practice' for programs intended to help people who are regularly exposed to (potentially) psychologically traumatic events (also called 'PPTE'; Di Nota Bahji, Groll, Carleton & Anderson, 2021; Ponniah & Hollon, 2009). Often the services and programs that are available in Canada are responding to PPTE exposures after the fact, rather than being preventative or proactive mental health training (Bahji et al., 2022; Di Nota Bahji, Groll, Carleton & Anderson, 2021; Lentz et al., 2022; Stelnicki, Jamshidi, Fletcher & Carleton, 2021). A few workplace programs have been developed to moderate the impact of what is called 'operational stress injuries' (or 'OSI') which can be understood as "persistent psychological difficulty resulting from operational duties" and associated with exposures to PPTE (Canadian Mental Health Association, 2023, p. 1; Heber et al., 2023). Examples of operational stress injuries include (recognised and unrecognized) posttraumatic stress, anxiety, depressive, and substance use disorders, as well as other mental health conditions (Heber et al., 2023). Operational stressors and organisational stressors are delineated in the literature; the former is understood as arising directly from job duties and the latter from workplace contexts and structures (Norman & Ricciardelli, 2022). To date, workplace programs aimed at operational stress injuries have typically focused on Veterans, military personnel, and police officers (Canadian Mental Health Association, 2023; Grenier et al., 2007; Richardson et al., 2008).

The 'Before Operational Stress' program (or 'the BOS program') was developed in 2017 by Dr. Megan McElheran, a psychologist and director of the Wayfound Mental Health Group, who found that many clinical hours were spent teaching clients mental health literacy and that there was serious need for this type of education (McElheran et al., 2020). 'Mental health

literacy' as a concept was introduced in 1997 to describe the skills, attitudes, beliefs, and knowledge needed for recognizing mental unwellness and disorders, seeking relevant information (e.g., risk factors, causes), accessing professional help, and learning methods of helping oneself and others (Race & Furnham, 2014). The BOS program is strongly influenced by cognitive behavioural therapy and is designed to mitigate the effects of operational stress, to improve resiliency, and to support interpersonal relationships, specific to PSP and HCW (McElheran et al., 2020). The initiative was forward-thinking with the uncommon intentionality to be preventative – or at least mitigating – of psychological injuries before they happen (Stelnicki, Jamshidi, Fletcher & Carleton, 2021).

The BOS program was originally implemented with in-person groups facilitated by a clinician, but delivery options for BOS were expanded and deployed during the COVID-19 pandemic to include online clinician-facilitated groups and online self-paced individual modules. Expanded delivery options increased access for people who have highly variable and atypical work schedules across Canada's vast geographies. All modalities use the same training material, consisting of eight two-hour sessions that cover the following topics: operational service culture, physiology of operational stress, markers of operational stress, cognitive impacts of operational stress, emotions, behaviour changes associated with operational stress, communication, empathy, and the technique of functional disconnection and functional reconnection (McElheran et al., 2020). The first six modules teach participants to understand and to process the connections between their thoughts, emotions, physical sensations, and behaviours, while the last two modules focus on communication, interpersonal relationships, and stress management skills (McElheran et al., 2020).

In a previous pilot study that carried out a small quantitative evaluation of the BOS

program, participants reported statistically significant improvements in PTSD symptoms, mental health stigma, quality of life, and perceived social support after the training (Stelnicki, Jamshidi, Fletcher & Carleton, 2021). That pilot study was followed by a larger quantitative study that tested whether the BOS program could produce small to moderate improvements in participant measurements of PTSD, major depressive disorder symptoms, stress, panic disorder, alcohol use, cannabis use, resiliency, stigma, social support, and self-care, as well as mental health access, knowledge, and service use (Ioachim et al., 2024a).

Qualitative interviews were conducted alongside this series of quantitative surveys that assessed for changes in symptoms and constructs evidenced in the pilot study. The qualitative interviews were intended to provide insight into participant feelings about the following five themes: 1) the impact of and perceptions around group dynamics (for those in groups); 2) the most and least helpful aspects of the program; 3) if and how the program attended to diversity; 4) overall experience and perceptions of the program; and, 5) participant suggestions for improving the program. The BOS program involves sensitive content about how PPTE exposures can impact individual health and relationships; accordingly, an exploratory qualitative study was needed to gain an in-depth understanding into how the training was experienced by diverse PSP and HCW in the context of their everyday workplaces and home environments.

A subset of the BOS program evaluation team, consisting of four researchers (one post-doc and three assistants including myself), did a rapid analysis of the rich qualitative data that emerged from the interviews I conducted, but we were overwhelmed by the breadth and depth, and we had a difficult time completing everything to fulsome satisfaction within the short timeframe allowed by the limited project funding. We did not have adequate time or resources to fully analyze and adequately write about many of the crucial themes that arose in the

interviews before the contract ended. Consequently, I became motivated to perform a secondary analysis, drawing and building on the skills that I had learned during my master's in science, resourced by the scholarship funding I secured from the Canadian Institutes of Health Research to do a doctoral degree at the University of Manitoba.

Purpose and Objectives

Given the high prevalence of mental disorders among PSP and HCW, including but not limited to PTSD and suicidality, as well as chronic PPTE exposures, burnout, and other concerning patterns of occurrence, more research is needed to help inform workforce sustainability (e.g., planning, recruitment, retention) and employee health and wellness efforts (Adriaenssens et al., 2012; Aiken et al., 2011; Angehrn et al., 2020; Corthésy-Blondin et al., 2021; Di Nota et al., 2020; Gomez-Urquiza et al., 2017; Lentz et al., 2021; Mealer et al., 2009; Poulsen et al., 2015; Rodrigues et al., 2018; Smith-MacDonald et al., 2021; Whitehead, 2014). The Public Health Agency of Canada funded an umbrella of initiatives intended "to support the mental health needs of PSP and HCW, their families, and their caregivers who have been most affected by the COVID-19 pandemic" (CIPHER, 2023, p. 1; Government of Canada, 2022a).

The broader study on which I collaborated was designed to provide feedback on the BOS program and to build empirical evidence toward improving mental health programming, and ultimately, mental health outcomes for PSP and HCW. As a further development, I carried out this secondary analysis with more expansive research questions beyond program evaluation to include broader issues. When I asked frontline workers about their experiences with the BOS program, they inevitably wanted to talk about their working conditions, their organizational stressors, the system-wide issues, and how these impacted their psychological injuries and mental health. I decided to re-analyze the interviews to help to identify and explore urgent

underlying issues.

The current study is designed to provide a better understanding of the lived realities of frontline workers in Canada and their experiences with mental health to inform decision-makers going forward. The specific objectives are: 1) to understand some of the mental health-related challenges frontline workers are facing; 2) to understand what supports their well-being; 3) to understand how operational stress and psychological injury interact with organizational stressors and workplace culture; 4) to understand if and how these differ across social categories of diversity, as far as the data will allow; and, 5) to develop a theoretical model that is responsive to the mental health needs of the individuals working within Canadian human service delivery systems, as well as their organizations as entities.

The current study is relevant to three priority areas set out by the Canadian Institutes of Health Research: 1) the COVID-19 and mental health initiative; 2) healthy and productive work; and, 3) PTSD among PSP (Government of Canada, 2023). The current study is also relevant to the new National Suicide Prevention Action Plan for Canada; healthcare and public safety professional associations, unions, and employing organizations' policies, partnerships, and internal reviews; policy-making and strategic planning at national, provincial, municipal, and organizational levels; and other related ongoing activities.

Preliminary Literature Review

Methodological Note Regarding the Timing of a Literature Review in Grounded Theory

I did not perform a literature review prior to interviewing participants while working with the University of Regina research team on the PHAC-funded project. I was hired onto a larger team of researchers in which the proposal and funding were already secured, there was a lot of previous research by the institute that guided the research questions, and I was fitting my

efforts into a larger momentum. When I developed the interview guide, I used the previous pilot study on the subject (Stelnicki, Jamshidi, Fletcher & Carleton, 2021), the BOS program modules, three pre-test interviews, and my previous experience as a qualitative interviewer to inform the route and breadth of the questions. Only when I was writing a report toward the end of the analysis stage did I look to the literature to put the current study results into dialogue with academic knowledge. This secondary analysis study continued to flow from this iterative and inductive style of working, and the qualitative design of 'grounded theory' fit best for the methodology of the study going forward.

In classical grounded theory as developed by Glaser and Straus, the literature review is performed after the data collection, analysis, and theory-generation; this is to support the centering of the participants' experiences and to avoid "contaminating, constraining, inhibiting, or impeding the researcher's analysis of theoretical codes emerging from the data" (Giles et al., 2013, p. E30). I drew primarily on Charmaz's (2014) development of grounded theory as a systematic guide to construct theory that is 'grounded' in the data. In Charmaz' body of scholarship, grounded theory as a methodology shifts away from positivism's "notions of a neutral observer and value-free expert" and toward constructivism which allows for the self-awareness of the researcher to emerge (Charmaz, 2014, p. 13). A preliminary pre-study literature review is acceptable if it is not too in-depth or too prescriptive in directing the study – the data generated by the participants with lived experience is the primary driver, according to Charmaz (2017) and Giles (2013). I used the practices of self-questioning reflexivity and the constant comparison method to help me to mitigate my prior knowledge, which is otherwise a common critique of the earlier, positivist version of the methodology (Charmaz, 2017; Giles et al., 2013). My practice of active listening – both in the interviews and in the analysis – helped

me to "put aside personal perspectives to understand the participant's viewpoint," including knowledge from the preliminary literature review (Giles et al., 2013, p. E34). I performed a secondary (and much more in-depth) literature review toward the end of the analysis stages of the study to investigate what already existed in the literature regarding each theme and sub-theme that emerged from participants' self-expression.

The debate regarding when and how much of a literature review to perform and when is ongoing; in the interim, I am aligned with the statement that: "we can never enter a research area with an empty head but that we can try to approach research with an open mind" (Giles et al., 2013, p. E35). Overall, the participants' contributions directed my process; I maintained direct fidelity to the data throughout every step of analysis (Charmaz, 2017; Giles et al., 2013). That said, I did conduct a preliminary literature review, as per general requirements of university officials and ethics boards, which follows here (Charmaz, 2017; Giles et al., 2013). Following this introductory literature review, extant literature was woven with the current study results, as explored in the *Discussion* chapter. In attempting to satisfy my interdisciplinary inquisitiveness, the depth and breadth of my research questions, and my advisory committee members who each are distinguished in different fields of scholarship, I decided to consult all kinds of literature and data sources, whatever I could find from any discipline, if it was reputable and cross-referenceable.

Unmet Mental Health Training Needs

There are many unmet needs and gaps in knowledge in mental health training for frontline workers. Learning essential mental health skills (e.g., self-awareness, vocabulary, expression of emotions, what to do in a crisis) is not a mandatory part of Canadian public-school, post-secondary, or vocational training curricula; further, most public safety and

healthcare organizations do not train for – nor have requisite competencies in – mental health literacy and skills (Søvold et al., 2021). Too often, frontline workers have substantially unmet needs for this type of skill development (Søvold et al., 2021).

Public safety and healthcare work involves assessing and managing emergencies and potentially life-and-death situations where workers are met with a vast array of human emotions, and although managing emotions (their own and others') is critical to their work, not enough attention is paid to the meaning of emotional labour (Bloom & Farragher, 2011; Funk et al., 2017; Romosiou et al., 2019; Shuler, 2001; Williams, 2012). Police officers, social workers, psychiatrists, nurses, and first-line police supervisors account for the top five occupations most demanding in emotional labour (Bloom & Farragher, 2011). Emotional labour involves suppressing one's feelings to act in accordance with one's profession, and when demands exceed personal psychological resources, this can cause emotional exhaustion and burnout (Bloom & Farragher, 2011). Emotional exhaustion and burnout in turn tend to perpetuate low morale, counter-aggressive behaviours, and high turnover rates in human service delivery systems (Bloom & Farragher, 2011).

Learning mental health techniques such as 'functional disconnection and functional reconnection' (FDFR) can be helpful for frontline workers who tend to otherwise default to hyper-stoicism and avoidance. Most people require specialized training to learn such skills (Ioachim et al., 2024b; McElheran & Stelnicki, Jamshidi, Fletcher & Carleton, 2021; Stelnicki, Jamshidi, Ricciardelli & Carleton, 2021). The functional *dis*connection aspect of the technique – a type of compartmentalization of one's personal thoughts and emotions – can be necessary for the worker to carry out their functions and operations at work (McElheran & Stelnicki, 2021). Training in the functional *re*connection aspect of the technique allows PSP and HCW to stop

suppressing their psychological and emotional needs and to reconnect inwardly, as well as with loved ones, such as in their roles as parents and spouses (McElheran & Stelnicki, 2021). The fulsome roles of emotional health and spiritual health may represent knowledge gaps in peer-reviewed mental health literature.

A narrative review of studies on PSP families found that a lack of interpersonal communication skills is a key barrier to mental health resiliency (Cox et al., 2022). When PSP are processing PPTE, they tend to slip into non-communicating with their family members; in turn, family members experience increased stress and worry in the absence of information about what is going on with their loved one (Cox et al., 2022). Cox and colleagues (2022) found that PSP tend to withhold strong emotions which produces tensions in the family unit, impairing communication and resiliency.

Previous studies on mental health training for PSP and HCW populations have yielded mixed results (Carleton, Korol, Mason, Hozempa, Anderson, Jones, & Bailey, 2018; Di Nota Bahji, Groll, Carleton & Anderson, 2021; Fikretoglu et al., 2019; Larijani & Garmaroudi, 2018; Milligan-Saville et al., 2017; Szeto et al., 2019; Wild, El-Salahi, et al., 2020). The only program I know of that is currently implemented as a mandatory requirement for some Canadian police and firefighting organizations is called ‘the Road to Mental Readiness’ (or ‘R2MR’) program (Carleton, Korol, Mason, Hozempa, Anderson, Jones, Dobson, et al., 2018; Mental Health Commission of Canada, 2024; Szeto et al., 2019). The R2MR program consists of a singular two-hour session which, while better than no mental health training, is still insufficient for meeting PSP needs (Carleton, et al., 2018; Mental Health Commission of Canada, 2024; Szeto et al., 2019). In a R2MR evaluation that consisted of a pre- and post-training series of questionnaires (with follow-ups at 6 and 12 months), researchers found no statistically

significant changes in mental health symptoms, resilience, or work engagement in Canadian police agency employees, although there was possibly an improvement in stigma (Carleton, Korol, Mason, Hozempa, Anderson, Jones, Dobson, et al., 2018). The R2MR results were similar to other short, single-session interventions, suggesting longer mandatory training or refreshers are needed to reinforce learning, skill acquisition, practice, and expertise (Carleton, Korol, Mason, Hozempa, Anderson, Jones, Dobson, et al., 2018). The R2MR program focuses completely on individual level changes and does not discuss structural level changes.

In a systematic review and meta-analysis that evaluated a collective sample of 3182 "public safety and frontline healthcare professionals, PPTE-exposed educational staff, and miners," Di Nota, Bahji, Groll, Carleton, and Anderson (2021) found substantial overlap in programs designed to support mindfulness, resilience, stress management, and psychoeducation. Program effects were deemed to be small to moderate for posttraumatic stress injuries and symptoms, but insufficient for reducing substance use or absenteeism (Di Nota, Bahji, Groll, Carleton & Anderson, 2021). In another study, Wild, Greenberg, and their team (2020) found there was not enough empirical evidence to support or dissuade mental health programs being implemented as preventative measures at pre- and early-employment stages, likely because such training and research are rare.

The COVID-19 pandemic took a tremendous toll on the mental health of Canadian HCW and HCW, and there are several articles that describe increased burnout, moral distress, moral injury, substance use, suicide, attrition, and mental disorders in these populations during this time period (e.g., Bouza et al., 2023; Statistics Canada, 2021; Patel et al., 2023; Smith-MacDonald et al., 2021; Xue et al., 2022); however, there has been very little inquiry into mental health skills training (e.g., how to deliver, what works, what does not help) in the

pandemic-recovery period.

A postdoctoral fellow and her colleagues at the University of Alberta's 'Heroes in Mind, Advocacy and Research Consortium' have conducted research on trauma-oriented retreats for Canadian military, Veterans, and police with PTSD and moral injury (Smith-MacDonald, Pike, et al., 2022; Smith-MacDonald, VanderLaan, et al., 2022). Smith-MacDonald, Pike, and colleagues (2022) demonstrated statistically significant decreases in several participant self-reported symptoms (i.e., PTSD, anxiety, stress, depression, moral injury, anger, emotional dysregulation) when comparing pre- and post- retreat scores, as well as an increase in resilience.

There are studies on healthcare communication training to improve team performance and self-efficacy, but very few published training evaluations specific to alleviating mental health symptoms in HCW (Mata et al., 2021). Powell and Yuma-Guerrero (2016) conducted a mixed-methods study to evaluate a psychoeducational training with community health workers doing post-hurricane disaster recovery work, and they found that as participants' knowledge of traumatic stress increased, their stress scores decreased. Participants felt that learning about physiological responses to traumatic events validated their experiences and that the training gave them tools to cope with their daily lives (Powell & Yuma-Guerrero, 2016).

PSP feel the current landscape of interventions for improving mental health is not really equipped to meet their needs (Ford-Jones & Daly, 2020; Lentz et al., 2022). PSP want robust, sustained, and comprehensive interventions and practices to be adopted throughout their organizations as opposed to one-time "checking the box" training (Lentz et al., 2022). This need is doubly urgent given the rising number of 911 calls that are related to mental health emergencies (Ford-Jones & Daly, 2020). Despite a proliferation of mental health initiatives (e.g., app and website development, a burgeoning multi-billion-dollar wellness industry) in

response to the COVID-19 pandemic and mental health sequalae, few initiatives have been formally evaluated at all or since the pre-pandemic era (Thompson & Dobson, 2023; Wang et al., 2018).

There are some emerging studies regarding online learning in the COVID-19 era (Strawser, 2022). Offering different delivery modalities of mental health training and treatment can facilitate accessibility (Nielsen & Miraglia, 2017). The BOS program evaluation team did comparative analyses of delivery modalities of training for PSP and HCW in Canada, but there are no other similar studies to our knowledge (Ioachim et al., 2024b). The mixed-method evaluations that investigated trauma-oriented retreats for PSP, military, police, and Veterans concluded that these were potentially effective for individual recovery, but should not replace other types of interventions, and no single solution appears to be a universal panacea (Smith-MacDonald, Pike, et al., 2022; Smith-MacDonald, VanderLaan, et al., 2022).

A subsection of Canadian PSP literature has begun to evaluate peer support programs. Poremski and associates (2022) found that of all mental health service users, those in a role as peer support specialist helped participants to make gains in knowledge and resiliency while learning "how to harness their recovery journey without risking relapse" (p. 1). In a systematic review, Anderson and colleagues (2020) concluded that methodological issues (e.g., small samples, high attrition, confounding psychological injuries) have produced limited robust empirical evidence regarding the effects of peer support. The meta-analysis reported a complete lack of qualitative studies in its area of inquiry, namely "peer support and crisis-focused psychological interventions designed to mitigate posttraumatic stress injuries among public safety and frontline healthcare personnel" despite the critical role this type of research can play (Anderson et al., 2020, p. 1). Qualitative research is essential for answering difficult questions,

including understanding barriers to uptake and engagement, de- and re-constructing categories of analysis, explaining underlying reasons *why* and *how* patterns are occurring, and grappling with moral, ethical, and scientific complexities (Allen et al., 2024).

Overall, there are many gaps in mental health training, research, and development. A comprehensive and multi-pronged approach is needed to address unmet mental health training needs, including proactive and responsive solutions for frontline workers, early and ongoing, from training through to retirement.

Gender-based, Intersectional, and Systemic Issues

The second theme that arose from the preliminary literature search was that of gender-based, intersectional, and systemic issues in the frontline labour force. There has tended to be a degree of monocultural and demographic homogeneity, historically and ongoing – especially in public safety workplaces, but also in certain healthcare departments, units, and specialities. Men-dominated PSP and HCW workplaces can often be hostile to women and other minorities. People inhabiting minority identities categorically endure more non-acceptance, exclusion, isolation, harassment, discrimination, humiliation, assault (physical, sexual, and verbal), and subjection to hazing behaviours to much greater extremes than their heterosexually-presenting, white, men counterparts (Bastarache, 2020; George et al., 2020; Gouliquer et al., 2020). As scholars of intersectionality theory, marginalization theory, social identity theory, and other theories have explained, such problematic social behaviours may be understood as a manifestation of othering used to maintain power asymmetry that privileges the in-group (Bastarache, 2020; David et al., 2019; George et al., 2020; Gouliquer et al., 2020). A sense of belonging is a key element in an individual's psychological well-being that signals acceptance, protection, and care, increasing survival chances via socially constructed behaviour rules for in-

group and out-group gatekeeping (Arieli et al., 2012; Baumeister & Leary, 1995; Brown, 2021; Rigby, 2003). Progress has been evidenced in diversifying PSP and HCW labour forces, and there are pockets of greater progress and of exceptions, but socio-historical forces produce glass ceiling effects that keep women and minorities out of leadership positions and away from reaching a critical mass large enough to have an influential voice in decision-making (Bauer, 2014; Perrott, 2023).

Gender-based violence is "violence committed against someone based on their gender, gender expression, gender identity, or perceived gender" (Government of Canada, 2024a, p.1). Gender-based violence is a term inclusive of neglect, discrimination, harassment, assault, or abuse via physical, verbal, sexual, psychological, emotional, economic, societal, or online manifestations (Government of Canada, 2024a). There can be negative and long-term impacts of gender-based violence, including to health, social, and economic outcomes (Government of Canada, 2024a). In Canada, rates of intimate partner violence and of sexual assault (at least once since age 15) are near to four times higher for women and girls compared to men and boys (Government of Canada, 2024a). Women and girls who are low income, Indigenous, immigrants, refugees, visible minorities, northern, rural, remote, postsecondary students, living with disabilities, senior citizens, or 2SLGBTQI+ (two-spirit, lesbian, gay, bisexual, transgender, queer, intersex, and additional sexual and gender diverse people) are at heightened risk of gender-based violence (Government of Canada, 2024a). In Canada and worldwide, gender-based violence has been evidenced in policing (e.g., Bastarache, 2020; Bourassa Rabichuk, 2021), healthcare (e.g., Cukier & Viogel, 2021; George et al., 2020), and correctional service organizations (e.g., Ricciardelli & McKendy, 2020), and this type of phenomena – in some times and settings, though there are plentiful gaps in the peer-reviewed literature – was

exacerbated under the stressful circumstances of the COVID-19 pandemic (George et al., 2020; Havaei et al., 2021).

Law enforcement officers are among the most studied groups of frontline workers, though a lot of gaps remain in policing research, including sex- and gender-based differences (Angehrn, Fletcher, et al., 2021; Angehrn, Vig, et al., 2021; Richards et al., 2021). Violanti and colleagues (2016) identified important gender differences between what police officers rated as their most frequent operational stressors. Men police officers most often reported stressor was how work tasks reduced their time-off, whereas for women police officers, it was the lack of support from supervisors (Violanti et al., 2016). The lack of support was 37% more prevalent for women than for the men counterparts (Violanti et al., 2016). Women had lower job satisfaction and more difficulty securing leadership positions and tenure in these workplaces typically dominated by men (Burke & Mikkelsen, 2005; Perrott, 2023). Women police officers also reported more discrimination and sexual harassment (Burke & Mikkelsen, 2005; Perrott, 2023). In 2020, Bastarache documented the devastating impacts of systemic sexual harassment and abuse against women in the RCMP, after thirty years of calls to do so. The inquiry examined evidence from 3086 claims and 644 interviewees to conclude that "the RCMP is toxic and tolerates misogynistic and homophobic attitudes" – sometimes with horrific detail, then clearly laid out numerous recommendations to rectify the organizational structures and systems (Bastarache, 2020, p. 1). There was a small but steady cumulative growth of women represented in policing in Canada, from their initial entrance into the profession in the 1970s at zero percent up to 22% in 2019, but this has since plateaued (Perrott, 2023).

The Canadian healthcare labour force is substantively feminized and racialized; specifically, 80% of workers are women, 12% are Black, and 11% are Filipino (Dube, 2020;

Tungohan, 2020). Feminized and racialized populations face high risks of PPTE exposures, including violence, but very few studies focusing on gender-based/racial violence in healthcare workplaces (Dube, 2020; George et al., 2020; Tungohan, 2020). George and colleagues (2020) reported that career opportunities for women in healthcare have increased since the 1970s, but the full contributory potential of women remains unknown due to participation barriers including gender-based violence that "undermines their confidence and undercuts their ability to progress in their careers or be promoted to leadership positions from which they could prevent and curtail abuses of power" (George et al., 2020, p. 1).

There is a paucity of peer-reviewed literature on the mental health of PSP or HCW of sexual, racial, or dis/ability minorities, and more intersectional research is needed. There is very little peer-reviewed literature specifically with, by, and for Indigenous people in these sectors, with gaps also evident for Black, Filipino, Indian, Chinese, and other marginalized people in Canada. In a recent scoping review, Moagi and associates (2021) searched for research addressing mental health challenges of LGBT people and found only two Canadian studies across all domains. There is also a gap in the peer-reviewed literature where frontline workers living with disabilities and different abilities – including mental health conditions – are rendered unseen and unheard. To my knowledge, there are no participatory or arts-based studies (e.g., PhotoVoice, Digital Storytelling) with frontline workers in Canada.

Qualitative research designs offer a wide variety of approaches with vast intra-paradigm diversity, including participatory action, arts-based, and anti-oppressive research (O'Reilly & Kiyimba, 2015). Diverse research methods may help clarify the mental health challenges and sources of resilience for minority frontline workers and therein potentiate otherwise under-recognized solutions that can benefit all involved (Clare, 2015; Kafer, 2013; Rice et al., 2017).

Aqil and colleagues (2021) described the need for anti-oppressive health education research that account for the effects of social hierarchies embedded within group dynamics that disproportionately affect marginalized people. If psychoeducation programs and research work to mitigate the influence of how power flows through social structures, then they can better support the mental health of people in structurally disadvantaged groups (Aqil et al., 2021; Edyburn et al., 2022; King et al., 2019).

Frontline workers uphold differing degrees of empowerment as potential agents of change in employing organizations, and it is important to support workers' agency (Dobson et al., 2019). Psychoeducation can provide valuable information and empower workers to actively invest in their own mental health maintenance practices (Powell & Yuma-Guerrero, 2016). At the same time, a criticism of psychoeducation is the inherent risk of exclusively placing responsibility on individuals to stay well or get well, without interrogating their environments, including policies, systems, organizations, institutions, social structures, and social determinants of health (Bloom & Farragher, 2013; Haigh, 2024). Organizational and systemic issues must be addressed in tandem with individual level mental health initiatives to support mental well-being comprehensively (Bloom & Farragher, 2013; DeJoy, 2005).

Dissertation outline

This introductory chapter presented some of the background, significance, purpose, and objectives of the current study on the mental health of frontline workers in Canada. As the *Introduction*, Chapter 1 discussed the preliminary literature review which included frontline workers' unmet mental health training needs, as well as gender-based, intersectional, and systemic issues pertaining to frontline workers' mental health.

Chapter 2, *Research Methods and Methodology,* describes the strategies used to

carefully, rigorously, and systematically investigate mental health of frontline workers in Canada. Details are provided about the paradigm and design of the current study, the recruitment and screening strategies, the characteristics of the sample, the data generation and analysis methods, the exercise of appropriate standards of rigour and ethics in research, and my positionality and reflexivity.

Chapter 3, *Mental Health Challenges of Frontline Workers*, presents the initial study results regarding mental health challenges facing frontline workers in Canada. There are many challenges categorized as emotional, cognitive, empathy-related, ethical, existential, and behavioural. Several challenges emerged as particularly important to participants; thus, the chapter describes ingrained psychological and behavioural patterns, PTSD, suicide, chronic stress, burnout, place-based psychological trauma, dissociation, exposure to death, grief, loss, and challenges arising other parts of life that can interact with frontline work.

Chapter 4, *Mental Health Supports for Frontline Workers*, presents results on the various types of facilitators that help frontline workers to cope with their mental health challenges. The chapter explores how partners, families, and loved ones are crucial supports for frontline workers' mental health, as are mental health professionals, facilitated group therapy, and mental health training. Chapter 4 discusses the role of self in the internal work of mental health, the importance of agency and practicing self-awareness, self-compassion, and self-care practices. There was also evidence that spirituality and philosophies on life and death can support frontline worker mental health. The chapter presents information about workplace supports, including the roles of peers, managers, leaders, policies, and debriefing practices.

Chapter 5, *Interactions between Organizational Stressors, Workplace Culture, and Frontline Workers' Mental Health*, delineates how organizational and systemic stressors

entangle with frontline workers' mental health, focusing on evidence of stoicism, stigma, and machoism in frontline workplace culture. The chapter presents challenges with leadership (e.g., contradictory organizational policies and priorities) and management (e.g., shift scheduling, staffing shortages, lack of breaks, forced overtime, attendance, attrition, insufficient disability accommodations). There was also evidence of workplace bullying, harassment, work conflict, moral distress, moral injury, sanctuary trauma, and institutional barriers to accessing help for mental health. There is also attention paid to the role of middle managers in hierarchal power structures of frontlines workplaces.

Chapter 6, *Frontline Workers' Mental Health: Intersectional Considerations,* focuses on synthesizing results from the previous chapters within the context of Canadian societal diversity. Consideration is given to 2SLGBTQIA+ frontline workers. Gender-based differences were identified and described, including: 1) the 'triple-bind' of women who in the multiple roles of frontline workers, primary caregivers, and primary mental health supporters for spouses; 2) gendered bullying, harassment, career barriers, and mental health stigma; and, 3) how masculinity, anger, and non-acceptability of emotions interplay with mental health. The chapter also describes Indigenous-specific considerations around spirituality, rural and remote communities, and the ongoing impacts of colonization and the Indian Residential School System as related to frontline worker mental health. Chapter 6 also briefly discusses how class, income, education, and job category, as well as disability status or labelling, interact with frontline worker mental health.

Chapter 7, *Directions Forward for Frontline Workers' Mental Health*, showcases aggregated recommendations from frontline workers into a theoretical model for change. The collective lived experience of participating frontline workers provides main directives regarding

mental health training, mental health professionals, workplace culture, organizational system transformation at various levels, and a vision going forward.

Chapter 8, *Discussion*, places the findings of each chapter of results into the context of relevant extant literature. This chapter follows the same flow of presentation of topics from the preceding chapters.

Chapter 9, the *Conclusion*, describes the limitations and strengths of the study, contributions to knowledge, directions for future research, and offers concluding thoughts on the current study as a dissertation.

Chapter 2: Research Methods and Methodology

The current chapter describes the methods and methodology used to carefully, rigorously, and systematically investigate the state of mental health of frontline workers in Canada. Details are provided about the paradigm and design of the current study, the recruitment and screening strategies, the characteristics of the sample, the data generation and analysis methods, the exercise of appropriate standards of rigour and ethics in research, and the areas of my positionality that are relevant to the research.

Paradigm and Design

The current study arose from a pragmatist paradigm, the design followed qualitative grounded theory, and theoretical influences include critical constructivism (Brown & Strega, 2015; Hankivsky et al., 2014; Levitt, 2021; O'Reilly & Kiyimba, 2015). I performed a secondary analysis of the 41 in-depth, semi-structured interviews that I generated while I was working with the University of Regina research team during a contract from June 2022 to April 2023. The initial project was conducted with approval from the University of Regina Research Ethics Board under the leadership of Dr. R. Nicholas Carleton who is on my advisory committee. A small research group performed a rapid Template Analysis toward the end of the Before Operational Stress (BOS) program evaluation contract, but we had a very limited amount of time to develop our group analysis process, to thoroughly analyze the transcripts, and to write about our results. I have revisited the data focusing on new and different research objectives (see *Purpose and Objectives* in *Chapter 1: Introduction*), in contrast to the initial study which was oriented to program evaluation questions (see *Appendix 1: Interview Guide, Checklist, and Script*).

I chose grounded theory for many reasons, including that existing theories are

incomplete in their ability to comprehensively represent participants' real-world settings (Charmaz, 2014). I drew on a great many theories (e.g., intersectionality, marginalization theory, moral injury, sanctuary trauma, polyvagal theory, internal family systems theory) which informed my writing, but I ultimately developed a new theoretical model tightly connected to the data. Staying close to the data helped me reduce threats to validity and errors like misplaced attributions (Charmaz, 2014; Levitt, 2021). A perfect following of grounded theory methodology would have had me use multiple iterations of theoretical sampling, but that was not realistic in this case with a time-strapped, hard-to-reach population; the strategy of reanalysis was still iterative and moved into deeper underlying processes and systemic issues, as per grounded theory, compared to the initial rapid thematic analysis (Charmaz, 2014). While my theoretical model is not a grand theory, it is typical of applied psychology to use grounded theory to develop knowledge through detailed explanations of lived experiences, intended to be applied in certain contexts, and which can lead to more formalized grand theory development in the future (Levitt, 2021). More abstract theories risk straying too far from participants' data, muddying discovery and justification, and negating the pragmatic motivation (i.e., to honour what participants shared comprehensively and accurately) and paradigm of the study (Levitt, 2021).

Recruitment and Screening

All participants who received the BOS training through the Public Health Agency of Canada (PHAC) 2022 funding initiative were eligible to participate in the independent evaluation of the program which consisted of a series of quantitative surveys, as well as a qualitative interview. Participants were not required to do either arm of the study which were kept independent of the training program.

All participants were screened by the Wayfound Mental Health Group before enrollment could occur to ensure they were eligible for the BOS training program. The screening process included screening for acute mental distress in which case participants were referred to a treatment program or crisis center. The qualitative study employed no additional inclusion or exclusion criteria, so anyone who had completed the BOS program was eligible.

A subset of participants from the three different BOS program delivery modalities (i.e., in-person groups, online groups, online self-paced modules) were randomly selected using a random number generator. While unusual for a qualitative study, random selection aligned with the fact that we had approximately 70,000 potential study participants who had completed the BOS program. Random selection allowed us to draw participants from different batches of registrants from different regions, organizations, and job categories. I invited potential participants to be interviewed by emailing an ethics-approved recruitment letter in batches of up to one hundred people at a time. I reached out to a total of 1155 potential participants over five months, with a somewhat lower response rate in the summertime and a somewhat higher response rate in autumn. There were 71 people who initially responded to express interest following the recruitment email. There were 41 people of the initial 71 who completed the full scheduling process and the interview.

Scheduling was at times a substantial barrier to completing an interview. Potential participants got called to work extra shifts, had unanticipated collegial funeral proceedings to attend, or had other arising personal matters. A couple of people experienced technical difficulties when the interviews were scheduled. A small percentage dropped off email scheduling communications, likely due to time constraints. A handful of people emailed to say they had not actually completed the program, largely due to time constraints and a few from

being triggered by the content. I recorded all of this in an Excel spreadsheet, and I responded to thank each person for their interest and time even when an interview did not occur.

Sample Characteristics

I interviewed 41 participants over Zoom Pro videoconferencing technology between August and December of 2022. The sample had a mean average age of 50 with a range from 32 to 78 years old (at the time of interview), including 24 men and 17 women. I refer to participants by their gender as self-identified during the interviews when given the opportunity to do so in an open-ended question, and no one openly identified as transgender. Most participants presented as White, although the sample also included some Asian and Indigenous participants. The sample demographic composition somewhat mirrors the overall workforce, despite no effort at sampling to be statistically representative by ethnicity. In Canada, 8% of police officers identify as visible minorities and 4% identify as Indigenous, as compared to 22% and 5% of national population, respectively (Perrott, 2023). There were participants from British Columbia, Alberta, Saskatchewan, Manitoba, Ontario, Nova Scotia, and Prince Edward Island; and participant were from a mix of urban, rural, and remote locations.

The sample included participants from all three available delivery modalities, with 22 participants who had completed the self-paced online modules, 9 who had completed the online group version, and 10 who had completed the in-person group sessions. Table 1 provides a summary of participant demographics to describe select characteristics while not disclosing too many identifiers to maintain privacy and confidentiality.

Table 1. Summary of sample characteristics

Age range Mean average age	32-78 years old 50 years old
Gender ratio men to women Identified as cisgender	24:17 41

Identified as openly transgender Identified as openly 2SLGBTQIA+	0 0
Occupation	12 firefighters 12 police officers 5 paramedics 5 corrections officers 4 nurses 1 respiratory therapist 1 social worker 1 spiritual care provider
Self-declared ethnicity	38 White or Euro-Canadian (includes 3 first-generation immigrants to Canada) 2 Indigenous 1 Asian-Canadian
Peer supporter	9
Mentor/trainer/wellness committee member	8
In a management/leadership position	9

The current sample only included individuals who had completed the BOS program and were willing to be interviewed. The sample was relatively large for qualitative research to capture a wide range of viewpoints (Liamputtong, 2017; O'Reilly & Kiyimba, 2015). The viewpoints of those who self-excluded represent valuable data that are unfortunately missing.

Participant Numbers and Pseudonyms

Participants were initially assigned numbers to facilitate anonymity, but as the reanalysis went on, and as I developed theory around the need for re-humanization in human service organizations and systems, reducing participants to numbers felt problematic and ironic; nevertheless, there are reasons for anonymization, so I continued with it but also assigned pseudonyms. The pseudonyms were based on government sources for identifying the most popular names in Canada by gender and by decade in the Baby Names Observatory (statcan.gc.ca) as available, then the top names by decade in the USA Social Security (ssa.gov), followed by random selection. I created a table of participant numbers and pseudonyms, and I

kept the table in a separate file. For the current dissertation, participant numbers are used, which ultimately seemed better for clarity in reading and reporting.

Data Generation

I used Zoom Pro videoconferencing software to record and auto-transcribe each interview. Before the interview, I changed the participants on-screen name to a participant number to ensure the recordings and transcripts did not include their name for confidentiality purposes. Interviews ranged from 28-120 minutes long, depending on how much the participants wanted to discuss (O'Reilly & Kiyimba, 2015). The interview guide was developed based on the BOS program content and the small, quantitative, previously conducted pilot study (Stelnicki, Jamshidi, Fletcher & Carleton, 2021). The guide was pre-tested internally by running interviews with team members who role-played previous participant attitudes and responses from the pilot study, with feedback being integrated before the guide was finalized (O'Reilly & Kiyimba, 2015). The open-endedness built into the interview guide allowed for participants to lead the discussion in various directions at their discretion. The interview guide is viewable in *Appendix 1: Interview Guide, Checklist, and Script*.

Directly after the interview, I deleted the video files from the Zoom Pro account and from my computer downloads, retaining only the audio files and the transcript files in the University of Regina's secure server. From each raw transcript, I created an anonymized version by removing personally identifying information and by inserting placeholders for potentially identifying information, such as replacing 'Ottawa' with 'urban centre' (MacLean et al., 2004; O'Reilly & Kiyimba, 2015). Time stamps were removed, broken sentences were collapsed, and inaudible words were flagged and revisited in the recordings (MacLean et al., 2004; O'Reilly & Kiyimba, 2015). For each interview, the accuracy-checked and anonymized transcript was

returned to the participant, who was then given two weeks to review the document and redact any comment or section at their discretion (Carlson, 2010).

I practiced deep listening and active listening when interviewing frontline workers (Bennett, 2022; Lyall et al., 2021). I used qualified naiveté to bring a sense of curiosity and not-knowing to each interview, and I worked to create and maintain ethical safe space for participants sharing sensitive information to feel heard and valued (Hesse-Biber, 2017; Liamputtong, 2007). I feel that my own lived experience (see *Research Role and Positionality* for details) enhanced my research interview skills more than hampered me with presuppositions.

Data Analysis

Though more common in quantitative research than in qualitative research, there are several benefits to secondary analysis of the latter (O'Reilly & Kiyimba, 2015). Qualitative interviews tend to generate "significant amounts of material which is rich in detail" that can "often mean much of it remains unanalysed," and "from an ethical perspective, therefore, it is respectful to participants to make the best use of the data that are collected" (O'Reilly & Kiyimba, 2015, p. 132). Striving for efficiency is particularly pertinent for research with difficult to recruit highly in-demand populations, such as HCWs and PSP, while also being cost-effective and mindful of valuable research funding (Bikos, 2023; Bishopp et al., 2019; O'Reilly & Kiyimba, 2015). O'Reilly and Kiyimba (2015) argued that a "subsequent analysis of an initial data set by the same researcher to address new research questions" can also be called 'reuse analysis' or 'reanalysis' (p.136). I use the terms 'reanalysis' and 'secondary analysis' interchangeably.

I reanalysed the transcripts using Dedoose qualitative and mixed-methods analysis

software. The original group analysis occurred using NVivo software, so I started a completely new analysis project file using different software for the current study. In Dedoose, I inputted relevant demographic information for each participant in case any remarkable patterns presented. These descriptors were used to discern if there are any notable differences across variables (e.g., self-identified gender, ethnicity, occupation, age range, regionality, delivery modality, marital status, parental status, or any other emerging descriptors shared by the participants), regarding the saliency of codes and themes (Salmona et al., 2019).

I primarily followed the analytical process as set out by Charmaz (2017)'s foundational work of constructivist grounded theory, as well as Levitt (2021)'s methodological guide to critical constructivist grounded theory for reference. These scholars are both engaged in qualitative health research that attends to the role of power and participants' social locations, congruent with my research questions to understand socio-political and environmental factors regarding mental health.

I coded the text line-by-line and section-by-section, building up from open coding to more selective, focused coding, identifying emerging patterns and themes related to my research objectives (Hesse-Biber, 2017). I used memo-writing to explore linkages across themes, as well as for practicing reflexivity (Saldana & Omasta, 2022). Over time, I developed a four-level coding structure, as well a theory to collectively account for (and visualization to summarize) the data (Hesse-Biber, 2017). After developing a theoretical model grounded in the data, I turned to extant scholarship to perform an in-depth literature review, inclusive of all areas of literature relevant to what arose in the analysis; this helped me to discern how the theory fits into the dialogue of extant literature (Charmaz, 2017). The qualitative design and sample size does not allow us to calculate for any statistical associations or relationships, but it does permit

us to hear from frontline workers on their lived experiences, perspectives, attitudes, narratives, thought processes, and mental-emotional realities, and to magnify their individual and collective voices through knowledge production and dissemination.

Ensuring Rigour

I created and maintained an audit trail including all my dated and detailed field notes, interview notes, records, and drafts of interpretation (Carlson, 2010; O'Reilly & Kiyimba, 2015). I used my personal reflexivity journaling practice and the Dedoose memo-writing function to examine the arising feelings, assumptions, uncertainties, values, beliefs, thoughts, and ideas that emerged during analysis (Carlson, 2010; O'Reilly & Kiyimba, 2015). I remained mindful of how my background and approachability might interact with participants' backgrounds and candour (Carlson, 2010; O'Reilly & Kiyimba, 2015). To provide context for readers to discern transferability, I aimed to consider thick description of settings, participants, and procedures where appropriate, while keeping participant privacy and confidentiality at the forefront of my concerns (Carlson, 2010; O'Reilly & Kiyimba, 2015). My triangulation processes included the second iterative literature review and scholarly discussions with my advisory committee members, as well as any interested frontline workers, mental health professionals, labour organizers, community members, and other stakeholders and audiences (Carlson, 2010; O'Reilly & Kiyimba, 2015).

Member checking can be an important part of practicing qualitative rigour (Carlson, 2010; O'Reilly & Kiyimba, 2015). I sent the transcriptions to the participants (within a week of conducting their interview) and asked them to verify for accuracy, and offered an opportunity to add, to redact, or to change their wording, and to revise anything they shared (Carlson, 2010; O'Reilly & Kiyimba, 2015). One-time member checking to verify transcripts typically suffices,

and there are pitfalls to elaborate member checking with time-strapped populations (Carlson, 2010). I used a consistent practice of active listening and reflecting back words and meanings to participants throughout the interviews (Adler & Proctor, 2011; Liamputtong, 2007). I mindfully introduced the member-checking task through email communications to participants who then provided positive feedback and their permissions to proceed. I also followed up with each participant to reiterate gratitude for their participation and express openness to further communication if something came up for them after the interview and transcript verification. All participants expressed satisfaction with the process and their contributions, but only one participant explicitly expressed openness to further interpretative member checking tasks. My advisory team members and external examiner provided supervision and review, and any potential future publication processes will involve blinded peer review.

Research Ethics

The initial BOS Program evaluation study was approved by the University of Regina Research Ethics Board in 2022 (UR REB# 2022-033). I received approval from the University of Regina Research Ethics Board (UR REB# 2024-676) and the University of Manitoba Bannatyne Campus Health Research Ethics Board (UM HREB #HS26350(H2024:076)) in 2024 for this secondary analysis. The University of Regina housed the initial study, and the University of Manitoba is where I am academically housed, employed, and carrying out my PhD studies. The data are stored at the University of Regina, and I have secured permission for access and analyses. During analysis, copies of the data were securely stored on a password protected computer in my locked home office. After the study the data will be removed from my computer and will remain only at the University of Regina. The consent form is viewable in *Appendix 2: Consent Form*, and it includes the agreement that “the data may be used for related

secondary analyses in the future as part of additional research efforts to support mental health of public safety personnel."

Researcher Role, Positionality, and Reflexivity

In this section, I take inventory of my positionality as relevant to the study. Positionality is the acknowledgement of the researcher's social locations in relation to the research, and reflexivity is the critical practice of self-scrutiny of pre-suppositions and how one's background and positionality potentially interrelate with the various steps of the study (Brown & Strega, 2015; Hesse-Biber, 2017; Liamputtong, 2017; O'Reilly & Kiyimba, 2015). My research epistemology is informed by pragmatist and social constructivist influences that embrace how the nature of reality can be understood through lived experiences, that these realities are multiple, partial, and situated in social locations, and that a diversity of subjectivities leads to important dialogue and discovery (Brown & Strega, 2015; Hesse-Biber, 2017; Liamputtong, 2017; O'Reilly & Kiyimba, 2015). Research can never be fully separated and neutralized away from the researcher and the participants involved, nor their positionalities, nor the contexts from which the data arises, and I understand the work of my investigation to be to produce a rich and deep integration of otherwise divergent threads of a multivocal discussion (Absolon, 2011; Brown & Strega, 2015; O'Reilly & Kiyimba, 2015).

I believe my background helps me empathize with participants' experiences. For the better part of four years, I worked in observation and participation roles in numerous healthcare units, including intensive care, high-risk wards, urban clinics, and operating rooms, as well as rural, remote, and home care settings; I have experience of healthcare from a worker's perspective. This work was in maternity-and-infant services, primarily with women co-workers. I have also worked in men-dominated settings over a total of approximately 15 years, as a

labourer in agriculture, construction, reforestation, manufacturing, and mail delivery services. I believe these experiences helped me to understand at least some of the cultural milieu in men-dominated frontline workplaces.

I have always been close to many family and community members working in healthcare and public safety (e.g., four step/parents/in-laws, two aunts, and numerous friends in healthcare; two uncles and my best friend's two parents in policing; a sister-in-law in medic-firefighting; further, both my grandfathers served in World War II, a reality that deeply impacted my parents' upbringings, and there are connections between some of the experiences of PSP and military personnel). My awareness of these communities and my experiences of these relationships – along with my empathetic disposition and the rapport I developed with participants – have facilitated my desire to do high quality work that is transparent, mindful, reflexive, ethical, useful, and relevant.

I have had mostly positive relationships with frontline workers in my life, but I have had some disturbing experiences of toxic workplaces and brutal preceptors in healthcare, particularly when I was a student practitioner of nurse-midwifery. We were the first cohort and often referred to as 'guinea pigs' in a new training program without established or reliable student services, practicum placements, administrators, coordinators, instructors, or watchdog committee, working with a model of care divergent from the mainstream medical model. A lot went wrong with this program, which led into my passion for program evaluation and research. I have also had excellent experiences with healthcare professionals, such as when I needed an urgent surgery during the COVID-19 pandemic. I was treated with great care and expertise, and I experienced life-affirming help and no complications, for which I am grateful.

I have direct personal experience of police brutality during (and after) peaceful protests,

and I am aware of how state power can assert itself, including beyond its legal jurisdiction. For example, I was with a few environmentalist friends cleaning up a public park the day after the Quebec City protests in April 2001, when police officers rushed us, dragged us across the gravel by the hair, immobilized us, and detained us in cells for 24 hours without ever formally arresting or charging us with any crime, nor reading us our rights, as is law. That weekend, we faced concussions grenades, water cannons, rubber bullets, and tear gas (a known abortifacient) released from helicopters above us, despite practicing non-violence (and the presence of pregnant women). In that same period in Winnipeg, my roommate suffered a series of concussions from being hit on the head by police during protests, events which were followed by disturbing personality changes and egregious behaviours. I highlight these experiences to bring to light the pre-suppositions I inevitably carried at the beginning of this project before re-examining myself in relation to the subject. I need to also address the recent eruptions of prominent political movements involving the police.

Large segments of society recoiled from law enforcement as a function in the wake of the murder of George Floyd by officer Eric Chauvin in 2020, resulting in heightened awareness of race-based police violence in the United States, which brought forth alarm and resonance in many parts of the world, including Canada (Kleinig, 2023). The Black Lives Matters movement was started years earlier in 2013 and is part of a much longer struggle for civil liberties and equality. Racialized groups have worked for decades to secure safer communities (Kleinig, 2023). The unprecedented visibility of the murder of George Floyd (i.e., videorecorded and posted online) produced international discussions just prior to when my data were collected (Kleinig, 2023).

From 2014 to 2018, I worked as a freelance facilitator in discussions between members

of the Winnipeg Police Services (WPS; under Devon Clunis, the first Black Canadian Chief of Police) and Indigenous community members, leaders, and organizers. The discussions took place in various Indigenous community centres, health centres, and friendship centres. The WPS actively engaged in relationship-building, asked people what they wanted the police services role to be in their communities and immersed themselves in listening work.

My personal and workplace experiences have informed my worldview, as has my participation in traditional Indigenous ceremonies since first being invited in 1999. I have benefitted greatly from Indigenous healing ceremonies and practices, which have helped me manage and resolve personal, interpersonal, and intergenerational psychological trauma and soul wounds. I have seen trauma in marginalized communities and trauma in frontline workers, all in need of healing. Menakem (2017) wrote:

> Many African Americans know trauma intimately – from their own nervous systems, from the experiences of people they love, and, most often, from both. But African Americans are not alone in this. A different but equally real form of racialized trauma lives in the bodies of most white Americans. And a third, often deeply toxic type of racialized trauma lives and breathes in the bodies of many of America's law enforcement officers. All three types of traumas are routinely passed on from person to person and from generation to generation. This intergenerational transmission – which more aptly and less clinically, I call a *soul wound* – occurs in multiple ways (p.10).

We can read Menakem (2017) in the context of Canada as northern neighbours of the United States, and consider 'Black, Indigenous, and People of Colour' alongside Menakem's use of the term 'African Americans.' Menakem and others provide both a vision and practical exercises on how to disarm embodied and internalized racism and reactivity, and reduce racial violence

(Menakem, 2017; Singh, 2019). There is work in calling people in (rather than out) and drawing a larger circle (rather than a smaller one) to help address trauma in communities by including PSP and HCWs (Clare, 2015; Menakem, 2017; Shay, 1991, 1994, 2002; Singh, 2019; Wagamese, 2008, 2016). Collective engagement may help communities and their human services continue to evolve and better address complex challenges (Olds, 2022).

I have been transformed by the research through my own compassion-based listening, creating and maintaining safe space for participants during sensitive discussions around mental health (Hesse-Biber, 2017; Liamputtong, 2007; O'Reilly & Kiyimba, 2015). In learning about police-related challenges (who tend to be the most societally contentious of all the PSP and HCW categories), I also want to acknowledge that recently I was grateful to the officers who answered my teenage daughter's call for help when she was followed and accosted by a middle-aged man on more than one occasion. Once he was identified, we learned he had a pattern of harassing young women in the neighbourhood. The officers issued him a warning to stop his inappropriate behaviours and we believe he has since stopped.

I am cognizant that being a White (of Euro-Canadian descent), working class woman influences the way I am perceived and treated in the world, including by frontline workers, such as police officers and physicians. Being cis-gender affords me privilege in many hetero-and cis-normative spaces, as does being read as straight due to being in a long-term relationship with a man, though I have felt attraction to, dated, and loved people of all genders, an aspect of my identity that is typically rendered invisible. I acknowledge that being a woman, a mother, on the cusp between Generation X and Millennial, and dealing with episodic chronic pain (i.e., migraines), all impact my daily interactions and how I am perceived. My experiences over twenty-five years of Indigenous-led community healing and ceremonies inform my orientation

to mental health – and emotional, physical, and spiritual health – as does my practice (of similar duration) of Vipassana meditation. I have not been formerly trained in psychology and come from an interdisciplinary community health sciences background. I do not believe my social identity strongly influenced the interviews because the interviewee was centered almost completely, with my self-disclosures limited to rapport building and maintenance. The data analysis and writing are inevitably influenced by my own lived experiences thus interpretations, that said, I continually checked to align the work with participant voices and to let the study objectives direct the writing.

I believe contributing to mental health research with HCWs and PSP is important because how they exercise power is linked to PPTE exposures and responses, which can ripple through communities and needs to be constructive and appropriate (Kleinig, 2023; Menakem, 2017; Papadopoulos, 2020; Singh, 2019; Smith-MacDonald et al., 2021). I selected my research focus partially due to the high prevalence of psychological injuries and mental disorders among frontline workers but also among those in socially vulnerable positions who are among those most likely to interact with emergency services (e.g., those living without stable housing, in low socioeconomic brackets, struggling with addictions, lacking strong family supports, senior citizens, racialized populations; Corman, 2017; Huey et al., 2023; Menakem, 2017). Psychological traumas can harm everyone involved with public safety and healthcare services, with produce far-reaching impacts (Adriaenssens et al., 2012; Angehrn et al., 2020; Blackstock et al., 2015; Bombay et al., 2011; Cox et al., 2022; Fjeldheim et al., 2014; Garbarro et al., 2013; Menakem, 2017; PSPNET, 2023; Spencer et al., 2021). I believe that in deepening our understanding of the antecedents and consequences of trauma can inform opportunities of multidirectional beneficial changes.

This chapter provided details on study methods and methodology, including the paradigm, design, recruitment, screening, sample characteristics, data generation, data analysis, academic rigour, ethical rigour, positionality, and reflexivity. The next chapter is the first of several chapters to present the study results; it presents data on frontline workers' mental health challenges.

Chapter 3: Mental Health Challenges of Frontline Workers

This chapter presents the first set of study results, which address the first research question: what are some of the mental health-related challenges frontline workers are facing? Participants described many challenges, including emotional, cognitive, ethical, existential, and behavioural challenges. Experiences participants reported of ingrained patterns, PTSD, suicide, chronic stress, burnout, place-specific psychological trauma, dissociation, exposure to death, grief, loss, and pre-existing mental health challenges are all described in this chapter.

Participants discussed some challenges more than others, and not every issue was discussed to the same depth. In qualitative research, we are not as focused on measuring incidence, but we are seeking to uncover and understand some of the breadth, depth, and interplay of entwined issues. Participants were not directly asked if they had experienced mental health problems or psychological injuries; nevertheless, most participants spontaneously chose to disclose having one or more psychological diagnoses incurred occupationally. *Table 2. Mental health challenges reported by frontline workers* provides an overview of the mental health challenges participants described. I categorized the mental health challenges as emotional, cognitive, behavioural, diagnosis/injuries/disabilities, other outcomes, organizational, and lastly, pre-existing and interacting challenges. Categories other than 'pre-existing and interacting' were reported as incurred during frontlines work.

My categorizations for this table were based on my own lived experiences and self-study of the mind-matter phenomenon during several ten-day silent Vipassana (translated from Pali as *insight*) meditation retreats, as well as regular practice. Vipassana is predicated on how physiological sense processes (i.e., touch, taste, smell, sight, hearing) give rise to feelings (that can become emotions), which give rise to thoughts (that can become thinking patterns), which

give rise to behaviours (that can become habits), which progressively solidify and compound into diagnoses and outcomes (Cayoun et al., 2018; Wright, 2017). Working to build awareness of and equanimity with arising sensations allows the practitioner to observe and disempower the root causes of craving (pleasant sensations) or aversions (unpleasant sensations; Cayoun et al., 2018; Wright, 2017). Vipassana meditation can help disrupt and revise automated cycles and attachments (Cayoun et al., 2018; Wright, 2017). Some scholars have noted parallels between Vipassana meditation, cognitive behaviour therapy (CBT), and mindfulness-based cognitive-behaviour-therapy (Cayoun et al., 2018; Kim et al., 2010; Wright, 2017).

The table provides an overview of challenges, many of which are expanded on in the following sections. Any mental health challenge that was reported by participants has been included in the table without being ranked (e.g., by frequency, severity). The mental health challenges are presented alphabetically within each category, loosely grouped by the meaning-making of participants, and staying as close as possible to their words in verbatim. In participants' lived experience, these are not so neatly and easily separated but exist as layers of complexity and cyclic processes.

Table 2. Mental health challenges reported by frontline workers

Emotional
Abandoned, no one has capacity to help, required to be hyper-independent
Alone, isolated, alienated, stigmatized
Angry, enraged
Anxiety, anxiousness, intense fear, panic attacks
Avoiding exposures, avoiding people, shutting down
Broken, unfixable, lost functionality
Burnout, compassion fatigue, exhaustion, loss of capacity for empathy
Defensiveness, guardedness, feeling unsafe to let guard down, hyper-arousal, hypervigilance
Dissociation, chronic numbness
Eroded self worth, worthlessness, unvalued
Feeling stuck, cannot change jobs yet cannot limit exposures or manage workplace toxicity

Guilt, shame, embarrassment, humiliation
Mood swings, feeling all over the place, feeling “crazy”
Overwhelmed with negativity, stress, pressure
Sadness, depression, grief, loss
Resentment, bitterness, regret
Cognitive
Catastrophizing
Cognitive dissonance
Cynicism, jaded worldview
Distrust, suspiciousness
Intrusive thoughts
Inability to focus (on anything that is not a crisis)
Ruminating
Suicidal thoughts
Violent thoughts
Behavioural
Alcohol dependency, addiction
Eating disorders
Gambling addiction
Insomnia, sleep disturbances
Repetitive behaviour, compulsive behaviour, ingrained patterns
Self-harm
Substance dependency, addiction
Suicide attempts
Unhealthy coping habits (unspecified)
Diagnoses/injuries/disabilities
Alexithymia
Anxiety disorder, chronic hyper-arousal, hypervigilance, panic attacks
Clinical depression, major depressive disorder
“Faulty brain syndrome” (false memory syndrome?)
Occupational injuries (unspecified)
Physical disabilities
PTSD, complex PTSD, flashbacks, triggered by loud noises, triggered by sirens/tones
Sleep disorders
Stress injuries, psychological injuries, brain injuries (unspecified)
Interpersonal, existential, and other
Compassion fatigue, loss of empathy, loss of emotion

Existential, darker perception of humanity, pessimism, cynicism (sometimes directed at particular group along categories of ethnicity, socioeconomic status, age, etc.) of clientele
Deaths of colleagues, grief, loss
Difficulty with functional disconnection (from work) and functional reconnection (with family, etc.)
Divorce, family breakdown, estrangement, strain
Loss of sense of self, identity crises
Violence and death normalized
Organizational
Bullying, gaslighting, victimization, ganging up
Chronic stress in response to environmental triggers and occupational stressors
Harassment (physical, psychological, sexual, verbal)
Hazing rituals (to borderline harassment)
Institutional betrayal, sanctuary trauma, traumatized organization
Moral distress, moral injury
Ostracization, social exclusion
Overtime pressures and chronic staff shortages exacerbating mental challenges
Physical disability/illness led to being treated as worthless, disposable
Potentially psychologically traumatizing exposures in high frequency and severity
Stigmatization
Stoicism, machoism, toxic masculinity
Pre-existing and interacting
ACES (adverse childhood experiences; unspecified)
ADHD (attention deficit hyperactivity disorder)
Alexithymia
Autism spectrum
Bipolar disorder
Eating disorder
Obsessive and compulsive behaviours
Sexual abuse trauma

Emotional Challenges

Participants struggled with numerous emotional challenges, as evidenced in the table. Participants reported that responding to people in emergencies (e.g., car accidents, housefires, domestic abuse calls) gives rise to a plethora of emotions; however, a cultural orientation of stoicism typically dictates suppression of emotionality. Perhaps ironic considering

pervasiveness, most participants described dealing with their emotional responses solitarily and in alienation from their coworkers and their organization. Developing emotional awareness, managing emotional expression, practicing emotional health – and a culture of acceptance of these – emerged as key to evolving Canadian mental health discourses and initiatives. *Table 3. Selected emotional challenges with representative excerpts* presents selected interview excerpts corresponding with common emotional challenges reported by participants.

Table 3. Selected emotional challenges with representative excerpts

Emotional challenges	Representative Excerpts
Alone, alienated, not understood	Participant 30: There's a lot of this, like Let's Talk day, and all this stuff in itself is – let's be honest, nobody really wants to hear my mental health problems […]. People don't understand that stuff. So, it's a lonely journey.
Anger, rage, normalized	Participant 13: Anger is much more acceptable, rage is much more acceptable, crying is not acceptable. Participant 22: I had the stereotypical, emotional dysregulation and lots of angry outbursts and just anger. I thought okay well, yeah you know, all firefighters have marriage issues, it's normal.
Anxious, depressed, invisible illness	Participant 7: I've noticed [these problems] are very widespread. A lot of us have very similar problems, similar trends in anxiety and depression. Participant 11: Even having depression, I wouldn't talk about something like that, and I thought for so long, I wish I had something that people could see, and then they'd understand.
Burnt out, compassion fatigue	Participant 1: It's like compassion and empathy right now in the workplace, it's such a thin tread for so many people. Participant 35: I'm still an ER nurse, so for my own personal [health]… There's so much burnout.
Crazy, spinning	Participant 37: They kind of go – 'job burnout,' and all of that stuff, but it was cause sometimes you feel like you're crazy, because you're that, you're spinning, or you just don't feel like doing anything. And it's like, you sit back and wonder, where the heck is that coming from?
Guilt, survivor's guilt, self-doubting, fear	Participant 15: A lot of staff, they really take it to heart, and they beat themselves up. Did I do the right thing? Am I gonna lose my

	job because I didn't do the right protocol? Participant 10: We say we're fine all the time, which most of the time we are. Sometimes we're not. […] We have real cases [of suicide] to talk about. There's lots of survivor guilt after the fact because you go, Oh, why did I –? How did I miss that sign?
Humiliated, alienated, stigmatized, unsafe	Participant 26: We're not made of –. It takes a long time to get to the point where you feel like it's okay to ask for help. […] I tell you, it felt humiliating, it felt – I was embarrassed. […] First of all, because there's these people that I had to tell I was having a difficult time. I didn't trust them, and I didn't really respect them, so it was embarrassing that I had to do that. […] But I had to make the decision that my mental health was more important than worrying about fear of repercussions from managers at work.

A crosscutting theme that emerged in this and other sections was that of difficult emotions (and psychological trauma) being common and widespread while simultaneously denied and suppressed to maintain a tough exterior. Participants shared a lot of these difficult to bear emotions which would conceivably be easier manage overtly if workers were not also burdened by pressures to hyper-individualistically hide and internalize their emotions. Pervasive emotional burdens could potentially be mitigated by creating psychologically safe cultures with deliberate processes for constructively engaging with emotions.

People in many types of jobs face adversity when choosing to disclose mental health challenges, fearing they will be misunderstood and devalued (Dobson et al., 2019; McCreary, 2021; Mortali & Moutier, 2019). The stigma associated with mental health may be particularly poignant for frontline workers (Dutheil et al, 2019; Ricciardelli et al., 2020; Ricciardelli & Power, 2020; Sukhera et al., 2021). Enormous societal expectations are placed on these workers, including the projection of the 'hero' narrative, vis-à-vis the portrayal of glamourized PSP and HCW characters in television and film who are often impervious and show superhero strength (Archibald-Varley & Fung, 2024; Beck et al., 2023; Hawker et al., 2011). Participant 3, a law enforcement officer with a psychological injury, bitterly refuted the hero narrative: "Frontline

workers are just everyday people − we put our pants on one leg at a time like everyone else. We're not fucking superheroes that aren't subject to exposure and dealing with stuff, thank you very much." For more discussion, see *Masculinity, Anger, and Other Emotions* in Chapter 6.

Cognitive Challenges

Participants commented on several cognitive challenges of which they were working to become more aware. Many cognitive concepts were novel for BOS participants, such as 'thinking traps' (e.g., catastrophizing, cognitive dissonance, cynicism, discounting the positives, espousing a jaded worldview, pervasive distrust and suspiciousness, black-and-white binary thinking, intrusive thoughts, violent thoughts, suicidal thoughts, ruminating, and the inability to focus outside of crisis situations). Participants reported that they were vocationally required to be hypervigilant which can result in such cognitive challenges. Participants also gave examples of how pervasive PPTE exposures can blur delineations of actual threat experiences from habitual overtripping of psychological reactivity to perceived threats in the environment. The challenges with psychological reactivity were emphasized by Participant 9, a corrections officer:

> Something simple like the ice cream truck is driving by, and I have two young kids, and I don't think the same as my husband because of all the background information I have on people that I work with, and I know that that's a small population of society, but it's still there. It's reality. […] And so, my thought is, 'Back away, don't really talk, we don't need that.' And then my husband is like, 'What's the problem?' (Participant 9)

She noted that the difference between her mindset and that of her spouse created discord in their relationship, as well as serving as a benchmark for comparing her worldview with 'a normal' – intended as a noun used sometimes by participants to reference non-frontline workers (i.e., 'the

normals' don't get it). Participants reported that they necessarily spend a large percentage of their waking life with other frontline workers who hold similar worldviews and exist in similar contexts; accordingly, a mental state of suspiciousness pervades. Participant 9 elaborated on how she routinely perceives threats in the people around: "My go-to is, 'What are you doing?' And so, it changes the way I operate, like lots of colleagues I've worked with" (Participant 9). This officer described how working in prisons has changed how she thinks about people and the world, even when she was not at work and in public places: "Where do you sit? You sit with your back against the wall, so you can see what's going on around you" (Participant 9).

Frontline workers commented that they are trained to be alert, tuned into alarms, and ready for action, and that they adopt habitual scanning of the environment for threats to safety, in ways concretizing their challenging emotions, cognitions, and behaviours. Participants highlighted that switching hypervigilance off for the non-work, family-oriented, and enjoyment-based aspects of life is often very difficult. An advanced care paramedic/firefighter was grappling to increase his control over the difficulty that being in a state of hypervigilance and readiness induces:

> I do have a tendency to catastrophize in my mind bad things happening and being hypervigilant a lot still, which I know is another symptom of the job. I just try to move on as soon as those thoughts are creeping in. (Participant 7)

'Moving on' to other thoughts requires practicing self-awareness and attentiveness (Cayoun et al., 2018; Wright, 2017). To stop catastrophizing, Participant 7 tries to actively notice when he has slipped into 'a cognitive rut' then turn his thoughts to his children, his wife, and pleasant memories, a skill he learned through the BOS program. Participants struggled with this kind of mental practice a lot, rationalizing that there are job-specific reasons to stay in a state of

suspicion or hypervigilance, either on the offensive or the defensive, but they find this can impede the processing of trauma and emotion. A divorced police officer disclosed some of the tension in wanting to have the ability to access emotions, but having difficulty given it being contradictory to his operative functionality:

> I think if there is a way… and I'm going to guess all first responders are the same, but certainly cops are very good liars. I think we're good at hiding things. We're good at hiding emotion. We know what our tells are. We don't want to give a tell, so we hide it. (Participant 10)

Suppressing one's true thoughts and feelings is a labour honed for maintaining professional, psychological, and functional distance when, from his examples, interrogating homicide suspects or child abusers, but this skillset interferes with emotional and mental self-regulating. Intimate couples and close family members co-regulate in emotional symbiotic cycles, so those living with frontline workers are directly impacted by their mental and emotional state and capacities (PSPNET, 2023; Stephens et al., 2022). Many participants were just beginning to learn how to access and express their feelings. Frontline workers may believe they are protecting their loved ones by bottling up and not talking about their experiences but doing so can be a problematic form of emotional avoidance (Cox et al., 2021).

Empathy, Ethical, and Existential Challenges

Participant struggled with existential and ethical dilemmas and larger questions than the BOS program could answer. They were burdened by questions of moral perplexities and existential crises, asking: How do they sustain their initial service-orientation, motivation, and good-will after years of disillusionment and PPTE exposures? What do they do for they mental health when their entire perception of humanity has changed for the worse? How do they

reconcile feeling compassion for people who were sexually abused as children with the fact they have become convicted rapists?

Participants asserted the need for mental health help at deeper levels, including tangible guidance and training on how to overcome 'the skew' (or the tendency to start to only see the worst in people). These workers reported that they typically received no training or organizational supports to address their everyday lived ethical dilemmas, their negatively skewed perspectives, or the internal emotional and mental labour required of them.

Many participants shared an awareness that their presence was felt by others as negative, being on-scene for PPTE and often not included in joyful and life-affirming events in communities, for example: "Nobody ever calls us and says, 'Hey, I'm having a really good day. Could you pop by?' No, they're having a shitty day. We're going there to try to fix whatever is going on" (Participant 10).

Frontline workers learn how to interact with people during crisis and tragedy by keeping a professional distance with occasional use of 'tactical empathy' or 'fake empathy' insofar as it assists them in their operations. As exemplified by this law enforcement officer:

> I worked in homicide for a long time. I can fake empathy pretty well. I certainly chat a lot to child killers and try to elicit what took place or a confession. And you're pretending like you understand and stuff like that. (Participant 10)

The practice of tactical empathy can eventually come to blunt the ability to feel authentic empathy; participants expressed feeling conflicted about empathy for this and other reasons. The BOS program suggested to participants that they reconnect with their empathy and emotions when at home with loved ones but stay disconnected at work to carry out their necessary functions. This advice was complicated by participants who described situations in

which the matter of empathy (as well as how to transition between mental states) was not at all clearcut. For example, this officer imparted that he tells his new recruits:

> When I go out [to answer a call], there's a reset to treat this person as though they're your loved one. The idea behind it is about showing some empathy. If I show up to your mom's house, your dad's house, how do you want me to represent us? (Participant 10)

With the juxtaposition as exemplified in the two excerpts above, participants experienced internal dissonance, self-questioning, confoundment, and distress. In moments like these in the interviews, I observed a paradoxical quality in which the frontline worker was conflicted between their impulse of compassion for those involved and their need to disconnect from feeling empathy to perform job duties; such conflict is present on several types of occasions, including when they identify with the person(s) in crisis (e.g., the same profession, a family member, a resemblance of someone dear to them). All this led me to question: How can we advance therapies and approaches tailored to specific needs of frontline workers that address the ethical, existential, empathy-related, philosophical, and spiritual questioning dimensions of mental health? How can frontline operations, organizations, and systems better attend to comprehensive well-being of the humans involved?

Behavioural Challenges

Behavioural challenges are closely connected to emotional and cognitive challenges (Eisenberg, 2015). Various destructive behaviours can arise as coping mechanisms in response to stressors (Clary et al., 2022). Participants recounted struggling with alcohol and substances – sometimes self-medicating in the absence of externally sanctioned medications (i.e., from a health professional) with sequelae including addictions, adverse effects, and overdosing. Participants also struggled with sleeping and eating disorders, as well as self-harm and

suicidality.

Participants reported that they typically entered their careers with a sense of optimism and purpose to save lives, but often their role is to clean up after death and wreckage or to face the negative outcomes of chronic poverty and violence. As the human mind is conditioned to recreate cognitive behaviour patterns to conserve mental energy, self-awareness to counter these default patterns requires conscious effort (Cayoun, 2011). Participant 30 linked chronic occupational stressors and unresolved psychological trauma to eroded self-worth, and in turn, overwhelming self-deprecating thoughts and self-destructive behaviours for self-escape. In speaking of hidden mental unwellness and stigma in firefighters, he explained:

> A lot of people use drugs and alcohol to try to cope with all this stuff too. And that's another thing that gets like, we kind of look at people with drug and alcohol problems like it's somehow that they want to do, they have something they chose to do. But you know, at the end of the day, if the voice in your head keeps telling you you're worthless, eventually, what would anybody do? (Participant 30)

Negative coping behaviours can serve for the purposes of (temporary) emotional and psychological escape or release; they can be difficult for participants to disentangle from, with potential to become addictive (e.g., using substances, self-harming; Brown & Kimball, 2013; Di Nota, Kasurak, Bahji, Groll & Anderson, 2021). A corrections officer was noting that with her own increased self-awareness, she began to see more clearly the negative coping pervasive in colleagues around her: "I'm talking about gambling, drug addiction, alcoholism. That's all coping mechanisms. But getting out of that cycle is really hard, and you often cannot do it yourself" (Participant 13). Participants linked overreliance on alcohol to not sleeping well, feeling depressed, not recovering as well from the tolls of night shifts, and to not functioning

well, broadly constructed.

One corrections officer disclosed that while she was aware that she had an eating disorder, she only realized she was performing other compulsive behaviours when she mentioned to a couple of co-workers that:

> I had started counting every step I took from the house to the door, from the door to the tree, from the tree to there, and I was counting. I could tell you exactly where I was, I knew every step. I thought everybody would do that. […] I had no idea that this is a survival tool. Because I was not processing anything in my head. I was just using the counting to layer it up, to mask it up, to paint over it, so I don't have to deal with it. (Participant 13)

Participant 13 noted that it was not until her disclosure to and reaction from co-workers that made her think that her behaviour was perhaps not normal and that she needed external help. She interpreted too that some types of behaviour challenges (e.g., substance use, alcoholism) draw more attention, understanding, and supports, while neglected or lesser-known challenges (e.g., eating disorders, obsessive compulsive disorder) may take longer for frontline workers to surface awareness of and to find help with, as per her lived experience. Participants reported attempting to hide or minimize addiction behaviours from family and coworkers, as well as from themselves. Participants reported carrying unresolved trauma unknowingly until 'something switches a light on,' such as engaging with mental health training or social learning through conversation with others.

> We all know what alcoholism looks like, we all know what gambling is – but the leading up to it, the counting in your head, the nail biting, and all of that stuff […]. There's a lot of stuff out there where people could share that and say, 'Hey, before I even went to that

> [mental health training], I did all these things, and nobody told me this is not good.' I think that would be very helpful for a lot of people where they are like, 'Oh my God! Yeah, the light is going on, I get it now, I should maybe look at this.' (Participant 13)

Participants noted that conversations – in casual or intentional settings – with coworkers can bring to light the need to address mental health. How coworker conversation and comradery interact with workplace culture, time constraints, performance measures, and other drivers from the business logic model, are explored more in Chapter 5.

As a matter of occupational realities, many participants are enduring irregular sleep, non-restorative sleep, sleep disturbances, sleep disorders, and insomnia, which they felt impact their mental health and functioning. Sleep is a keystone – along with diet and exercise – in striking balance toward remedy for numerous health issues, including mental, physiological, and psycho-somatic (Kunugi, 2023; Zhang et al., 2022). Participants talked about how disturbed sleep can impact cognition, decision-making, self-esteem, speaking properly, disposition, personality, and basic functions. Sleep disturbances they reported included nightmares and flashbacks, which are symptoms of PTSD but can also be present without a formal or full diagnosis. These challenges pertaining to sleep were experienced as disruptive for the participants, as well as those who live with them. Some participants reported not sleeping for their entire four-day shifts. Participant 2, a firefighter, explained the conundrum of assigning responsibility for his own 'sleep hygiene' while working these shifts:

> Everybody says, 'Oh, sleep is important.' […] Sleep is very, very, very difficult for me. I've been in this field for thirty years, and I've never once slept in a fire hall. Never! I just can't do it. […] I would go sometimes four or five days without sleeping at all. And I did that for over ten years, where it'd be like that. […] So, I know sleep's

> important, we learn that from day one. But your brain plays tricks with you, too, the entire time, right? (Participant 2)

Participants felt on their own in strategizing solutions for sleep issues. Some participants found that only time-off helped with sleep recovery. Participant 34 reflected that he uses sleep to escape himself and the heaviness of his work that otherwise threatens his well-being. He works day shifts, rarely seeing his kids because sleeping right after dinner is his main strategy for not physically harming himself or others:

> I go to sleep at the same time every day, and my kids struggle with that, right? Because it's, it's early. And sometimes even earlier. But if I'm not well psychologically, I go to sleep. […] As the day goes on, things get heavier. (Participant 34)

Participants disclosed using non-suicidal self-harming behaviours to manage overwhelming emotions in the absence of other safe rituals to help externalize their pain and suffering. Some described intrusive thoughts and violent fantasies, as well as their self-control strategies:

> I know enough not to drink. I know enough not to own weapons because of what you'll do with them. What you see every day, like you see every day, you see yourself hurting people. You see yourself hurting yourself. You, you see all these things every day. It doesn't matter what time of the day. (Participant 34)

When speaking about self-harm as a regular practice that has become a non-negotiable because it is less damaging than other behaviours he thinks about, this participant stated: "It [self-harming] becomes – it's a part of me" (Participant 34).

Disclosing self-harm can be positive as it signals an outward expression of that which is often hidden, inward suffering (Brown & Kimball, 2013; McCabe et al. 2023). When I assisted in a research lab dedicated to youth mental health, consulting psychologists warned against

presenting research results that risk glamourizing self-harm; at the same time, participants in this study did not want self-harm to be immediately pathologized either. Though it is 'abnormal' behaviour when not contextually and socially acceptable, and though there are important differences in terms of type, severity, frequency, and purpose, there are cultures and subcultures in which cutting and other body modifications are used for spiritual healing, on behalf of oneself or others (Enns, 2018; Farber, 2013, Kinew, 2015). Learning more about the latent causes and purposes of these behavioural challenges and uncovering culturally specific healing and meaning-making practices, may offer insight going forward (Enns, 2018; Farber, 2013, Kinew, 2015).

Ingrained Patterns

During the mental health crisis that intensified in tandem with the COVID-19 pandemic in Canada, there emerged some common refrains in the national discourse; 'There is help' and 'We're in this together' messaging campaigns were rolled out (Oliver, 2020). The intention to affirm that no one needs to face self-destructive and suicidal thoughts, feelings, and behaviours alone is aspirational and principled; however, the typical approaches (e.g., hotlines, websites) still leave it to people who are in distress to reach out for help (Nyaga & Torres, 2024; Oliver, 2020). Participants commented that reaching out for help can be notably complex for those who identify as the responders, protectors, and lifesavers of other people, and who, by definition, are not the ones in distress themselves, thus additionally troubling the psyche and identity.

Participants expressed that changing behaviours was also difficult because the collective psyche in workplace culture has its own defense mechanisms that serve to protect ingrained ways of thinking and behaving. In other words, the problematic behaviour is both ingrained in the self and ingrained in the culture, so the struggle does not end with the − albeit critical − step

of the worker deciding for themselves that they want to change. Once someone decides within themselves to quit drinking, for example: “I'm like, I don't want to do that anymore, I don't want to go to the bottle anymore. […] My kids had the worst of me, […] that’s not how I want to live” (Participant 1), they still face numerous obstacles. As this paramedic impressed:

> People want to bring you down. […] If multiple people don't go through the [mental health training] program or don't understand how it applies to our workplace, you end up ostracized from the workplace because you're not conforming. You're a positive individual in a negative environment, and we can't have that. (Participant 1)

As Participant 1 spoke about overcoming his negative coping behaviours, he emphasized that there were additional adversities in staying in the same work setting from which the behaviours arose, and in which coworkers were continuing the same behaviours. He and others highlighted how difficult it is to resist the cultural and in-group membership pressures when they permeate the workplace, and that the limited solutions then become either returning to negative patterns or leaving the occupation.

Participants struggled against compulsive behaviours that initially arise to help them live through PPTE via dissociation, likened to a memory short-circuit and desire to refocus on something they could control (rather than the PPTE which is out of their control). A PSP explained how destructive patterns, though not fatal, limited her life:

> When you do things over and over for years, it's much harder to change that. Basically, what you are doing is not good for your mental health. You do it over and over, but you survived, until this point. You know you can survive it, even if you still continue in doing it. But is that what you want? Do you want to just survive, or you want to live? (Participant 13)

Participants described the desire to living in a mentally healthier, more emancipated way. Sometimes it was the result of a loved ones' ultimatum paired with desire for a better life: "My wife was going to leave me, so I mean, that was huge, obviously. But I think I realized, I'd had enough. This is not living" (Participant 8). This firefighter had gone through cascading 'wake-up calls' including a diagnosis from a psychologist:

> She diagnosed me with hardcore PTSD. And until then I hadn't really thought about it. I just thought I had a drinking problem. It didn't really change anything right away. And even having a heart specialist tell me that if I didn't stop drinking, I'd better get my affairs in order. That didn't stop me either. I was just on that self-destructive path. (Participant 8)

Multiple healthcare professionals warned Participant 8 about the serious state of his health, but it was eventually 'an internal switch' that catalyzed his decision to get help. He described that he needed internal resolve to carry through the many steps involved in seeking, accessing, and aligning with a mental health professional who could provide an accurate diagnosis and appropriate treatment.

Some participants used the metaphors of moving from 'darkness to light,' from 'fog to clarity,' urging that there needs to be more 'lights lit' and 'spaces cleared.' Participants wanted more roadmaps to finding help and more examples of frontline worker 'recovery leaders' to follow through the 'fog of addiction' and other self-destructive behaviour. Participant 1 implored: "I don't want to go back to that fog. I don't want to go back to that darkness."

Posttraumatic Stress Disorder (PTSD)

PTSD was one of the most common mental health diagnoses cited by participants, with signs and symptoms of hypervigilance, avoidance, jumpiness, aggressiveness, distressing

memories, intrusive flashbacks, nightmares, trouble sleeping, trouble focusing, memory gaps, loss of hope, loss of joy, loss of sociability, guilt, and shame. Participants felt getting a diagnosis had been becoming easier but still described considerable barriers to care in many work settings. Older participants more often described facing adversity when seeking help, reflecting on when PTSD was less widely recognized. A police officer in her seventies spoke about being misdiagnosed because PTSD was not on the radar, especially for women. She commented:

> I was diagnosed with PTSD in [year]. So that sounds like a long time ago, however, I should have been diagnosed before that. I believe being a woman, it was just like, 'Oh, she's got anxiety, she's got depression.' […] It wasn't recognized. (Participant 11)

Participant 11 spoke at length about her agonizing search for a diagnosis that made sense to her over years of help-seeking.

Participants commented on how prevalent alcoholism is in their departments, realizing retrospectively that this is likely an aspect of comorbidity with PTSD. Participants expressed dismay that too many co-workers were on medical leave for PTSD and other afflictions, reporting up to half their workforce, which diminished morale. Participants who were on wellness committees emphasized the importance of checking in on these off-duty coworkers to make sure they knew that they mattered. Participants painted a fragmented picture as to how PTSD medical leave and reintegration are handled, but trauma-informed approaches were key concerns for such highly exposed populations. There was persistent participant concern regarding how PTSD impedes social connections and the return-to-work process. Unmanaged PTSD can feel unbearable, described by some participants as threatening their desire to live.

Participants describing PTSD underscored that, albeit a message of commonality with all humans who feel anxious from time to time, there is the critical factor of 'getting stuck' in elevated anxiety, rumination, and hypervigilance, unendingly. This paramedic/firefighter elaborated:

> It's not abnormal for someone to look for a way to numb some of the negative energy or voice in their head. It's not abnormal for someone to be in a freeze response. The problem is with PTSD you just get stuck there, and so it's a matter of trying to get it out, and everything around it, like suicidal ideations, all those kinds of things are all related to being stuck in those things. You can only deal with it for so long before you start thinking, 'Man, like what's the point of me being here?' (Participant 30)

One participant shared that both herself and her husband were PSP with PTSD, as is the case for a portion of PSP couples. She felt compounding impacts because both required substantial support to manage their PTSD and could not always count on their partner: "I would come home from my treatments and exposure therapies, and I would be just so raw, and [my husband] couldn't understand, because he couldn't make sense of my emotions or thought processes" (Participant 24). This excerpt refers to exposure therapy which involves engaging with psychological traumatic stress triggers alongside a qualified therapist as part of mitigating associated reactions (Smits, 2022). The evidence-based intervention can produce a temporary state of vulnerability and incoherence (Smits, 2022). Spouses often are the primary source of support for frontline workers, but PTSD produces considerable strains on spousal relationships (Cox et al., 2022; Kaur et al., 2023).

Participants raised the issues that within PSP and HCW categories there are higher-risk speciality units (e.g., child abuse, narcotics, sexual violence) who need even more accessible

and less stigmatized PTSD treatment specific to their work. Participants also described losing friends to suicide and then having to face stigma and backlash on top of grief:

> I had a friend that I worked closely with in the drug section who did take his own life with a shotgun. And I mentioned this one day, and this intermediate student said, 'He should never have been hired!' I said, 'Whoa! Just time out. I worked with this man. This man, you would be honored to work with.' (Participant 11)

Participant 11 shared that this officer was put on an undercover assignment investigating a criminal drug network, requiring hard drug use to gain group acceptance, resulting in addictions and PTSD. There was no meaningful support or treatment made available to the officer, who ultimately died by suicide.

Suicides

The word 'suicide' came up 46 times during the interviews even without any suicide-specific questions. Participants discussed the suicides of colleagues, friends, and family members. Participants described answering 911 calls to find people about to commit suicide, having already committed suicide, or who committed suicide in front of them. A firefighter reported: "I've been to eight line-of-duty deaths in the past ten years, and you know, many of them suicide-related, mental health-related. And yeah, I don't think things are getting better" (Participant 30). Some participants felt passionately that management needs to address suicide preventatively. As a woman police officer stated: "They need to start looking at their people over their process, because one suicide is too many suicides, and people off on PTSD, I know you can't control all of that, but some of it they can" (Participant 6).

Participants in management roles worried about low morale and the social contagion of the depressive impacts of suicide. There was participant uncertainty around classifying and

memorializing suicide as a 'line-of-duty death,' with concern that such a classification could glorify suicide, particularly when elaborate funeral rites accompany this highly honoured status. This law enforcement officer contemplated:

> I don't know what the right answer is, so I struggle with this as a manager, and I struggle as a cop. […] In some organizations or in some countries or jurisdictions, they'll have a memorial to officers that died as a result of suicide. I don't know if that's the right thing to do or not the right thing to do. I think sometimes that to memorialize − somebody who is putting together a plan or has ideation might go, 'Well, that's one way to memorialize me.' And I've seen that in my own organization, and so that causes me issues. But one of the things I do hear is a lot is people applauding those kinds of initiatives. (Participant 10)

Participants' were conflicted: the movement to memorialize contrasts a legacy of shame and condemning (e.g., an early Christian belief that the soul of someone who commits suicide is condemned to hell), recognizing the mental health sacrifices that come with occupational psychological injuries which would not be incurred by the individual if they had not been obligated by their job (Hirono, 2012; Kasper, 2012; Shay 1994, 2002). When deaths by suicide are deemed line-of-duty deaths, the families may receive better help and resources, even though tragically, it is too late by then for the person themselves to receive mental healthcare (Kasper, 2012). The heightened status of line-of-duty deaths can also serve to raise public awareness of frontline workers' PTSD and surrounding issues (Kasper, 2012; Shay 1994, 2002). Prevention and treatment, including being responsive to anyone asking for help to never dismiss people or trivialize concerns, are crucial to address mental unwellness before the point of suicide (Benas & Hart, 2017; Enns, 2018).

Chronic Stress and Burnout

Participants underscored the accumulative effect of enduring frequent PPTE and unrelenting stress. Burnout was described as an unending exhaustion within which one has depleted their cognitive capacity and emotional bandwidth to care and respond, feeling 'stretched so thin it hurts,' and being 'about to break.' Participants reported burning out from multiple simultaneous sources of stress, including pressure to respond to ever-increasing frequency of calls and types of calls they are not trained for (e.g., psychiatric, social work), without proper staffing. This police officer elucidated:

> [It's] gotten worse with allocation of human resources to demand for service, and the pressure to respond to calls, […] and the critical criticism over how are you handled something, especially with in-car cameras and body-worn cameras now, whereas everything's being reviewed and criticized, which is good because it makes you more professional, but it's also more stress too. And then also the social media pressures, the cameras-in-your-face pressures, the family pressures because of challenges with employment and rising interest rates […]. It's not just one or two things, right, not one or two little triggers, but it's that 360 [degrees of] pressure. (Participant 36)

Another pressure participants discussed was backlash and violence (e.g., in the form of stalking, verbal abuse, death threats, physical assault) against frontline workers as representatives of public health, public safety, or government authorities – broadly constructed, notably during the COVID-19 pandemic. A firefighter worried about how public perceptions were being mediated through the news as relayed on social media and internet platforms, as well as in film and television, and the interplay with individual workers' mental health:

> We're still seeing way too many suicides and way too many mental health issues within

> emergency responders, and I unfortunately I see this getting worse before it starts to get better. […]. The expectations are through the roof. They want more for less. Thank you, Hollywood, for saying that we could be anywhere in five minutes or less with all the tools to solve your problem. (Participant 33)

Participants pointed out that PPTE start accumulating as early as during training or the first shift of their career. One woman in law enforcement described:

> I'll never forget my first call. It's just like, 'Where am I? What am I doing?!' We do not see normal things. […] Your eyes open so wide… And some people truly need your help, and hopefully that's what you're doing, but it's also that you may need help, say you had five shifts in five days of seeing sudden death. (Participant 6)

Participants said that witnessing even one sudden death was disturbing and life changing. Many were surprised sudden deaths were not always the most impactful PPTE; instead, a PPTE that may be categorized as relatively non-severe could be the overwhelming event. A lot depends on the intersection between one or more specific stressors, capacity and resources at any given time, and accumulated exposures likened to fault lines of strain. One firefighter described:

> Best analogy is like a pop can. You can stand on a pop can all day long. But if you twist the angle on it, or you step on the side of it, or you apply to one side a little bit differently, it is going to crumple. It's the same thing. (Participant 33)

Participants urged that helping frontline workers not crumple requires systems and structures of comprehensive support.

Participant chronic stress and burnout were exacerbated by the COVID-19 pandemic. As the COVID-19 infection rates and death rates spiked in reoccurring waves throughout the pandemic, those working in healthcare experienced corresponding intensifications of pressure.

A nurse emphasized the compounding impacts of each wave, on top of pre-existing strains in hospitals: “I was going crazy! No, way before COVID − I'm an ICU nurse and actually, all the waves were bad, but wave four definitely did me in” (Participant 21). A respiratory therapist similarly expounded on the mental health toll of the pandemic on HCW:

> With COVID we just worked so long and so hard. It just drilled into every aspect, where we had no more emotional bandwidth to share with our families or even our colleagues, for that matter, because it was all-encompassing. We were stretched to limits that we never thought we were going to have to be stretched to. Nor were we trained to stretch to those limits. And then we were just left to pick up the pieces when it was over, and most people could not. (Participant 23)

There was generally a consensus among participants that chronic stress, psychological trauma, and burnout preceded the pandemic, were exacerbated by the pandemic, and have continued after the pandemic.

Environmental Triggers and Considerations

Psychologically traumatizing events are linked mentally, memorially, sensorially, and biochemically to the geographical place (and stimuli) of occurrence, and the associated place can trigger psychological injury symptoms (Blum et al., 2019; Demaria et al., 2006; Smits, 2022). Environmental triggers are important for PSP who frequently experience PPTE at work and must return to the associated locations (Blum et al., 2019; Demaria et al., 2006; Smits, 2022). Participants highlighted that trauma triggers permeate their work environments; for example, this firefighter said: “Even just tones going off in a [fire] station all the time − it programs your brain, so that you behave in a certain way, so you go from zero-to-100 just because of a noise or a light” (Participant 2).

Participants reported that returning to the trauma site without proper therapeutic supports can trigger psychological injury symptoms. Returning to the scene of a horrific crime or car accident, for example, can also give rise to distress even well-after the event because of a delayed response, reexperiencing, and problems with emotional regulation: “I've been to accidents where a month or two later, somebody's come in and been like, ‘I said I was good, but I drove by the scene, and it all came back to me’” (Participant 33). Participants sometimes felt confounded by the disjointed timelines between PPTE and the onset of psychological difficulties. This chief of protective services regularly affirms for his crew members that: “It was okay to be okay then. And now, it's okay to not be okay” (Participant 33).

Participants reported cases where the workplace triggers unmanageable disordered stress responses potentiate untenable work situations. Further, participants at times struggle to recover from (or with) psychological injuries, such as PTSD, while working where the injury occurred. When a woman working in correctional services started having panic attacks, she thought she was having life-threatening heart attacks. Participant 14 linked her work setting to her disordered stress responses and her recovery to switching jobs. She said:

> I no longer work at the prison. A large part of my stress was connected to the security of the place, always living in fear that you might be bringing in something wrong or something that was not contraband necessarily, but unauthorized. They take that stuff very seriously. I've seen people accidentally bring in their cell phone, and they get put on the rails for it. (Participant 14)

Providing an example of what a worker may accidently do incorrectly and be punished for, she elaborated:

> Even if you bring a glass of overnight oats, or those kind of things in a glass jar – that's

> unauthorized because then inmates can get a hold of it and break it, slash somebody. That never happens at the women's prison, but that's the mentality of the security staff. You can't bring a metal fork. There is a lot of the stress around keeping track of things that are just part of our everyday reality that you would use all the time and bring in your purse. (Participant 14)

Participants described an institutional expectation of constant hypervigilance of workers in prison environments, and how the prison system treats everyone involved − incarcerated people and workers alike – punitively and severely, which comes with biological and psychological repercussions. This participant underscored the incompatibility of the expectations and the human workers they are set upon: "I'm a human being, and I'm not perfect, and people make mistakes" (Participant 14), reminiscent of the proverb 'to err is to be human.' Another main reason she left the job was that she felt overwhelmed by an environment steeped in secondary trauma (also called vicarious trauma). Almost every interaction she had with co-workers was impacted by both the pervasiveness of expecting the worst of people (including others' treatment of her), as well as of acute phycological trauma connected to place. She described PPTE exposures as a function of helping co-workers deal with their place-based PPTE:

> Vicarious and cumulative [trauma] because this stuff was continuous. And then you have to deal with your friends. I had a friend who, when an inmate got slashed up, there was blood everywhere. And this woman was a manager, and the expectation was that she should just be okay. No one, not even any of the senior managers or the psychologists got in touch with her to see if she was okay. She was in a previous life an EMT. From that incident she has left work. She said to me, 'All I see is that blood every time I go

> down. It's on the Secure [unit with higher level of security]. Every time I go down there, all I see is the blood, that's all I see. […] The expectation clearly was, 'You're okay, and you don't need help.' (Participant 14)

The prison was untenable as a workplace for this participant, as well as her colleague who had decades of experience as an emergency medical technician and as a corrections officer; they both left for the sake of their mental health.

Corrections officers return to the same workplace daily, whereas other frontline workers may work in a broader environment but may also need to return to locations associated with psychological injuries while off-duty. This 'on-the-street' work has further complexity when an emergency is at a family or childhood home. A firefighter described a colleague's experience:

> The call came in at three in the morning that there was a house fire. […] I'm driving, and […] one guy in the passenger seat says, 'Where are we going? Where's the fire?' And the other guy said, 'It's your parents' place.' That firefighter – his mind is elsewhere now. He grew up in that house, so he to me was completely useless now. I couldn't even get him to hit a hydrant, get water. He was just dumbstruck. (Participant 25)

Learning his parents' house was on fire interfered with his capacity to act. This firefighter suggested that place-based, childhood memory-specific triggers may be more common for volunteer firefighters who tend to live in the same communities they serve − and grew up in and know more of the population – whereas career firefighters who more often live in a different area than they cover for work. He said that having some geographical distance can facilitate the psychological separation of the spheres of work and home:

> You come into work, and then you work there, and then you go back home again. So, it separates you, but the volunteers don't have that luxury. […] This can make the practices

> of functional disconnection and functional reconnection more challenging with less separation. (Participant 25)

There were other participants with similar considerations; for example, people living in small, isolated, rural, remote, island, or Indigenous communities where people generally have the sense of knowing everybody or that there are less degrees of separation and anonymity than in larger urban centres. There was an example of a spiritual care provider who is called to tragedies in his community specifically because he already has a relationship with those involved; he may have officiated the marriage of the couple whose house is now burning, or he may have baptised the child who has now just been in a car accident. A continuity of care and relationship of those who work within their own community environments may have implications for individual-level and community-level mental health. One rural firefighter, for example, found solace and meaning in visiting with neighbours after a fire to check in and help communalize their loss. Participants said that frontline workers are often responding to acute emergencies, but less often have any follow-up or relationship-building in their scope of practice. The absent follow-up precludes knowing short-to-medium-to-long-term outcomes experienced by the people they serve and protect.

Dissociation

Mental health is influenced by one's relationships, including relationships with physical places (Enns, 2018; Herman, 2023). 'Dissociation' refers to a state of detachment or disconnection from one's physical sensations, emotions, memories, and personalized self, which can present anywhere from low to severe along a continuum (Durvasula, 2022). Often, dissociation is an intrapsychic defense mechanism in response to trauma, abuse, or violence (Durvasula, 2022). Participants shared some of their experiences with dissociation, sometimes a

way to get through the workday. Creating a cognitive barrier to or distance from a PPTE, or a difficult supervisor or workplace, was sometimes the only viable option participants' felt they could employ while surviving their situation or making plans to change careers.

One participant with first-hand knowledge and experience of dissociation linked the phenomena to the lack of breaks to meet basic human needs (e.g., eating meals, going to the bathroom) in first responder and healthcare workplaces. He described the process that led to his dissociation and alexithymia diagnoses, which he observes in a lot of emergency medical services professionals. Participant 30 remarked: "You're dissociating from your needs all day. That's what it is." He paused to acknowledge the need for functional disconnection to serve one's operational role in the emergency, providing the example of surgeons dissociating while operating, but he emphasized the serious complications with disassociation regularly. "When you start ignoring your own needs and saying, 'I've really gotta pee, but I can't think about that right now. I gotta do whatever,' then you're separating yourself from your body" (Participant 30). He outlined the process of regular disconnection gradually building to dissociation:

> Well, that becomes a problem because your body just gets louder and louder and louder, right? Or it eventually just shuts up, and it doesn't tell you, and then you don't even feel those things anymore. But you are, you're still feeling them, you just don't realize you're feeling. (Participant 30)

He described developing areas of numbness, becoming splintered off and outside of himself, and unable to respond to certain areas of himself. This participant offered his insights into coping with protracted stress, experiencing prodromal dissociating or even full dissociating.

> Then what happens is that it just ends up being a psychological injury, right? Because you can't repress feelings for very long before it starts reacting in your body. I did it for

> years and years and years. I can tell you that it catches up to you eventually. (Participant 30)

A couple of the participants indicated they knew people who dismissed (or they themselves had previously dismissed) mental and emotional health knowledge as 'touchy feely stuff' or "airy fairy hocus pocus stuff" (i.e., Participant 1) that is too abstract to heed. Very few participants still felt that they themselves were invincible, but all knew someone who (or had previously themselves) carried the attitude of 'it won't happen to me,' regarding a mental health crisis. Participants reported that this attitude is still prevalent in many participants' workplaces, and participants explained it as stoicism, naiveté, or being at an early career stage, but also in some cases as a sign of denial, activated defenses, and dissociation. There were a few participants who identified recent and unprocessed PPTE, who were denying their suffering, saying there was no room for first responders to be 'weak.' They attempted to suppress or dissociate from the 'weak' or feeling parts of themselves to remain 'resilient' and 'tough,' important identity markers entwined with their livelihood and self-esteem. These participants felt that they 'could not afford' to be psychologically traumatized, thus counterproductively leaving their traumas unacknowledged and unprocessed.

Exposures to Death

There are important studies on the different categories of PPTE (see e.g., Carleton et al., 2020; Horswill & Carleton, 2021) which inform our understanding of prevalences and priorities quantitatively. This section is focused on one thematic type of PPTE exposure that participants described frequently in the current study; specifically, exposure to people dying, dead bodies, and death broadly constructed. The words 'death' and 'dead' came up 61 times, often regarding violent and premature death.

One firefighter captain described a typical 911 call that she and her crew attend to, as well as her thought process when encountering potentially dying or dead people:

> We cover a section of highway where we get a lot of higher velocity crashes. So, most of the cars are a million pieces, and sometimes the people are alive, and sometimes they're not − most often they're not. If we have to extricate the person from the car? Or what kind of condition? Or you know, are they unconscious? Are they dead? Are they alive and screaming? Are they, is the car on fire, and they're freaking out? (Participant 29)

There was no clear participant consensus on how best to train for appropriate mental fortitude with this type of exposure, nor how to keep regular exposures emotionally manageable in a stoicism-normative culture. Some participants felt left at a loss, highlighting the difficulties for new recruits without any substantive preparation or guidance. A couple participants remarked that their training included being provided with photographs of gruesome scenes to help build up an expectation of emotional armour to what they would witness. The theory was to desensitize workers to minimize sensory overload during a true emergency and support predictable performance. Participants remarked that desensitization training has fallen out of favour, with no pervasive replacement training. Participants reported wellness implications for how workers feel about interacting with dying people and dead bodies, influenced by previous experience or lack thereof, as well as cultural, philosophical, spiritual, and religious orientations; however, occupational training or comprehensive supports are generally absent. Participants noted that a new recruit or trainee cannot accurately anticipate their reaction to a novel PPTE, but their reactions can be influenced by preparedness, mentoring, modelling, and their beliefs about values surrounding death and dead bodies.

A consensus emerged that some deaths are more difficult to bear, such as when frontline

workers feel personally connected to the dead. Participants described the hardest calls as often involving dead babies, children, or someone who reminds them of a family member. A police officer and single dad, for example, remarked on the difficulty of finding dead children the same age as his own. From his years of service, he had concluded: “I'm not good with dead cops or dead kids, and unfortunately, I have to deal with both. So, those ones aren't good for me, and there's nothing that's going to help at the time deal with that” (Participant 10).

Participants felt unclear how they could prepare themselves for such situations without causing psychological harm. Participant 38 described this paradox, saying that he goes between ruminating on past psychological traumas and running future scenarios in his mind to keep himself always prepared for the worst. He felt there is a fine line between mentally preparing (or debriefing) for PPTE and falling into repetitive intrusive thoughts (or untherapeutic rehashing of events). In his mind, preparing himself for the worst-case scenarios was part of his individual preparedness routine that he thought strengthened his self-perceived resilience; he did describe his practice as painful and not always something he did by choice.

PSP work increases individual exposures to death (Bahji et al., 2022; Di Nota, Bahji, Groll, Carleton & Anderson, 2021; Lentz et al., 2022; Stelnicki, Jamshidi, Ricciardelli & Carleton, 2021); accordingly, more understanding of how emotional and psychological labour – as well as the culturally safety – is needed to work appropriately with dead and dying people. The nuances of mental health in relation to death need to be brought much more fully and intentionally into the consciousness of the frontline organizational culture, to be more meaningfully recognized, understood, and valued.

Loss of Family and Friends

Despite being in occupations sometimes equated with ‘superhero work,’ participants

repeatedly emphasized that they are ‘humans like everybody else.’ Participants reported incurring ‘normal’ amounts of personal psychological trauma on top of their occupational exposures during their lives. Participants shared how they were dealing with grief from non-work events, such as parents dying, spouses dying, children dying, friends dying, and going through separation and divorce. Participants experienced losses to total social support networks outside work, including relationships with family and friends over time because they have difficulty talking to them and keeping them close. Participants’ spouses were unlikely to thoroughly understand their day-to-day reality, their state of mind when they get home from work after a PPTE, or that talking about work was often too much of a landmine (unless the spouse had mental health knowledge and training). In reflecting back, this participant considered losses to social networks a flag for mental health problems:

> I've always had good social supports but then drifted away from them as time progressed right, so like my circle of friends would become smaller and smaller. It's not like an instant effect that you notice it right away. […] It is a marker for me, anyways, a huge marker. (Participant 2)

This ‘frontline worker isolation effect’ was predominant for participants. Gilmartin (2021) coined the useful phrase ‘the hypervigilance biological rollercoaster’ to describe the unhealthy physiological effects of the intense fluctuations frontline workers go through between work- and home-life; adrenaline-demanding crises tax the body, followed by a complete crash into anti-social catatonia after work. Participants pointed out that, further, psychological injuries create barriers to socializing with ‘normals,’ and frontline workers often feel pressure to protect others from their horrific stories.

Pre-existing Challenges

Some of the participants had learning disabilities and differentiated abilities, such as attention-deficit/hyperactivity disorder (ADHD) and being on the Autism spectrum. Some participants remarked that ADHD was prevalent in PSP and emergency department workers more than average citizens, although the corresponding signs and symptoms may be exacerbated or confounded by occupational exposures. There were numerous occupational issues impacting participants on emotional, cognitive, behavioural, and interpersonal levels which could be interacting with pre-existing disabilities (e.g., ADHD, Autism) or other psychological issues (e.g., addictions, PTSD, dissociation).

Some participants did not realize they had had adverse childhood experiences or psychological issues until they were facing work trauma(s) that interacted with and surfaced their previous trauma(s). They speculated that perhaps they were compelled to do this type of work – consciously or unconsciously − from having a history of trauma, that an element in the psyche might desire to bring to surface some repressed trauma; alternatively, the familiarity with chaotic environments (as is pervasive in frontlines work) might be compelling to those who had chaotic environments in childhood. One participant who was unaware of his adverse childhood experiences and pre-existing trauma, expressed how coming into a paramedic job was a part of a search for a sense of control that he did not have as a child:

> People come into this kind of job to give themselves a sense of control over their life. Some people have pre-existing trauma that already comes in, they didn't even recognize it. I was one of those people, and so there's already that. (Participant 30)

For some participants, the inclination to their occupation was linked to more outlying neurodivergent brains or ADHD brains that like the fast-paced urgency, and accompanying clarity, that comes with working with crises; they need their workplace urgency pressures to

focus their attention, as this provides some relief. This nurse said of being at home after a shift during the COVID-19 pandemic:

> I just didn't know what to do with myself at home, right, so in this timeframe, I also, I mean I − I know I've had it my whole life, ADHD, but I was also diagnosed with ADHD, so like being at home, I would just! and I just couldn't settle down and I just couldn't figure out what I was gonna do, what I should do in the house, like I just couldn't calm myself down. Where at least at work, I knew, I knew what I had to do, and I just did it. (Participant 21)

There were also participants who, in a way, inherited a lineage of PSP or healthcare professional tradition through their families, for example, coming from a family of firefighters, of nurses, or of law enforcement officers, and having grown up with the cultures, epigenetics, and stories of their parents in those professions, took on intergenerational ontologies and traumas. One participant pinpointed the childhood loss of his family home and family business to a fire as the reason compelling several of his family members to work as firefighters.

This chapter has provided insight into the mental health challenges reported by frontline workers in the current study. These were organized as emotional, cognitive, behavioural, existential, and pre-existing challenges. Ingrained patterns, PTSD, suicide, chronic stress, burnout, place-based psychological trauma, dissociation, exposure to death, accumulated grief and loss, and pre-existing challenges were also discussed. The next chapter will explore what types of supports are available to help frontline workers with PPTE-related mental health challenges.

Chapter 4: Mental Health Supports for Frontline Workers

This chapter presents the second set of study results, which address the second research question: what are some of the supports for frontline workers' mental health? The chapter begins with supports that are typically external to or at arm's length from the employing organization, such as family and loved ones, mental health professionals and trainers, therapy groups, and peer supporters. The role of the self in the internal work of mental health, as well as the importance of agency and practicing self-awareness, self-compassion, and self-care are then discussed. A section on how spirituality and philosophies on life and death can support frontline worker mental health is followed by supports within the work environment, including peer-based supports, critical incident debriefing practices, leadership, management, and policy.

There were many different types of supports reported, but not everyone had access to all types of support. All reported types of support are discussed but not compared quantitatively. There are complex interpersonal give-and-take dynamics at play in each relationship (e.g., spouse, therapy group, peer supporters), all of which will be explored within the focus on supports.

Spouses, Family Members, and Loved Ones

Married participants often cited their spouses as a primary source of support for their mental health and wellness. When they return home after work, some participants debrief with and vent to their spouses, counting on them to listen and provide emotional support. Some participants articulated that having someone to talk to makes a huge difference in their everyday realities, and they were more likely to talk to their spouses to whom they had daily access than a therapist they might see once a year, if at all. Other participants reported not being in the habit of talking about work to their spouse, either because they did not have good communication,

work talk aggravated their dynamics, the spouse had set a boundary, or they tended to fall into silence after work. A few participants flagged the urgency of the need for mental health training for family members because they are often the first to notice early warning signs of mental unwellness. Spouses also gave participants substantial practical, moral, and financial supports. When both spouses were frontline workers, and when they were navigating parenting responsibilities, there were additional strains. Participants who were divorced reflected on how occupational stress, mental unwellness, and their lack of mental and emotional health skills and capacities played a part in the breakdown of their relationships. One advocate of mental health training for spouses stated:

> I'm one of the lucky ones where I have a spouse that is very understanding and very supportive, so I think I'm doing quite well. The more we learn about it, and the more we learn about what symptoms to look for, the better we're doing it. Doing it together, to get through the hard times, and get out of them quicker. (Participant 12)

Participants who were on addiction recovery journeys reported requiring very strong social support. During the COVID-19 pandemic, participants felt intensified pressure was put on many relationships, and expectations changed. Staying sober became a primary goal and a concentrated effort, as this paramedic shared:

> My spouse and I had a saying through the pandemic. We're like − the only things you're going to hear during this pandemic is − stay sane, sober, and safe. That was it. We didn't care what happened [beyond] we're going to come through this thing, and you're going to be safe, and you're going to be sober. (Participant 1)

When the participant's primary source of support was one other main person, as was commonly the case, and when that person would eventually become overwhelmed by their own

stressors, the participant felt vulnerable with no one to talk to. As participants described, spouses and loved ones did not always have capacity to listen and support the frontline workers in their lives, such as during periods of heightened anxiety and isolation during the COVID-19 pandemic. One participant, whose wife was a nurse also on the frontlines, observed a breaking point:

> I hit a low point because my wife got tapped out, and I realized she's my go-to every time. […] I asked her to go for a walk. I was hoping to unload some of the stuff that was piling up for me, but she had so much of her own stuff, she didn't give me a turn, which is unusual. So, then the next day I tried that again, and I wasn't completely conscious of what was happening. She didn't have this capacity again and then something weird happened in me like a switch flipped, and symptoms I have not seen in myself before. (Participant 20)

Participants were cognizant that spouses of frontline workers themselves need supports, including mental health training, and that spouses cannot sustainably be the worker's sole source of support. Another factor exacerbating this dynamic was that many HCW were severely psychologically affected by quarantine measures during the COVID-19 pandemic, isolated from and fearful for their families for lengths of time (Bouza et al., 2023; Gómez-Durán et al., 2020).

Professional Help

Psychologists, psychiatrists, therapists, counsellors, Indigenous Elders, and other types of mental health and healing practitioners were important sources of support for participants. One difficulty that participants cited was in finding the right fittingness with a therapist and type of therapy. Participants had sought various modalities of professional health, such as individual psychotherapy, cognitive behaviour therapy (CBT), eye movement desensitization and

reprocessing (EMDR), virtual counselling, group therapy, PTSD rehabilitation residential treatment programs, substance detox and rehabilitation programs, healing retreats, and psychiatric diagnoses with pharmacological medications. Some participants sought guidance from Indigenous Elders as culturally safe persons whose presence, prayers, medicines, and teachings were therapeutic.

Participants struggled at times with feeling that they did not exactly fit their diagnosis or treatment plans. Participant 11 was one participant who struggled at length with a misdiagnosis: "They were looking at symptoms. But the doctors, the therapists weren't putting together. […] I couldn't find meaningful help." Many stressed that first responders needed therapists with advanced psychological understandings specific to the realities of healthcare and public safety occupations. Participants remarked on the limitations of their employee assistance program psychologists provided through work who often do not have PSP- or HCW-specific experience or training. Participant 2 exemplified: "I bounced around a bunch of different therapists, and then finally found the one that I really like, but that gets expensive bouncing around." Participants highlighted that their company health insurance plans provided for too few visits per year, and they needed more sessions allotted per year, especially for people dealing with stress injuries and complex issues. A few had negative or unhelpful experiences of therapy which sent them down the wrong path and delayed recovery. These cases had to do with misdiagnoses, novice practitioners, psychologists lacking sector-specific training, and an example of a psychiatrist who abandoned the patient midway through their treatment program, telling them: "That I can't be fixed. There's nothing existing today that will fix what's wrong with me" (Participant 34).

There was a consensus from participants whose therapist was also their BOS program

facilitator that they were happy and benefitting from their professional help. Some participants reported that finding a trauma-informed therapist made 'all the difference in the world,' as did Participant 8, for example: "My psychologist has worked miracles with me." Psychologists and other such helpers were the only source of support for some participants. A corrections officer who struggled with anxiety, self-deprecation, guilt, shame, and grief stated: "One of the things my therapist tasked me to do is to be kinder to myself. […] I said, 'Why don't you give me some examples on that?!'" (Participant 14). Participants who had found help in these avenues expressed relief and gratitude, asserting that skilled, trauma-informed, professional mental health help should be destigmatized and made easily accessible, proactively and regularly.

Facilitated Group Therapy

There was consensus and appreciation from those participants who had tried group therapy specifically with other PSP and HCW (i.e., organizers had purposefully excluded people from other job categories). Most participants who were placed in a group with colleagues from the same workplace found that helped build support and understanding at work. One exception was someone had dropped out of their group because they were placed with a direct superior with whom they did not get along with and felt unable to participate given the power differential between them. The unifying factor for therapy groups was unmet mental health needs, more than other aspects of identity, and participants expressed they felt the facilitators and groups were fostering inclusion and respect across race/ethnicity, gender, sexuality, and job category.

Participants found group therapy to be helpful, meaningful, and invigorating on their learning and recovery journeys. Those who had not had access to professionally facilitated group therapy (i.e., those who completed the version of the BOS program without the group therapy elements) typically wanted to try it, wishing for opportunities to therapeutically explore

mental health with other frontline workers who understand their workplace realities. As one firefighter who had gone through group therapy remarked: “You're with people that understand where you're coming from, and you don't have to explain yourself” (Participant 8).

A quality therapeutic relationship between therapist and participant is one of the key elements in what makes therapy helpful (McAleavey & Castonguay, 2015). Participants found that in the case of group therapy, the benefits of the therapeutic relationship were magnified because it included the clinical psychologist leading the group but also extended to the other participants in the group. Participants reported that some of the influential functions of the group were cultural, including to create space, to gain vocabulary, and to practice sharing and processing psychological trauma; these acted in a way that countered entrenched workplace culture norms of stigmatization.

A registered nurse gave her reasons for going to group therapy and appreciating its impact:

> To feel less alone. […] Hearing someone else explain it or even just to say it − that there's less of an isolation feeling for me in that. And if I can speak openly about something I've experienced, because of the trauma, that someone else too, might relate to that. And by doing that it, sometimes it gives some understanding. (Participant 17)

Participants felt that group therapy was an effective avenue for not just therapy but also the social learning phenomena that occurs when “people see your vulnerability, and they're able to be more vulnerable themselves” (Participant 23). This type of therapy provided participants a welcomed opportunity to practice new mental health skills and language, and to experience what a safe space for mental health discussions feels like, as an important precedent to set.

Participants mentioned feeling initially hesitant and cautious about discussing emotional

and mental impacts of incurred traumas in a group setting because, without proper facilitation, sometimes groups devolve into a competition of the worst 'war stories' or there can be an intolerance of displays of emotion. Police officers, for example, are trained to be non-emotive and restrained in affect, which can be in direct conflict with the opening that is needed for therapeutic exploration (Gilmartin, 2021). Some participants expressed that starting group therapy was a little nerve racking; it was intimidating to practice being vulnerable about psychological trauma with people whom one does not know at first. Participants who had done group therapy emphasized that there were helpful parameters set to keep the process safe and therapeutic; for example, one ground rule is to not spend time ruminating on PPTE gruesome details, but rather to focus on self-awareness instead.

Good facilitation was deemed critical, and every participant but one had excellent experiences of their clinician-facilitator. The main issue with the one exception was that the facilitator had invited a guest speaker who dominated the space with his own stories of alcoholism; the participant felt he was rallying a following and proselytizing more than supporting recovery in others. This participant also was displeased that her group members were all together in a second group (i.e., in a peer support group) which made for too much overlap and reinforcing of poor dynamics without enough traction and forward movement. Everyone else with groups unanimously wanted to keep going beyond the allotted eight weeks. They wanted to keep communication open with their group members and to continue having follow-up sessions to talk about how they were integrating their learning in their respective personal lives and work settings moving forward.

Mental Health Training

Learning mental health literacy was substantially emphasized as participants were

grateful for the BOS program sessions tailored for PSP and HCW. A lot of participants had not been exposed to cognitive behaviour therapy, psychoeducation, or related skills and concepts previously, in any aspect of their professional training or otherwise. Some participants elected to take the program more than once to support their growth and learning. Participants reported that mental health trainings were not being offered routinely as a part of occupational training despite the high prevalence of PPTE in these sectors.

Most participants expressed perspectives along the lines of 'Mental health training has come a long way, but it still has a long way to go,' pointing out issues such as inconsistent access and the need for proactive and widespread change. A few participants observed that the self-paced online module format of the BOS training needed amendments because they saw a coworker flipping through the content as rapidly as their devices would allow. They suggested incorporating knowledge tests, minimum allotted times, and engagement incentives into that format of the program. The BOS online modules increased accessibility for frontline workers across Canada, but important aspects of the program, such as the facilitated group therapy, were unfortunately lost, which disappointed several participants.

Participants recommended the normalization of mental health training in frontline workplaces and in society more broadly. They advocated for advancing mental health skill development when one is not in crisis so that these practices can become less alien and more second nature. Many PSP participants mentioned that their job sectors tend to draw action-oriented people, inferring that training strategies should be tailored for that audience. Paramedics and HCW with medical backgrounds were more likely to enjoy anatomical, physiological, and neuroscientific explanations of stress responses than other frontline workers. Firefighter participants tended to suggest keeping training materials to more straight-forward

bullet points or flowcharts. Participants thought that most PSP have not completed post-secondary education and were not accustomed to sitting for long lectures. Participants highlighted that mental health information disseminated by people who have a solid reputation and credibility in their organizations amplified potential impact; they referred to PSP and HCW with years of frontlines experience and leadership skills, as well as therapists with special expertise and experience in frontlines work.

A few participants had integrated further learning from self-study, going back to school, attending therapy sessions, educational opportunities for peer supporters, or the Road to Mental Readiness (R2MR) two-hour session that teaches "tactical breathing, mental rehearsal, goal setting, self-talk, and attention control" (CIPSRT, 2023, p. 1). This police officer exemplified the higher end of the spectrum of mental health training and personal investment:

> I'm one of our peer-to-peer advisors, so I've done some training through that. The Mental Health First Aid course I've taken; ASIST [applied suicide intervention skills training], Road to Mental Health Readiness, and I recently took the Train the Trainer course for that as well. I've done a bit of reading of some of the different books on this type of stuff, like *The Body Keeps the Score* and starting to read *The Window of Tolerance*. (Participant 39)

For participants who taught others, such as peer supporters, wellness committee members, mentors, and corrections officers (who are increasingly responsible for educational interventions in prisons; CBC, 2014; Ricciardelli et al., 2019), mental health training validated and solidified knowledge and skills they share with others. Mental health training was felt to empower people to make a difference in their own lives; it can lead to help seeking, and it can foster 'a growth mindset' (i.e., Participant 1).

Mental health training helped participants in their relationships with loved ones (e.g., ‘I have more compassion for my spouse who is also a police officer’; ‘my wife and I recognized we are both anxious and more likely to fight right before a shift’; ‘I decided to tell my wife how I was feeling’). Access to mental health knowledge helped participants nurture their marriages and better manage their home lives. Many spoke about how training was key to validating their experiences, and in turn, reducing self-stigmatization. Participants were grateful for non-accusatory terminology, such as ‘stress injury,’ which helps to distance the locus of blame from the individual. Participants cited that practicing mental exercises (e.g., using the five sense tools, tactical breathing, meditation) and learning about cognitive distortions (e.g., ‘I thought I was having a heart attack, but it was anxiety’; ‘I thought I was broken but I was chronically stressed’) felt monumental in improving mental health. Participants were generally keen to expand their mental health literacy and skills, open to anything that might help.

Self: Agency in Healing

The role of the self and agency emerged from the data as an important aspect of supporting recovery from and recovery with mental health challenges. When sharing his reasons for participating in mental health training, this firefighter expressed: “I needed the help. I'm a believer that it's up to us to help ourselves, too. And I felt this was a way to helping myself” (Participant 18).

According to current study participants, mental health training focuses on individual-level agential capacities. One Indigenous woman working in correctional services offered this as a key realization: “We have autonomy to do our own healing” (Participant 14). Regarding empowering the individual in their own mental health, a paramedic-turned-manager described his perspective:

> I try to! Like people, staff, unfortunately don't believe looking after themselves is their job. They believe it's management's responsibility to take care of them, but once they leave work, we can't − we don't make those choices that they decide to make. (Participant 15)

Participant 15 elaborated on his frustration that there was little he could do to prevent his staff members from overusing alcohol or substances, from not eating properly or getting enough sleep, or any other component of physical and mental fitness outside of work hours. Participants reported that while some detachments and units have paid time allotted for workouts or fitness facilities on-site, many do not. As discussed in the previous chapter, some workers struggle to get adequate breaks and nutrition during a work shift, which is arguably controllable by management and leadership.

Some participants were a little more advanced than others in their understandings of trauma- and violence-informed approaches to self, and what these could mean for practicing agency and self-compassion. Participants pointed out that there was a great deal of nuance to an individual's needs when navigating recovery pathways. For participants with histories of childhood abuse, boundaries between perpetrator (or person with agency) and victim (or person with little-to-no agency) agency may be especially blurred; when the child was dependent on the adult to survive, helplessness was reinforced, troubling sense of self and sense of agency (Herman, 2023; Lahav et al., 2025). Participant 30 advocated for offering trauma-informed choices that supported people who were trying to expand their sense of agency:

> I just − being aware of trauma… A lot of people with trauma lose their boundaries a bit, and their ability to… their sense of agency. So, it's good to realize that a little softer approach is sometimes a little better for those people. (Participant 30)

One example this participant gave was organizations' offering trauma-informed yoga classes in which the teacher provides more choices and accommodations for people to practice ownership of and autonomy over their own bodies.

Complexities involving dependency and autonomy can interact with work relationships that may elicit responses based on workers' experienced parallels between family of origin and 'work families' or asymmetrical power dynamics reproduced in workplace hierarchies (Lewis, 2012; Stollberger et al., 2022). Workers who are dependent on their employer with few other options for livelihood to survive have less mental health autonomy and can be destabilized by inappropriate work conditions (Lewis, 2012; Stollberger et al., 2022). Some participants wanted to see a progression toward trauma-informed approaches to frontline work that offer the individual more meaningful autonomy and control. Rather than enforcing a 'one size fits all' approach, this direction would join in the momentum of the reimagining of work more broadly in contemporary Canada, a phenomenon that is already happening in many job sectors, as propelled by the COVID-19 pandemic, technological developments, and other societal and environmental factors (Collins, 2019; Mukhopadhyah, 2024).

The individual is an important site for agency, including deciding they are ready for help-seeking, and choosing what kind of help they want (Herman, 2023; Enns, 2018). This registered nurse added:

> Being ready to deal with your own traumas is entirely different than wanting to do it, which is tricky. I think my personality type is that, it's like, 'Give me the booklet. I'll do the booklet. I'll cure my trauma, and we'll carry on.' But that's obviously not how that works. (Participant 23)

Participant 23 expressed her desire to think her way out of traumatic responses, and to have

someone just show her the straight-forward ‘steps a, b, and c’ to recovery. External supports are crucial, but she reiterated the importance of self-compassion, patience, and agency: “But again, it's one of those things that you can only do for yourself” (Participant 23). This and other participants struggled against learned helplessness perpetuated by her lack of power over policies which profoundly impact her work life. To resist this sense of helplessness as much as was within her power, she expounded: “If you deal with your personal traumas, your work traumas won't feel like they’re such a burden” (Participant 23). Some participants verbalized that while psychologically traumatized people may have difficulty in setting and maintaining boundaries, practicing autonomy when and where possible can help to reverse a victim mentality and to foster a sense of agency and of belonging to oneself.

Self: Developing Self-Awareness, Self-Compassion, and Self-Care Practices

Participants spoke about the need to learn how to tune into their basic physical, emotional, and psychological needs. Though the term ‘self-care’ was sometimes interpreted by participants or their colleagues as too ‘New Agey’ or suspect regarding predatory opportunists in the wellness industry, for some participants it was just about recovering the self and ability to function well. This sensibility was highlighted by participants many times as an important differentiation of machines and humans, the latter with needs such as taking breaks to go to the bathroom, to eat, or to sit down for a few minutes. Participants reported that basic needs were frequently discounted and ignored. On a busy shift at the hospital, for example, nurses may not get any breaks, and this was similarly the case with first responder participants. As one nurse described the phenomenon and her struggle for self-awareness and self-care:

> There is an infinite amount of work to do that you could literally work until you were dead, and no one would be like, ‘Oh, she really should have gone to the bathroom more.’

> You are just doing it because you are feeling this pull of the constant grind of the call. It's hard to do self assessments. […] I need to prioritize when I need to go to the bathroom, which sounds so ridiculous that we would have to prioritize that. […] But it was one of those things that you're just like, 'I have to pee, but I'll do it after I do these three things.' And then, an hour later, you are dancing because you're like, 'If I don't go now, I will literally pee in my pants.' No one ever said that that was an expectation of doing this job. […] The same with I feel hungry right now. I need to stop what I'm doing, and I need to go get a snack. I just need to pee first, or I just need to sit down for two seconds and have a glass of water. (Participant 23)

Participant 23 described an inner process of developing resistance to the pervasive, systemic, and cultural workplace norms that otherwise perpetuate the behaviour of ignoring basic needs as the default. She felt this required rewiring through self-care practices which need to be supported across and through organizations. Many participants described feeling over-stressed and overwrought, realities that were exacerbated during the pandemic when taking regular breaks was even less likely. When talking about this issue, a corrections officer remarked: "Those days seem to all happen at the same time when I've not eaten or not slept or then I've had a stressful day" (Participant 14). Participants would sometimes plea with family members to accept them at their worst, as an extension of their own self-compassion practice. This participant expressed that she could not always be 'a perfect mother', especially when enduring hunger, fatigue, and stress, modeling self-acceptance for her daughter:

> I'll say to my daughter, look I'm this type of person 80% of the time, maybe 85% of the time. And then I'm like that hangry person 15% [of the time], so you got to forgive that part of me, and just remember the 85%. (Participant 14)

One of her ways of coping with chronic work stress was to go to bed early. When she was exhausted physically, mentally, and emotionally, she would hit a wall when she came home from work. She would tell her family: “I'm going to rest. I'm going to put this day to bed. I'm done with it” (Participant 14).

Participants listed several self-care practices that helped them, including going to bed early, taking extra time on the way home to decompress from work, initiating 15-minute breaks from parenting when home, meditation exercises (e.g., body scan, progressive muscle relaxation, visualization, intentional breathing, meditations videos), working out, visiting friends, and going for massage therapy. Participants found that active relaxation techniques were important and distinct from passive forms of relaxation.

One peer supporter highlighted how language choices could help to ensure acceptability, such as using ‘tactical breathing’ exercises: “It's called ‘tactical breathing’ because the word ‘tactical’ seems to make it more meaningful to or acceptable to frontline workers, as another way to tuning into body signals” (Participant 22). He was referring to a breathing exercise consisting of intentionally inhaling for four seconds, holding one’s breath for four seconds, exhaling for four seconds, holding one’s breath for another four seconds, then continuing with this pattern; it also gets called ‘square breathing’ or ‘box breathing’ (Röttger et al., 2021). This exercise serves to slow the heart rate and to calm racing thoughts, as well as to lower blood pressure (Röttger et al., 2021). The breath is a key element because it bridges two domains: 1) the unconscious and the involuntary functions of the parasympathetic nervous system; and, 2) the conscious and the voluntary functions of the sympathetic nervous system (Röttger et al., 2021; Wright, 2018). A person can breathe intentionally or leave it to the involuntarily function that is always occurring throughout life, whether we are awake or asleep, aware or unaware

(Röttger et al., 2021; Wright, 2018). Breathing with awareness counters numbing and dissociation from the body and self (Röttger et al., 2021; Wright, 2018). For Participant 30, this was critical for mental health: “I would say recognizing ways to find time to feel what's going on in your body and realizing that's probably the most important thing you can do for yourself.”

Participants commented that tuning into their physical sensations was beneficial for self-assessing and managing their needs, including self-prescribing physical exercise. As this participant expressed:

> [It’s] sensory in that respect because your body is stuck in that position where it literally thinks you're going to die. So, you freeze up. And you have to get your nervous system to realize that. Because you can tell your body all day with your mind, ‘Yeah, I'm safe, I’m safe, I’m safe.’ It doesn't matter. Your body's in control at that point, because it's the most primitive reaction. (Participant 30)

Participant 30 passionately advocated for teaching frontline workers about the technique of self-assessing heart rate variability.

> Heartrate variability is actually a really good tool. And a lot of EMS practitioners would probably be really interested because it's a scientific method. […] Many EMS practitioners I know have sat monitors on their babies and stuff. […] It's not like you have to do an hour of yoga every day. Do this for 5 minutes, this is going to help you decompress. I do heart rate variability because there's a lot of like medical benefits to it in the long run, especially if we have like childhood trauma issues. (Participant 30)

He imparted that increasing awareness of this technique in frontline workers could help them to self-assess fight or flight mode activation thus motivate them to “hit the treadmill for ten minutes” (Participant 30). For the freeze response, his advice was different. He suggested

soothing sensory inputs to return to a state of balance, such as heat blankets, saunas, baths, massage, or other forms of sensory relaxation; these methods demonstrate to the body that there is no threat present and so it is safe to let go of fear and come out of hiding. This participant elaborated on his strategies to counter the freeze response:

> Stretching, push on the wall, stretch out your arms. Because you want to make yourself bigger. Because what do you do when you go into a freeze response? You want to get smaller… So, you want to make yourself feel bigger. (Participant 30)

Participants described how intentionally navigating involuntary physiological responses was self-empowering and an important form of self-therapy.

Some participants mentioned that their wellness committees were working on bringing more self-care classes (e.g., yoga, nutrition) into their workplaces. Making classes accessible to everyone was impeded by varying shift work and on-call schedules; nevertheless, participants felt the efforts improved workplace culture and learning around self-awareness and self-care. Some participants stressed that while self-care was a substantial portion of the work at hand, they sometimes urgently needed an external voice coaching them. An external coaching voice can help to direct participants through particularly difficult episodes, such as a panic attacks, intrusive thoughts, or suicidal ideation.

Participants commented that self-awareness practices helped them to understand their own limitations, such as fluctuating emotional bandwidth (e.g., windows of tolerance, capacity for caring), which they were able to make peace with through self-compassion practices. Some participants discussed coming to accept psychologically traumatizing events and difficult feelings, such as guilt, shame, self-admonishment, and self-hatred, by learning compassionate self-talk. Participant 37, for example, shared what shifted the most for him on his journey to

self-acceptance: “I think just understanding what happened in the moment and being able to step back and say, ‘Okay, I have no control over what happened. I can’t change the things that happened.’” Some participants suggested that mental health could be better supported with a more fulsome understanding (including the outcomes) of an emergency that they responded to. The same participants were left perennially questioning what happened and their own role in events, potentiating psychological injuries.

Spirituality and Philosophies of Life and Death

Spirituality emerged as an important source of support among current study participants. For some participants spirituality was foundational for mental and holistic health. Dealing with sickness, injuries, and death is a substantial component of PSP and HCW work, lending to how spiritual, philosophical, and existential matters were important to participants’ mental health and wellness. Participants’ spiritualities were not necessarily based in formal religions, and they described spirituality as pertaining to seeking and finding meaning, higher purpose, personal growth, experiences of an uncanny and nonpareil quality, and anything contributing to wholeness and well-being. Some participants were wanting more spiritual and philosophical guidance for existential dilemmas, such as how to make sense of the violence and death witnessed at work.

A police officer who had worked in different countries and types of departments offered his experiences of spirituality being a force for nurturing humility and human connection. He invoked spirituality when he mentored younger officers, for example:

> When I’m talking to junior officers, in a mentoring role, I quite often say, ‘Know that people aren't born bad.’ They're a product of their environment. […] And but for the Grace of God, any of us, if you were born into this circumstance, you'd be acting like a

> dick too right now. (Participant 36)

He imparted that one of the primary tools that he relied on when discussing mental health with clients was a model from Gilmartin's book entitled, *Emotional Survival for Law Enforcement*: *A Guide for Officers and their Families*. Gilmartin's model depicts a wheel with 'sense of self' as the axis and spokes leading to several aspects of selfhood, such as spirituality, culture, values, beliefs, goals, family, friends, fitness, personal interests, and so on, which is customizable to each individual's attributes (Gilmartin, 2021, p. 91). Gilmartin (2021) posits multiple dimensions of the self outside of the role of worker; the worker role is just one spoke and cannot singularly hold or balance the wheel. Unidimensional identification with policing is common and potentiates mental health risks (Gilmartin, 2021). Participant 36 described:

> Balancing the wheel. […] All the spokes have to be the same length, otherwise your wheel doesn't run very well, and invariably ends up at the ditch at the side of the road. Spokes being friends, family, diet, exercise, some kind of spiritual shit. It doesn't have to be religious. It could be finding peace, walk in the forest, and meditating, and I think a lot of people can relate to that, as opposed to […] official religion. (Participant 36)

Participant 36, a law enforcement officer specializing in mental health crises on university campuses, drew on spirituality and this teaching tool for suicide prevention and response calls, one of his regularly occurring work tasks. Participant 36 wished he had had access to such knowledge when starting his career in the 1980s because he found Gilmartin's work life changing. The following story exemplified his point:

> One guy actually called me up after our interaction, months later, and basically told me that I saved his life because he was intending on ending his life. And if it wasn't for me drawing out Kevin Gilmartin's 'Wheel of Balancing' friends, family, diet, exercise, and

> some kind of spirituality… And he told me that he was existing every day, he was on methadone, so he was off the heroin. He got, he saw, this somewhat limited custody of his children. He had employment and housing. So, it was really neat, him literally called me in tears to thank me. (Participant 36)

There were participants who found themselves in this type of mentorship role, though never formally trained for it. The work of processing psychological trauma had spiritual significance for some participants, as did the work of the helping others in turn. Participants who spoke of having mentors that helped guide them in spiritual matters which meant a great deal to them throughout their lives. A few participants indicated that they were exposed to death early in childhood and that healthy grieving was modelled in a way that integrated death as a natural part of life. They were able to accept that 'God's plans' for life and death are beyond rational understanding, and they drew on these foundations in their work in frontlines organizations.

In terms of making sense of death, many participants did grapple with their role and influence in life-or-death situations and philosophy on death. Participants asked existential questions about how one carries on in contexts of chronic human suffering, such as this firefighter: "Are some people naturally better able to like, justify nature's cruelties in their own heads, or what? Or is that something that you learn?" (Participant 38). Participant 38 went on to wrestle with whether spiritual, philosophical, and existential strengthening is teachable from an organization's standpoint, and if raising people's awareness of their own core beliefs could be helpful in shifting workplace culture. Participants discussed ideas such as developing organizations to be more transparent during the recruitment and screening stages about the prevalence of PPTE, and the need for moral, spiritual, and philosophical care as a form of

‘personal protective equipment.’ Another idea was to incorporate a reflexive exercise for new recruits of taking inventory of experience with trauma and dead bodies. As this participant emphasized: “It's not just dead bodies. It's human suffering” (Participant 38). Other participants described death as a predominant theme. I thought this participant was alluding to the suffering of people on the scene of a bad call whose loved ones had just died, but he replied: “The ones [calls] that no one even died are almost worse, depending on what it was that happened” (Participant 38). Spiritual counseling and mentorship around human suffering may be called for in many types of PPTE, not only in those resulting in death.

A seasoned paramedic who often finds himself in mentorship roles, brought his matter-of-fact perspective on death:

> A lot of people say, ‘Oh, you’re old school, and you just think you're a hero already.’ The whole stoic thing. I don't. I look at the reason I got in into the business was because I wanted to help people. Unfortunately, you can't help everybody, you can't save everybody, and it's one of those things. You do the best you can. And if, unfortunately, whether you're old or young, I don't know why you have to die, but − they do. And it's one of those −. It's the circle of life. And everybody has their time and place here. And yeah, it sucks. (Participant 15)

Participant 15 attributed his straight-forward perspective to being grounded in his faith and spirituality. In his worldview, a higher power has control of life and death far beyond what humans can typically see or understand. He reflected: “I believe in God. I believe in − everybody has it, you only have so much time here. And some are longer than others” (Participant 15). He shared some personal experiences of the deaths of loved ones in his early years, and how he was coached to accept his humanly limitations on fulsome perception and all-

knowing, as a self-kindness: “I learned this from a funeral director years ago, and he said, ‘You never asked the reason why.’ Because if you do, if you ask that question, if you go home and think ‘Why?!’ You'll just beat yourself up” (Participant 15). He gave examples of questioning the purpose of infant deaths, of young deaths, and of tragedies involving whole families.

Though this questioning felt inevitable for participants who experienced emotion and empathy more readily, ruminating on the purpose behind such events simply is not helpful, in his experience. He went on to say that he actively stops himself from reflecting: “I may look at it briefly, but then I just shut it, shut it off (Participant 15). The capacity to ‘shut it off’ is notable – reminiscent of the functional disconnect in the FDFR technique − and links to his faith in a higher spiritual authority. Participants with faith-based foundations found spiritual, existential, and philosophical guidance and supports around death, violence, and different types of PPTE. There remained some questions for participants like Participant 15, though, about the possibility of denial of emotion as a coping mechanism that can veer into the territory of dissociation and alexithymia, the nuances of which would need to be explored carefully within a therapeutic relationship and space.

One factor related to spirituality in frontline worker mental health was the original intention that brought participants to their line of work in the first place. This intention is connected to participants’ sense of purpose in life, in their communities, and in society. One participant with insight on this was a spiritual care provider for law enforcement organizations. He relayed: “I do see a difference with those who have altruistic wiring or motives” (Participant 20). According to him, people who are wired or nurtured to be more altruistic in their work were eventually better off with respect to mental, emotional, social, and spiritual health. Such persons tended to be more caring to other members of their force and build stronger social support

networks. He elaborated on how the motivation needed to be deeper than superficial attachments to the kinds of things that are glorified in movies and shows about police officers. He underscored some altruism as necessary: “Once the shine of being a police officer wears off, then if you don't know why you're doing this, because those kinds of rewards, they sort of taper off after the first five years” (Participant 20). He described what it was he saw in those who were doing better longitudinally:

> It’s often faith, whether it's an organized faith, or something that somebody’s doing personally, you can point a person to being ‘others minded.’ […] It also really helps with teamwork, because it matters to you how your fellow member does and vice versa. And if that's not there, it's a big obstacle for people getting help before they need it because they end up being more isolated. (Participant 20)

Following this line of thinking, these attributes could be useful for organizations to inquire about more meaningfully at recruitment and screening stages, as well as to analyze in relation to workforce sustainability and job satisfaction. A firefighter remarked:

> You become aware of what everyone's priorities. It's like, ‘Why did you sign up to be a firefighter?’ And then you understand some people signed up for reasons that maybe aren't as admirable as others. […] If you don't have a mentality for what you do −. Some people, they look at firefighting almost as like, ‘This is awesome. We can watch hockey. We can work out. We can do all this fun stuff.’ But then they don't consider, you might die, terrible things happen constantly. […] But then, if you come in with too much of that, you’re kind of a downer in the group, right? So, it's finding that spot you fit in is, it can be very difficult, depending on all − and the variables are too much to count − the mentality of your specific group. (Participant 38)

Social class background and geography can limit occupational agency; some participants lived rurally with limited job options other than in correctional institutions. One corrections officer wished he had more job opportunities but felt stuck in a traumatizing job with few transferable skills. He remarked that he distrusted many of the people at work, as well as the processes that led them there:

> Some of them have no intention of staying there for any length of time. They haven't got the brains to see what they're getting into. They think it's all a big joke. They think it's cool because they get to go around in a uniform with a can of pepper spray, and all this stuff, and they get to carry a gun sometimes, and they got the knuckle dragging goon mentality. Not everybody is like that. Not all of the new hires are like that. But there's enough of them. (Participant 40)

In the contrasting example this participant gave, the job motivation is clearly not a sense of altruism or spirituality.[1]

Peer-Based Supports

Peer support tends to be organized through groups that are national and independent or at arms-length from the frontline workers employing agency, though some are organized within specific workplaces (Grenier et al., 2007; Poremski et al., 2022; Richardson et al., 2008). According to participants, if peer support is tied to reporting to the employing organization, it can negatively impact participant's level of trust, access, and disclosure. Peer support does, however, have an important role for mental health in frontline workers (Grenier et al., 2007;

[1] There was Indigenous-specific examples of spiritual and philosophical orientations that support frontline workers; these are discussed in the Indigenous section of Chapter 6 with the intention of making it easy for any readers who may wish to focus on Indigenous populations in a more streamlined fashion.

Poremski et al., 2022; Richardson et al., 2008). Participants indicated typically turning to peers for help more readily than they would turn to a superior.

Some examples of national, independent, peer support organizations that participants accessed or worked with (some participants were peer supporters or trainers themselves) include Wounded Warriors, Boots on the Ground, and Badge of Life Canada. There are other organizations that have trained and certified peer supporters who, alongside mental health professionals, check on people after a critical incident (Grenier et al., 2007; Poremski et al., 2022; Richardson et al., 2008). Otherwise, this type of work (i.e., checking on colleagues with potential psychological injuries or PTSD) falls to informal volunteers or wellness committee members, including several participants who fall into these categories. One woman who was a member of a newly developed wellness committee in a hectic police department in a large urban center explained:

> We do a lot of peer supporting at work. We often are talking and interacting with people every day, all day at work, and then also checking in with people after a major incidence. I'll talk to somebody the day after a distressing event. I like to give them the things to look for, what's normal, what's not normal, a week from now, two weeks from now. We're trying, slowly but surely trying, to improve the communication, improve the conversation, and reduce the stigma. We're definitely trying. But these things seemingly take a long time. (Participant 5)

Participants shared that these types of employee wellness initiatives are often coming from workers themselves who champion mental and physical health and well-being. Another woman police officer in a similar context differentiated her efforts from the governmental health-related regulations: “Every division has to have the Health and Safety. It's regulated by the ministry.

But what we're trying to do [is] focus on is people's wellness, so mental health and physical health" (Participant 6). Participants felt such work positively impacts workforce culture and sustainability and should be sponsored by wise organizations.

There are important sources of informal peer supports too, such as participants who are open with their own struggles, who get approached and asked for help from colleagues. As exemplified by an advanced care paramedic:

> Even though I am not peer support like one of the 'peer members,' I have been the person that ends up having a lot of conversations with people. I don't know. I have a lot of strong relationships with people at work, good relationships, so, it just ends up by default. (Participant 7)

A firefighter near retirement similarly ended up in informal support roles despite not officially being trained and designated a peer supporter:

> Yeah, so frustrating − you want to help. But there's nothing you can do a lot of times other than be there to support them. I've met with numerous members one-on-one. I'll invite them over, we'll sit on my patio, or in the living room, and just talk. They talk, I listen. […] I think it helps you alleviate that a little bit to be able to know that you've been able to give them a respite, for however long that is. (Participant 8)

Participants described how informal conversations and checking in on people are an important mental health support and resource, part of the invisible work in and for the social fabric of the organization. The hierarchical structure of public safety and healthcare organizations means that the term 'peer' was sometimes loosely defined by participants and could include someone who is technically a superior if: 1) they worked closely with their team; 2) were relatable and accessible; and, 3) had useful resources and knowledge to impart. One

participant described his approach on informal peer support networks in firefighting:

> I'm an officer in our department, and so I have a new person on my crew. This was his first suicide that he's had to go to. […] We just sat down afterwards and talked through the incident that we just had, and asked him how he's doing and stuff, and basically said that he needs to – 'You have any –, you can't sleep, or you need to talk about it, just come and get me. Phone me, phone me on my days off, it's okay.' So, we look out for each other in that sense. (Participant 25)

Some participants had a mentor, a peer, a leader, or someone else that they could look up to or feel safe opening up to, but many did not. Participants also explained that having time to talk with peers for processing and wellness was not institutionally embedded, nor understood as a part of recovery, collective well-being, and retaining employees.

One participant reminisced about when they had alcohol in the firehall to help workers decompress after a bad call, saying: "It was very common after a shitty call you'd see them sit down and have a beer, and really talk about it. But when they took that alcohol out, people went home" (Participant 33). He found that this exacerbated isolation and stigma. While admitting that aspects of that practice were indeed problematic, he explained that sharing alcohol provided a socially and culturally acceptable time and space for talking about mental health that was otherwise stigmatized. When the need arises, he takes his crew and buys them one round of beer (he emphasized the singular) to informally debrief in the back of a bar; he said the informal debriefing works because "it's non-confrontational" (Participant 33). He and many others discussed the difficulty that presents for the lone person who struggles to find support, and the possible benefits if they know that even just one other coworker 'gets it.' Participants who acted as informal coworker supporters often felt a sense of satisfaction and purpose in being the one

who can have difficult conversations about mental health. Participants reported tremendous potential in peer validation toward deconstructing stigma through informal discussions.

Participants also described formalized 'peer support members' of organized agencies, often with more training and resources than exist for coworkers helping one another informally. This police officer described one such agency (i.e., Badge of Life) and his involvement:

> It's a non-profit charity for first responders that has doctors and social workers and stuff, […] for their families as well. Because we go through shit at work and then when they bring it home and dump it on our family and then they have to deal with it. […] So, being involved in that, and having a better understanding of the occupational stress, they'll ask me to interact with my peers, and recognize things that they may be dealing with, and use the terminology to express to them, what they may be going through, or also other options to help them. (Participant 3)

Participants explained that peer supporters can provide a degree of comfort in the knowing that they have been through difficult mental health journeys themselves. Comparatively, the structure around mental health provider to client relationships serves to maintain power differentials that are less likely to exist among peers (Grenier et al., 2007; McAleavey & Castonguay, 2015; Poremski et al., 2022; Richardson et al., 2008). A clinician without lived experience or appropriately disclosed lived experience can be perceived as more intimidating than a peer (Grenier et al., 2007; McAleavey & Castonguay, 2015; Poremski et al., 2022; Richardson et al., 2008). Participants explained that the formal peer support role includes providing informational and moral support, flagging those who may need professional help, helping people find appropriate practitioners and support groups, and destigmatizing associated processes. Participant 39 stated:

> The peer-to-peer advisor role is, you're not a clinician, you're kind of a referral agent and somebody who will listen to people […to] see how severe a person's illness might be, so that you can have a better sense of urgency on where somebody's at. (Participant 39)

Participants reported that peer support can help to fill gaps where informed and supportive family and community may be missing. Participant 33, for example, came from a family of PSP and HCW who, when he was first practicing, would sit around their kitchen table talking openly about their experiences.

> That's where I get some of my passion comes forward with the trust piece. For years […] we were able to talk very openly and had no worries about trust. So, I didn't see that early on in my career being an issue. (Participant 33)

Moving away from his home, family, and that support system was eye-opening for him.

> I didn't have that support there anymore, and then I started to see the breakdown in the stations where, 'Hey, let's talk about this.' And nobody saying anything. And I'm like, 'Well, what if we're sitting around the kitchen table, you guys would talk openly.' And then really dialing in, 'Okay, what's the issue?' And it comes down to *trust*. (Participant 33)

The original intention of peer support, as understood by participants, was to provide a safe outlet for people. A few participants mentioned not trusting or confiding in formally designated peer supporters at their work, distrusting either the specific individual or perceiving mandatory reporting mechanisms threatened their employment if disclosing workplace mental health challenges. Participating corrections officers and police officers living with psychological injuries tended to feel that there was no safe space in their workplaces to talk about mental health, and that they could not trust people at work (even if maybe they were trustworthy

outside of the workplace), in part due to the systemic use of surveillance and punitive re-assignments. One corrections officer exemplified:

> I find stuff like this [BOS program] where I can share things, where it's a safe place to share, helps. Not through work. No. […] I'm not comfortable sharing a lot of stuff at work because I don't know who I can trust. (Participant 40)

The workplace is often associated with the PPTE, occurring within a hierarchy with notable power differentials, meaning psychological safety is not a given particularly for sensitive situations, such as disclosing mental health challenges. Participants also described other important factors, including the personality, the reputation, and the qualifications of the peer supporter, as well as how the peer supporter is mandated to behave and report. This law enforcement officer stated about peer supporters at her workplace:

> They're just a police officer. It's in the Employee Assistance Program or something, they've done a course. But what a lot of members don't like is that the peer support people, to show that, they have to document when they talk to people. So, people are like, 'Well, I don't want it to be written down anywhere that somebody talked to me.' Because as much as they like to say that they don't like people to lose out on jobs − I was a part of ERT, which is the emergency response team, and I had my job taken away because they changed the policy and said anyone diagnosed with PTSD can no longer have this position. So, lots of members don't want to still come forward, like it's − I know they say, 'Oh, that's old stigma.' But it's not. It's still very much a thing. (Participant 31)

Participants also noted that the RCMP peer-to-peer support could be improved because, while there is a posted phone number one can call and reach an officer who understands the job, they

do not have any previous connection or relationship; further, this system relies completely on the person who is struggling to reach out for help.

Despite barriers and challenges participants reported, peer support – in its various types and manifestations – remained an important support for frontline workers' mental health. One of the preferred techniques for helping coworkers was upheld by a spiritual care provider for PSP:

> The most positive model I've seen […] trained fellow firefighters on checking in with each other, and what it should look like. A good model of, coming in intellectually, getting down to the heart, and back out intellectually on the other side in a fairly short time, ten or fifteen minutes. And I think that ultimately would be great to have that kind of culture where team members are − I think it's maybe most natural with firefighters because they think of themselves as, well, we get each other out of the building. (Participant 20)

Firefighter participants typically described a strong sense of being a team or even pseudo-family, getting each other out of burning buildings by working together. A preferred model of peer support may best be tailored by job category or workplace (Grenier et al., 2007; McAleavey & Castonguay, 2015; Poremski et al., 2022; Richardson et al., 2008). Regardless of these and other nuances, it was clear from participants that developing peer support practices can foster how frontline workers can 'have each others' backs' as a critical avenue for mental health and well-being.

Debriefing Practices

Participants discussed a form of support that can be delivered internal to or in cooperation with employing organizations, namely the practice of debriefing critical incidents (or PPTE of any level of severity). Informal debriefing may happen for some workers via peer

support or with a spouse after work, but there was often no comprehensive system in most participants' workplaces. Several participants reflected on how to best normalize and carry out psychologically helpful practices that cover entire groups of workers, such as the Critical Incident Stress Management (CISM) models of debriefing (longer, more formal) and defusing (shorter, less formal). Where they exist, these processes can facilitate workers' access to professional support and peer support situated within and resourced by the organization (Hawker et al., 2011). The benefits that participants mentioned included reviewing how events interacted with protocols, validating feelings and actions, and helping settle racing thoughts that would otherwise be stuck in ruminating and second guessing.

Participants indicated that debriefing is often not carried out, and this is due to perceived lack of capacity, time constraints, and logistical reasons. From one fire captain's perspective, debriefing after events can feel "like herding cats" (Participant 25). He elaborated that after a call, volunteer rural firefighters return directly back to their regular jobs and may not see each other again for weeks. Debriefing often does not happen for police, according to participants. When asked if this was due to legal complexities, this officer responded:

> I think using the word 'complexities' is probably fair. In reality, I don't think it's legal. I think it's the optic complexities. […] In our jurisdiction we have body-worn cameras, so it's all on camera anyway, but we've certainly seen in other jurisdictions where you get 'justice warriors' that will say, 'Well, you guys all got together before courts, and you had a conversation around it.' (Participant 10)

'Social justice warrior' was originally a neutral or complimentary turn of phrase when it emerged as a descriptor in print media in the 1990s, but its meaning changed via online political debate; it became co-opted by alt-right and right-wing thinkers as a derogatory term used to

dismiss left-wing individuals for overly-enthusiastically promoting human rights and equity on internet platforms anonymously and without ‘real skin in the game’ (Cambridge Dictionary, 2024). This participant argued:

> Critical incident debriefs aren’t to talk about the actual incident, like we're not talking about the tactics of the incident. We're talking about all those other things that quite frankly, many of us would share, but it isn't something that we do right now in a meaningful way. (Participant 10)

The above excerpt indicates that these are clear delineations about what exactly gets discussed or not in a debriefing, which may or may not be the case depending in part on the facilitation, protocols, and accountability measures (Hawker et al., 2011; Pasciak & Kelley, 2013). The same excerpt infers worker mental health is placed in competition for priority with justice for victims of police brutality or misuse of power. There are criticisms of the culture of police fraternization, including upholding special protection and secrecy for ‘brothers in blue;’ for example, Faltas (2020) evidenced longitudinal patterns of police departments not investigating citizens’ allegations of misuse and abuse of police power. Participants were unclear whether debriefing can be separated from this entanglement in policing and other frontline work (e.g., fatal medical errors), and important surrounding concerns remain unanswered for.

There was some participant disagreement over the best practices in debriefing, as well as whether the way it is being conducted currently it is helpful or harmful. Participant 13, a corrections officer, stated that the debriefing process could add psychological stress to an already difficult event. She outlined several issues with the processes that are mandated to occur after certain types of PPTE in corrections:

> Let's say a suicide attempt, I go in, I do first aid, I talk to the offender. And then we have

> to write reports, and management is very, very hard on us. We have to write this report. And then CISM comes, and your brain is not ready to deal with any of this. I actually need it the next day or the day after. The follow-up is not really good. We should be asked, given the option if we want to go home, and quite often that's not allowed because then they have to call in overtime. And of course, it costs the institution. (Participant 13)

Participants reported that rather than provide workers the option of going home to take rest, to process the PPTE, to seek help, or to do self-care, organizations often expect them to continue to work, risking having them respond to more than one critical incidence on the same shift. Participant 13 elaborated:

> I have witnessed [specific number of] murders. […] I was not sent home. I was not asked if I want to go home. An hour later I had to respond to another incident, and I had not even done CISM for the first incident. […] After that, sure, we had CISM, and then it was basically, 'You, go back on post.' It's more a nuisance at that time. They say, 'Hey, the CISM team is to here, and they want to talk to you.' It's just − this is not just me, this is many officers say − it's just like, 'Oh my god! What do you want right now? I can't talk to you!' But this is how this is being worked. You are not being really − you have no breather. I'm exhausted, […] and I really had no time to work through it. (Participant 13)

Participants found it taxing to deal with both the onerous paperwork that directly follows a PPTE, then the CISM debriefing which risks becoming something of a personal assessment or performance review, as opposed to genuine psychological support for the worker. Participants advised that they need time to process PPTE but that there was no 'one size fits all' method. Some participants wished that more follow-ups would instead be provided the next day, then a

few days later, then the following week.

Participant 38, a firefighter, described a recent event in which he had interrupted extreme violence in a civilian scene that went on for many hours. He reflected:

> They sent us home that day. Because they thought, 'Okay, well, these people are probably too rattled.' But they didn't really do anything to help our mental health. Just, 'Go home.' I think sometimes sending people home is worse […] if you're all alone. (Participant 38)

Participants vocalized that CISM debriefing was generally losing ground in several workplaces. Participants shared their understanding of what critiques are emerging from applied psychology scholarship, such as how some versions of debriefing may increase vicarious trauma exposure, that people may feel pressured to talk before they are ready (even without being required), and that debriefing groups have influence that can bring some potential harms. According to Participant 20: "They still do debriefings with RCMP and some of them go good, and some of them go really terrible, and not just from my point of view, but there's not a right way yet." Numerous different agencies provide their own variations of debriefing practices which may or may not maintain high fidelity to evidence-based versions of the intervention; further, sufficiency of the evidence in this area is highly contested (Feuer, 2021). Instructors of CISM defend the model and saying: 'Yeah, it seems like it's really helping' or 'Well, if it's causing problems, it's because you weren't doing it right' (Participant 20). The solution, according to some participants, is in creating stronger frameworks, rules of engagement, and careful process.

There were some participants who were very passionate that, if done right, debriefing could effectively improve entire teams of frontline workers' mental health synergistically and

efficiently. Participants pointed out there are very many different types of debriefings and underscored needing the right tool for the job. Types of debriefs can include one-on-one, team-based, and family-included sessions, with focused interventions, resilience-building, therapeutic sessions, and educational meetings (Feuer, 2021; Hawker et al., 2011). Some participants described large-scale debriefings that profoundly helped the group process emotions together.

One such participant attributed a lot of positive influence to the debriefing held in the aftermath of a mass shooting in which responding police officers were also killed: "Altogether probably a hundred people were involved in the trauma of that event, either on the day of the event or in the subsequent two or three days afterwards, investigating the scene and cleaning it up, and all of those things" (Participant 4). Without naming a specific preferred model, Participant 36, a police officer, said that there are ingredients for a great debrief:

> The power of group, and being authentic, and checking your ego at the door, and having somebody professional there in order to set the scene first, and ease into it, without it getting out of control − which it can do, and then setting the ground rules for, 'Please feel free to leave if you have to,' and […] exploring the reasons why everyone's there. (Participant 36)

Many participants emphasized high-quality facilitation by well-trained people was crucial. Participants reported that various stakeholders are currently in the process of trying to discern the best way forward with debriefing and cautioned against 'throwing out the baby with the bathwater,' unhappy to simply return to a culture of silent stoicism. Participant 39 explained how debriefing was still being refined to fit each situation: "It's different now. It's done just with the first responders on the ground, and it's done right away, as soon as it's safe to do so." He attributed some changes in public safety culture to debriefings and remarked on the need to

use the tools gained in debriefings in more aspects of work:

> You're like, 'That was a tough one' and 'How do you feel?' Somebody says, 'Well, I'm scared.' That's not language that we used to use before. So, I think that's a tool that we have to incorporate more into our daily work habits. (Participant 39)

Most participants indicated that public safety debriefs tended to exclude people in management or leadership positions to facilitate the workers' psychological safety and capacity for emotional vulnerability in the workplace. On the other hand, some participants who were in leadership positions advocated for more involvement, for example: "A debriefing or diffusing after an incident, oftentimes the leaders are left out of it. Because they want that peer-to-peer, not the leadership. […] You know what? When you're making those decisions at the top end, you're equally involved" (Participant 33). Participants reported that in hospital cultures, physicians tended to assume the role of leading a debrief after a PPTE, and that the interdisciplinary healthcare team debriefs also tended to reproduce hierarchal dynamics.

Regarding physicians facilitating debriefs, this trauma coordinator expressed:

> Our physicians are generally pretty good, but I think that plays a big role into who will speak up, and because some of them are a little bit less personable. […] People are still a bit shy to speak up. Plus, we try to include our whole team, right, so lab, RTs, x-ray, they're always a little bit less willing to chime in. (Participant 35)

She suggested that the charge nurse or a social worker may be better suited for facilitating debriefs. Working in a hospital trauma unit, she was actively advocating for more debriefing.

> I'm finding, with my team, debriefing is not really happening when we have a major incident. I mean, we deal with trauma all the time, but for those [more severe incidents], we've been trying to really pull our team together and do a quick debrief. (Participant

35)

Participants explained that while there are standard PPTE categories that should immediately prompt a debriefing in response, such as a pediatric death, a trauma team activation, or a hospital emergency code (e.g., a security breach, a bomb threat, an evacuation), sometimes the debriefing processes are needed for less major events, and the need can be hard to predict.

Healthcare participants described how some emergency departments were currently using the 'INFO model' of debriefing developed by Dr. Stuart Rose in the province of Alberta. They explained that the acronym 'INFO' stands for *I*mmediately after the event, *N*ot a personal assessment, *F*ast (ten to 15 minutes), and *O*pportunity to ask questions and clarify what happened (INFO Clinical Debriefing, 2024). Participants described the model as including all team members who were present for the event, regardless of job title, and as meant to be a rapid roundtable discussion about what went well, what did not go well, and what could have been done differently. Ideally in these cases, debriefing would also be team-building, to foster relationships between interdisciplinary team members and departments, and to provide more fulsome understanding of events and outcomes, which can support workers in finding closure, (INFO Clinical Debriefing, 2024). Participant 35 explained: "We're finding a lot of times with our trauma teams, for example, is half the team doesn't even know [the full picture of] what happened to the patient […] because you're so focused in on your individual task." Participants relayed that another intention of the INFO model is that it can lead to employee help-seeking or recommendations to the organization (e.g., replacing old equipment, purchasing higher quality supplies).

Participants said debriefing is not done consistently, and some wanted the practice embedded into the work culture much more deeply to support mental health, job satisfaction,

personal fulfillment, and retention efforts. As Participant 35 summarized: “We just do better as a team when we feel a bit more supported.”

Leadership, Management, and Policy

Several participants highlighted the importance of the role of leaders in authentically supporting mental health, from a captain setting a tone for their crew to an executive enacting policy impacting thousands of workers. Participants urged policy responses from leadership to ensure system-wide support for worker mental health, including regular breaks, debriefing practices, standards of prevention and treatment, medical leaves, reintegration, disability accommodations, retention, and lateral job transfer strategies.

Participants who were in leadership positions and who more genuinely invested in helping their crews imparted a number of strategies, including having an open-door policy, checking on members, and keeping conversations ongoing, over coffee or in the lunchroom. When someone was struggling, they provided resources and messages of solidarity in humanizing ways. Another participant strategy was to get families involved in community-building events at work. One fire chief conveyed his dedication to his crew, saying that his boundaries between work/home/family were almost non-existent:

> I’ve struggled with it for many, many, many years. Being a chief officer, I mean, I go home with a radio and a cell phone. I go to bed with a radio and a cell phone. So, my delineation of work and home life are blurred. […] It doesn't matter if I’m on call or not on call. If they call, I should answer my phone. That's an expectation. (Participant 33)

A few participants advised that public safety and healthcare personnel working in management and leadership need mental health training and conferences specific to how to maintain and champion mental health while in those roles, including policymaking. Participants

who were middle managers or in leadership were often typically former frontlines workers themselves, though excluded from worker mental health interventions, without the same rights as workers covered by unions, but still wanting mental health supports and literacy.

Participants thought that dedicated leaders are key for promoting and enabling mental health from the organizational level; further, they risk feeding resentments when they pay lip service to mental health without authentic engagement or take credit for worker-led initiatives in public arenas.

This chapter explored mental health supports for frontline workers, including spouses, families, and loved ones, psychotherapy, facilitated group therapy, mental health training, the role of self, spirituality, philosophies on life and death, peer-based supports, some critical incident debriefing practices, and those at leadership, management, and policy levels. The next chapter will explore the interactions between individual level mental health (e.g., operational stressors, psychological injuries) with organizational level factors (e.g., organizational stressors, workplace cultures).

Chapter 5: Interactions between Organizational Stressors, Workplace Culture, and Frontline Workers' Mental Health

This chapter presents the third set of study results, which address the third research question: how do operational stress and psychological injury interact with organizational stressors and workplace culture? The subthemes presented in this chapter include participant-provided examples of key organizational stressors, including cultures of stoicism, stigma, and machoism; problematic and contradicting policies; staff shortages and forced overtime; burnout and attrition; institutional barriers to help; bullying, harassment, and lateral violence; moral distress and injury; institutional betrayal and sanctuary trauma; and the role of middle managers. The chapter ends with a discussion of relevant peer-reviewed literature, integrating these results.

One of the main themes that emerged from participant reports was that chronic organizational stressors were even more challenging than operational stressors, despite that the latter tend to receive more attention from interlocuters. Participants urged that organizational and cultural issues require further inquiry and improvements for the sake of frontline worker mental health. Participants asserted that when a frontline worker is psychologically injured, managing ongoing organizational stressors can become more complicated and less tenable.

Cultures of Stoicism, Stigma, and Machoism

Participants described their workplace cultures as permeated with stoicism (to extreme degrees), machoism, and stigma against showing emotion or empathy, traits which are perceived as weakness. This type of cultural milieu can act as a barrier to workers seeking help for mental unwellness (Pasciak & Kelley, 2013). Participants wanted more mental health validation and destigmatization, noting that frontline workers are trained to bypass and hide emotions to maintain a professional distance to focus on operational functions. A police officer reacted to

how coworkers disapproved of her showing emotion:

> I've had tears in my eyes at a sudden death, and someone said to me, 'Well, why are you crying?' Because that's someone's family members! That could be your loved one! They just −, this person just suddenly died on them. The fact that you have no emotion is also very concerning. (Participant 6)

Women participants more often than men described the emotional labour required of them at work. Women participants working in correctional services experienced competing pressures to be both compassionate (i.e., like therapists, teachers) and unfeeling (i.e., like soldiers, guards). Participants described how corrections officers take on many roles, including providing counseling, education, and interventions to assist people who are incarcerated in learning from and reframing their own histories of psychological traumas and to potentially address some of the root causes of their behaviour; for example, incarcerated women are more likely to have histories of being victims of sexual violence than the average citizen (CBC, 2014; Margo et al., 2008). Part of participant corrections officers' work was directed at addressing these underlying issues to support rehabilitation and to avoid recidivism. This corrections officer shared examples of the inner turmoil she experiences in the nuanced gray areas of the emotional labour and ethical dilemmas of where to place empathy in her work:

> If I'm reading a police analysis about a child molester or a wife beater or a rapist or somebody, it's difficult to explain to people how we feel. Because there is some that read it, and it's horrific, and they just zoom by. […] But there are some that stay with you […] for a very long time. […] If you feel any sympathy towards that particular person, even though he's done horrific things − because there have been reports where you read about his life and sit down and cry because this had been a horrible outcome for

> everybody all around […], some people that you work with, they'll look at you like, 'These are rapists, how come you care?' […] I have a bunch of colleagues who will say, 'Okay, he has mental health issues, he has a learning disability, there's developmental disabilities, and [still] say, 'Well, he should have known better anyway.' […] Then you feel guilty, and all you want to do is just be quiet and not say anything to too many people because then you are judged. (Participant 37)

She needed empathy to perform the rehabilitative aspects of her job, and she needed to be cautious about disclosing her empathy to the wrong person at work. Participants described how emotional labour contributions were undervalued and stigmatized; further, empathy complicated more convenient notions of clear-cut binaries such as prisoners vs. guards or 'good guys vs. bad guys.' I detected that underlying the dilemma is the willingness to question assumptions about who deserves empathy; do frontline workers, organizations, and systems espouse to empathize with only human beings who meet certain criteria or is simply being human enough?

Participants referred to generational cultural transformations and moments of change where there was greater awareness of mental health. Some workplaces had become more supportive after police suicides, for example, as this officer said:

> Old school policing was dry, fast, kick ass. And if you got a mental health problem you were frowned upon, and you were shunned, and you were made fun of, then despised. Whereas realistically, if they would have handled the officers that were in crisis a little bit better, they would have been more productive, would have had less crises, less suicides. (Participant 36)

A woman paramedic concurred, saying that more extreme stoicism was the norm not that long ago: "When I started in the emergency services, the culture I was in, and that I went through my

career with was ‘suck it up buttercup’” (Participant 22).

Some participants flagged the prevalent attitude that expected some people to be simply naturally mentally stronger than others, which passes without close analysis despite the implications it has for mental health. This excerpt depicts a common narrative arc of a participant who, only once he witnessed his own limitations, did he begin to change his mind. Earlier in his career, he was in a workshop on mental health:

> When [the facilitator] talked about mental health, injuries, and stuff like this, I put my hand up. […] I said, ‘Maybe some people just aren't meant for this job. Maybe some people are just inherently mentally stronger than what others are, and same thing with your physical strength. Some people are just born physically stronger than other people, and maybe people who aren't as mentally tough, just shouldn't be on this job.’ And that was kind of my belief. […] And man, talk about removing my foot from my mouth, two years later – when whatever happened to me came to a head. […] It's been humbling for sure. (Participant 18)

Participants expressed that the BOS program’s scientific explanations of involuntary physiological responses to PPTE helped address the prevalent cultural stigma and beliefs that having mental health problems was a sign of weakness or something people chose. One police officer stated that these learnings helped her reduce internalized stigma and negative self-talk. Her post-training attitude was: “Give yourself a little grace, because you're not suffering because you're weak. You're suffering because this is your body's response” (Participant 5).

Participants felt that awareness and education can help reduce internalized stigma within cultures of extreme stoicism and machoism, which can influence self-esteem and self-worth, and in turn, interpersonal confidence and capacities. Participants reported that when, through

mental health training, they became more trauma-informed and were feeling more validated in their own experiences, then they were better able to provide knowledge, support, and validation for others; thus, the individual worker represents great potential in cultural changemaking. I observed that participants did not necessarily differentiate between cultures of stoicism and of machoism but there are important distinctions to explore further, as well as how these interact with changing masculinities, gender equity and inclusion, group membership and belonging, and other cultural transformations, both within frontline workplaces and in broader society (Grahn-Wilder, 2018; Herron et al., 2020; Murray et al., 2008; Pasciak & Kelley, 2013).

Contradictory Policies, Priorities, and Management

Participants discussed work policies and organizational priorities that were problematic or contradictory. One paramedic/manager wrestled with chute time policies, for example:

> They really put people in a bad position because they would say, 'Run to the truck, we want you down the road in 90 seconds.' But you could be responding from all the way to the other side of the city, so like 30-40 minutes away from a cardiac arrest. People would say, 'I'm running to the truck to take 40 minutes to get to the call, so what difference does it make if I get there 10 seconds faster?' (Participant 30)

A chute time standard is to get an ambulance on the road within 90 seconds after receiving the 911 dispatch call; however, the additional personal protective equipment paramedics required during the COVID-19 pandemic made such policies impossible (Corman, 2017). Participant 30 summarized: "They feel like they can't win for losing." Workers got stuck in lose-lose situations dealing with frustration from 911 callers (e.g., angry that first responders are too slow to arrive), their supervisors (i.e., exerting pressures in opposing contradictory directions), top-down performance measures that were not adjusted to reflect the pandemic requirements for enhanced

safety precautions, and inner turmoil about the impossibility of meeting competing demands. System demand and supply issues, including number of trucks, stations, and workers per capita and by geographic coverage areas, are major pressure drivers that impact frontline worker mental health, and though beyond their individual control, negative fall-out lands on them.

Despite multiple external factors, individual workers feel the burden personally: “In [city], they say it's non-punitive, but if you didn't meet your chute times, they would switch your truck and take away your partner, which is a big deal for people in EMS” (Participant 30). Workers operated best with a partner they knew they could trust, and they felt additional stress with partners they did not know. Similarly, paramedics like to pack their trucks in a certain way, and switching to different truck models causes further burdens of relearning and reorganizing each time (Corman, 2017).

Participants stated that there was a lot of mismanagement during the pandemic which disrupted previous progress toward worker mental health initiatives. This paramedic/manager disagreed with the prevalent punitive management approach which was being applied to even such things as bathroom breaks:

> I wouldn't try to do it on the negative side because I realize that people are working hard. […] I believe most people in this job are out there trying to do their best to help people. […] I don't think we should whip people. I mean, if […] they have to pee, they have to pee. (Participant 30)

Participants disclosed that unrelenting pressures to be overly self-sacrificing and to forfeit their own basic needs and mental health for the sake of their work contributed to moral distress and loss of moral safety at work. Participant 30 elaborated that contradictory policies were: “Another moral interruption that puts people down. It affects their mental health because

moral safeties [are destabilized…] and sanctuary trauma interrupts that whole thing."

Participants felt that poor interpersonal and policy relations with those in management and leadership can aggravate workers' psychological injuries. Many participants felt that though the organization paid lip service to frontline worker mental health, there was little evidence of it being a genuine priority. An urban firefighter exemplified worker-supervisor tension:

> There's this thing called the Lean White Belt[2] where they are forced to make you do this nonsense presentation on how to be efficient, and the running joke is the way to be efficient would be to not do this training. Then we find out later that the city manager gets a bonus if 100% of people complete it. So, we're like, 'All right, is R2MR[3] the same thing? If we all do it, they get a bonus? Or do they actually want us to not –?' But I mean, they must, right? Like if you're compassionate human, you don't want one of your workers to commit suicide. In saying that, if you're managing them, and they do something insane, it reflects poorly on you, so even from a selfish perspective, you'd think they would have an interest in everyone's mental health. Monetarily, for sure they do. (Participant 38)

Participants reported that sarcasm and cynicism prevailed regarding the notion that institutions authentically cared about their workers as fellow humans. Participants noted off-colour and tone-deaf messages from leadership, as well as incentives and disincentives that were misaligned with mental health objectives. Participants expressed frustration at how coworkers on mental health leave were being ignored by leadership. This police officer reaches out to those on-leave as a part of her unpaid labour on the wellness committee:

> I'm checking in on people who are off on PTSD or major – […] The fact that you have

[2] The Lean Six Sigma White Belt is a business performance tool.
[3] The Road to Mental Readiness (R2MR) is a two-hour resiliency training.

> to tell the bosses here at the station to check in with them is a little concerning. When you are command of a station, you should be watching your personnel. They should be your number one focus. This is where I have a huge issue with the police. (Participant 6)

Participants thought that managerial disconcern stems from those positions being luxuriously removed from the frontline exposures themselves. As Participant 13 remarked: "I have seen the horrific stuff. […] Management doesn't see it." The division of labour keeps managers and executives safely off the streets and behind desks where they do not endure PPTE; if they did, the feeling is that they would likely create more appropriately supportive policies. As it is, as per Participant 26: "Managers care about scheduling more than people's mental health being okay." A paramedic/manager provided an example of his own lack of awareness as a higher-up, in this excerpt about a new recruit's first suicide call:

> To me it's a basic call. She didn't even have to do anything, but it was a brother of a police officer in [location] that he hung himself. They really didn't even have to work with the patient. They just went in, […] they're obviously dead, so −. But she missed two days of work for that! (Participant 15)

His exasperation was about her needing time to process what was to him 'a basic call.' I observed that he had little empathy until further discussion unfolded around the potential mental health implications of it being the new recruit's first time at a suicide scene and of it involving a fellow first responder, with potential conscious and unconscious associations and triggers embedded in that.

Participants identified that there was an unfortunate void where mental health training for managers and leaders should be, asserting that training higher-ups could serve as a mechanism to increase understanding and capacity to make the important changes that are

needed. Participants criticized managers for not knowing what to say or how to respond appropriately to the mental health struggles of their membership. Participants described how managers too often do not know how to talk to their members who are suffering, so they avoid them altogether, setting up an unspoken policy of silence and rejection. There were participants who reported further problems with higher-ups, as discussed further in the subsection below entitled *Bullying, Harassment, and Conflict at Work*.

Shift Scheduling, Staffing Shortages, and Overtime

Participants reported that lack of job control affected mental health, including the lack of flexibility in shift scheduling. They were looking for guidance and practical advice for staying healthy during periods of intense overtime and nightshifts – as well as transitioning in and out of them – when eating and sleeping are disrupted. Without set maximums regarding number of hours worked in a row or in a week, there can be negative consequences to the worker's functionality, effectiveness, and safety (D'Andrea, 2022; Gnerre et al., 2017). Negative consequences can play out in different ways due to cumulative lack of restorative sleep (Lv et al., 2023). Describing the transition from weeks of nightshifts with a quick turnover to working dayshifts, this police officer said:

> The first day that you had off, all you did was sleep in the morning. You were supposed to sleep that night to try to get ready to go back on the dayshift for four days. I was never really very good at it. […] You know when you're so tired you're considered worse than being drunk when you're driving? I can't do that – but that's my job. So that was very difficult for me. […] But I don't think that was an ideal shift pattern for anyone. [We need to be] getting the research in place for that as well. (Participant 26)

Participants reported regularly covering 24-hour shifts and being called in to work overtime

several times per week. They asserted that when shifts are more condensed, more errors occur, and mental health repercussions arise: “If you look at the stats, the section of our schedule that's condensed is when most of the problems happen” (Participant 38). This firefighter emphasized that stressors are exacerbated when workers have no time between shifts, such as with back-to-back shifts, condensed schedules, and frequent overtime. Participants said they managed long shifts better when they had sleeping quarters to rest in between calls, but some could simply never rest or sleep at work. Participants who had worked a lot of nightshifts reported that they could no longer sleep at night or would wake suddenly in a state of hyperarousal.

Some participants worried about the long-term health effects of nightshifts. They worried about surviving the job long enough to provide for their families and secure a pension at the end of career to maintain them in old age. Shift work was difficult for participants who were parents who wanted to attend their children’s sports games, recitals, and activities after school and in the evening, and who felt guilty for missing important moments in their children’s lives. They also pointed out that evening shifts cause them to miss their own wellness opportunities and classes (e.g., yoga, exercise).

Participants described how shift patterns interact with team dynamics, workplace culture, and stigma. Organizational stressors, such as a poorly functioning team and a lack of good group dynamics, caused participants considerable mental stress, strife, and anguish. This firefighter asserted his observations that: “It really comes down to the culture” (Participant 33). He went on to say that firefighting crews can be very closeknit, but that cross-shift feuding makes stigma harder to break, for example:

> You'll see a strong connection with the A crew and the B crew, C crew with D crew. So, A and B may not be together, but maybe they're on a traumatic call together. I have

> seen a number of times where some of the B crew will belittle amongst their group the A crew people because somebody's struggling. (Participant 33)

He noted that while team dynamics are important, so are cross-shift pairings. Participants highlighted the importance of team functioning to the mental health of the individual. This led me to question what best practices exist regarding cross-shift team-building activities, as well as shift scheduling for group cohesion, work effectivity, and mental health. Participants described similar implications for healthcare teams, as well as pairs of paramedics, who come to rely on their regular partner to carry through difficult calls. This paramedic described the connections between staffing issues and losing partner cohesion:

> The way our staffing issues are, a lot of the days we're running at 60% capacity. A lot of our trucks are shut down, which means that partnerships are moved, and you're not with your regular partner. […] You don't have this consistent pairing of people […] because a lot of people aren't even sticking around that long anymore. (Participant 24)

Participants reported sometimes having a new partner each shift, which potentiate destabilizing uncertainty, stress, and anxiety.

Participants reported that their time off work was often interrupted by being formally or informally on-call, including frequent incoming automated phone calls issued to get workers to cover extra shifts and do overtime. They described how this staffing practice intrudes on parenting roles, spousal relationships, personal wellness activities, and aspects of identity beyond work, eroding the capacity to separate work from the rest of life. Being chronically short-staffed exacerbated pressures to work overtime, this advanced care paramedic said:

> After two years of this [overtime pressures] going on, you see a lot of the same people coming in, coming in, coming in, and getting that money, getting that money, and I think

> it's been a shift to like, ‘Well, those people aren't actually helping us out anymore. They're just kind of like prolonging the suffering of everyone.’ (Participant 7)

He observed that instead of relying on ‘high ballers’ to step in for overtime, he wants his organization to hire more people to share the load with regular shift stability. Some participants observed that the high ballers in their workplaces were regularly calling in sick then taking the higher paying overtime shifts later the same day, leading to strain, resentments, and inequities.

There were participants who discussed how mental health necessitated personal transformation, including in their relationship with work and money. In becoming less willing to take overtime shifts, this in turn affected how participants delt with management. They found that there were unspoken penalties in the workplace and in their relationships with their managers and coworkers. This seasoned corrections officer exemplified:

> That has obviously a negative effect because people are not used to hear from me ‘no.’ Management, they don't like to hear that, if I stand up and say, ‘Actually, no, this is not good for me, this is not good for my mental health. We are going about this the proper way.’ They are doing shortcuts. […] You are being labeled a troublemaker now. Which is not true, I know that, but that's how you are being labeled by management because they don't want that. They want a smooth ride. (Participant 13)

Participants described how job control and autonomy vary between workplaces and along lines of seniority. They worried that shift schedules were not feasible to sustain long-term and more flexibility was needed. In discussing needed improvements to shift schedules, this paramedic said:

> We have a lot of people that just want to work casually because they can't deal with the shifting patterns and the long hours. People are deciding what their boundaries are.

> Which is so weird to me, because when I first started, full time was the goal, right? (Participant 19)

According to participants, the assumed goal and definitions of full-time (with expected overtime) may no longer be sustainable as the workforce changes to be more accepting of more women, single parents, GenZers, people needing accommodations, and others desiring better mental health and work-life balance.

Several participants saw cultural and generational differences in attitudes toward overtime. One Millennial police officer stated: “They could order you in. […] Whenever I get asked to work overtime, I have an extreme a feeling of guilt because […] I just don't want to let anybody down” (Participant 12). Other participants pushed back against management pressure tactics and organizational culture that normalized overtime expectations. They stated that workers need to assert their rights and have their mental health protected, for example: “If they just keep coming in on overtime too, then the management is just going to keep expecting us to work it and not get the right amount of people for the work that needs to be done” (Participant 12).

Participants reported that these management dynamics create palpable pressure on the worker who feels as though they do not have the right to decline overtime, additionally when they were the only one in their organization with special training or when there were sizable financial incentives. Participants described how this pressure interacted with mental health, competing for time and energy for such things as implementing self-help and self-care skills. An advanced care paramedic reflected:

> If people would just not come in then, perfect. Then we shut down trucks, and we rattle the chains, and then people start to really realize that − Oh, you got two fire trucks

> instead of five! But just there's always someone that needs the money, and that's really what it's boiled down to at this point. (Participant 7)

Participants felt strongly that organizations need to fill staffing shortages to proper capacities as a measure of authentic orientation to their workers' rights to preserve their mental health, rather than contributing to burnout, attrition, and the cyclical implications of these.

Participants described conditions with having no time to eat, drink, or go to the bathroom, let alone decompress between calls. They reported that the organizational management of high-volume urgent calls interacted with their ability to meet basic needs, interfering with functioning and mental health. This corrections officer described how shift work impacted her mental health around an eating disorder:

> I had an eating disorder, for sure, which you don't notice it because you are a shift worker. We don't necessarily have a break where I can sit down. So, you are going crazy, and you are starting to eat all that bad food, which you shouldn't eat, because it's readily available. It's the eating disorder which I still struggle today. It's one of the ones the hardest to cope, because you need food to survival. (Participant 13)

Participants described how staffing shortages were increasing the frequency of forced overtime for paramedics who already worked long shifts. Exemplifying the impacts on basic human needs and functions, this paramedic described the daily grind:

> People are coming into work, they're working their shift, they're busy the whole time, we turn over calls, turn over calls. Then they get forced overtime which nobody likes. Even on a 10-hour day shift, so that's 12 hours. You get back to the station, and get in your car, head home. That gives you an hour to decompress maybe. […] Maybe jam something down your throat to eat, and then get to bed, and then do it all over the next day.

(Participant 30)

Participants described staying in survival mode for long periods of time, running on adrenaline, and exacerbating nervous system stress. Participants needed more time to decompress, to reassociate with bodily sensations and needs, to calm stress responses, and to reconnect with other non-emergency non-work-related people. Stress hormone responses otherwise build up toward dissociation from self and disconnection from other, as per Participant 30:

> You put people through where they don't get time to actually feel what's going on in their body, they're dissociating all the time, they're running on essentially adrenaline all day, and it's not fair to be like, 'You need to take care of your mental health, but we're not going to give you time to do it.' (Participant 30)

Participants observed that these strains were aggravated by COVID-19 pandemic pressure (e.g., staff shortages feed into burnout, burnout feeds into staff shortages), creating a cycle of system dysfunction, in which many people are leaving frontlines professions. Meanwhile, new recruits entering the workforce were also heavily impacted, participants stated. As Participant 24, a paramedic, stated: "Those supports aren't what they used to be. We eat our young." Archibald-Varley & Fung (2024) wrote that the same was true of nurses, using that exact expression ('we eat our young') to refer to the treatment of student nurses. Frontline workers are already strained before additional preceptorship work, but from a system perspective, harassment of and lack of support for new workers is a maladaptive mechanism, exacerbating recruitment and retention problems (Archibald-Varley & Fung, 2024).

Participants commented that additional strains were from inadequately planned rapid urban expansion in some cities outpacing services. Participant 30 said: "It's gotten worse […].

It's just call after call after call, there's just no stopping. And they've really taking advantage of people." The relentlessness of calls played into feeding the workplace cultural norm of omitting breaks, a reality that would not be considered normal or even legally permissible in other Canadian sectors. This paramedic/manager elaborated on what he was seeing:

> Guys are just turning over calls, and they've really taken advantage of the fact that EMS never really took breaks. The idea used to be, when I worked in [city], there was actually nights you would get a few hours of sleep. That doesn't happen now. Those guys are going all the time. […] They've really taken advantage of the fact that, we used to […have] downtime [between calls] to eat our lunch at some point. […] They don't get that now. They really put people through the meat grinder. (Participant 33)

Participants need time between calls to attend to basic human functioning and to decompress, to complete documentation and reporting tasks, to train and teach new recruits, to build rapport and trust with teammates, and to debrief and process PPTE. Participants lamented losing the past capacity to receive guidance and training in the direction of their talents and interests; this contributed to professional development, self-actualization, job satisfaction, and retention. According to participants, time to converse with supervisors has become problematically rare.

Burnout, Attendance, Attrition, and Accommodations

Participants noted that the lack of time to meet basic human needs, to decompress between calls, and to process PPTE during and across shifts factored into burnout, low morale, low attendance, and attrition. Participants also pointed out that excessive administrative burdens fueled their stress and frustrations with their organizations. Participant 33 shared a common frustration: "We still have the operational stressors. But we've got the added admin stressors that

are coming in as well." Participants emphasized the need to reduce onerous documentation tasks during and after a 911 call or directly after a critical incident, saying that duplication and form-filling could be more efficiently streamlined. Some participants found that the unrelenting organizational stressors (e.g., administrative burdens, workplace conflict, and understaffing) took more of a toll on mental health than PPTE.

A corrections officer described what she called a 'stress leave epidemic' affecting staffing shortages, overtime pressures, and related issues extensively in her organization. Regarding the prevalence and consequences of stress and mental health leaves, she said:

> Half of them [are on leave]. So, if that is not a sign −. Same down east, it's the same thing. We have tons of officers on stress leave because nobody can cope with anything anymore. And management is just, I don't want to say bullying, because officially, 'That's not what we are doing,' but it is there. And that's why I said I had a really stressful week, because they tried the same thing to me, and I was like, 'Yeah, I'm not having any of it.' So yeah, it is brutal what they are doing. […] There is pressure there, huge pressure. (Participant 13)

Participants described how the workers who remain at work are left to deal with excessive job strains in efforts to cover understaffing. Without being able to rely on regularly scheduled teammates, participants described an erosion of trust, team cohesion, and team performance; these aspects affect the mental health of individual team members who may be risking their lives and require solid back-up. One participant described a harrowing, prolonged, near-death, hostage experience at the hands of a caller suffering with psychosis, but he would not allow himself to 'feel injured' or 'require help' because 'everybody is on stress leave.' He was suffering psychologically but wanted to just fix promptly himself between shifts and get back to

work.

A paramedic/manager in Alberta was adamant that there were too many people abusing the newer, more supportive mental health policies, saying: “There's always going to be abusers that are ruining it for everyone” (Participant 16). He described one of his workers as ‘playing the system,’ booking off 2180 out of 2190 maximum allowable hours on the grounds of mental anguish. His organization had new clauses allowing for time-off with no questions asked. He wanted to see a rationale and treatment plan in place for anyone using sick time, including a set number of days off for recovery; as a manager responsible for scheduling, he needed to know who would be available when. He and another participant commented that ‘abusers’ were taking advantage of the pendulum swinging too far − from an old school mentality of “suck it up” and “go to the bar, get drunk, and get back to work the next day” to the other extreme end of “over-exaggerating now that every single thing is a reason for you to not come to work” (Participant 16). This led me to question how to reconcile the tension in that taking leave does place further strain on remaining workers; however, psychological injury may not have a standardizable recovery period as individuals are differently affected. Participants foresaw a labour crisis that could serve as a ‘wake-up call.’

Wrestling with how to honour ‘true’ mental health challenge and ‘abusers,’ Participant 16 mused:

> That's the million-dollar question. If you can come up with the answer, you’re going to be a millionaire. We don’t know where it is. We know that what was in the past was not and is not going to work. We've added in quite a few programs now that are all mental health resiliency programs that – they seem to be a crutch for some individuals, not all, but some. (Participant 16)

The participant reported that if workers have mental health or medical issues, then they should get treatment, but a ‘no questions asked mental health’ was open for interpretation and therein abuse. The participant believed such abuses can negatively impact remaining workers mental health and create problematic interpersonal dynamics among workers. Participants described how in situations of chronic shortages and hardship, perceived ‘abusers’ are treated with stigma and isolation as other workers harden and turn away from them, saying they will not work with them, train them, or help them at work anymore. Participant 16 expounded on the ‘abuser:’

> We have membership who’ve been on the job for less than ten years who’ve already said they will never retire from our service, and they plan on having a medical disability for mental health anguish by the time they get close to retirement, and that is their retirement plan. They publicly state these things. (Participant 16)

He admitted this was a fraction of the membership (i.e., he clarified it was just one person), but he felt that the attitude represented a larger attitudinal undercurrent. He went on to say that at this site, there are two workers on permanent disability due to long-term mental health injuries. These members endured years of backlash when trying to advocate for themselves with Workers Compensation Board (WCB):

> Our management at the time almost drove them completely out of the industry. There was one specific person that made this person’s life just a living hell, and told him he was a useless employee, he was hired to do a certain job, but if he can't do that job, he should just quit, he's not good enough to be here. That sort of attitude is, I mean for some people it's still there, but it's just not verbalized everywhere. So, we've gotten better that way. (Participant 16)

Despite the concession and recognition of ongoing mental health stigma, the participant

still described policies as too lenient in holding ‘abusers’ accountable, and that a better balance was needed. There were two participants who emphasized that completely removing mental health stigma was counterproductive and would enable ‘abusers,’ representing an important exception to the more common perspective that more awareness and less stigma were needed. This perspective could be workplace-specific but was shared by participants who forfeited full recovery from their own psychological injuries to get back to work for the (perceived) sake of the whole. There were numerous generational comments, such as that younger workers were more likely to value and prioritize mental health over working, that younger workers were less likely to take time-off being too new and job insecure, that older workers were more likely to just ‘suck it up’ and work through injuries, and that older workers were more likely to use mental health days due to having more accumulated stress injuries over time; thus, though many participants suggested generational differences, there no consensus on how these were operating.

Other dilemmas arose for participants regarding disability accommodations. For example, one paramedic participant who responds to every type of paramedic call other than they have a permanent restriction on pediatric emergencies (which is their primary psychologically traumatizing trigger point). This worker is provided this accommodation in theory. In practice though, there is uncertainty as to how to guarantee which emergencies will not have children and infants involved, as participants explained. Rather than innovative solutions and satisfying modified duties, participants reported having faced stigma and rejection on the part of supervisors, being driven into early retirement, being transferred to undesirable work, or otherwise having a difficult time reintegrating back to work after a mental health leave.

Institutional Barriers to Help

There were participants who reported a very long and arduous journey in seeking mental health help through their institutions and organizations. Participants struggled with serious illness for years, some reporting problematic gas-lighting, such as denial of serious injury or illness, or their organization insisting on the internal clinician despite the participant wanting to stay with their own better-fitting therapist. Some participants reported that their benefits plan funded only a few psychologist appointments per year which was not enough for their treatment plans, and therapy was cost-prohibitive otherwise. Frontline workers exemplified a few of these issues: “I don't think that my doctor would even consider such a thing as occupational stress;” “It's very difficult to talk to her because it doesn’t seem like she understands lot of things [about PSP work…];” and “The insurance will not cover it, or if it will, it will cover barely anything” (Participant 37).

Participants found that stigma perpetuated through the organization was also a barrier in accessing help. Another corrections officer wished that her organization would be accountable as the site of the injuries and provide quality treatment and mental healthcare, saying the opposite is now the norm: “Our institution […], it's hard to get support because it's just a small town and people, you are being looked down upon” (Participant 13).

Not every practitioner has capacity to effectively treat every issue, so sometimes participants needed and wanted mental healthcare that was not available through their organizations or health plans. Some participants found that they wanted more comprehensive treatment but were only prescribed medications that reduced the acuteness of their perceptiveness and slowed brain functions that they needed to work effectively. As this nurse stated: “The doctors tried medicating me. And I’m going, I have to be able to think. I have to have a clear mind. And if medication is going to put me in a zombie-like state well, that's not

helping me" (Participant 34).

Participants reflected that they needed supports during crises, as well for prevention and in urgent need, but that there are gaps in many EAP programs. Corrections officers advocated for regular mental health check-ups which they currently do not have; though some PSP have these in place, it was not a comprehensive norm across participant workplaces. Police have regular check-ups in theory, but as some participants reported, they could not get connected with the employer-designated psychologist for years on end, so they just gave up. Participants experienced how there are some organizations with annual screening or check-ups with a physician, but even if mental challenges are suspected or diagnosed, workers are not required to seek help, and no follow-up is provided.

In the conversations around peer support, some participants described concerns about their institution not supporting mental health initiatives, and even actively quelching them. A paramedic/manager described a self-supporting peer program that was shut down despite it not costing the organization financially. His perception was that the leadership was self-serving and short-sighted about embracing bottom-up solutions.

> It's mismanagement. They just have their own ideas. There are people in those positions that are just manipulative, that just don't understand the bigger picture. It's that traumatized organization that is myopic and can't see that if you just invest in people, the organization is going to run so much better. They can't keep people because they don't take care of people. If you just take care of your people, they'll stay. (Participant 30)

Another problem area participants noted was the obligation some organizations placed on peer supporters to disclose sensitive information regarding their employees. Workers did not want to access these peers' assistance due to fear of consequences, including job loss. A firefighter

emphasized organizations needed to remove barriers to psychologically safety for more meaningful peer support after a critical incident:

> I'm struggling with the whole peer support piece. I think it's fantastic, but I still don't think we're dialing into the root of it. Because I've sat through many of these diffusing and debrief things where you're looking around the room, and people are quiet, people aren't saying much […]. Like, 'How is this impacting you? How is this affecting you?' And oftentimes I feel like they're holding back what their true feelings are in fear. (Participant 33)

Participants felt that organizations have a role to play in disconnecting in-house peer support from employment duties (i.e., documentation and reporting) for increased confidentiality, trust-building, and cultural changes (i.e., destigmatization) which may all contribute to a better network and system of mental health response for workers.

Participants broached the role of institutions and organizations in disability accommodations for different levels of functionality post-injury. Participants describe how Workers Compensation Benefit (WCB) and Workplace Safety and Insurance Board (WSIB) often promote avenues to get the worker into return-to-work processes as soon as possible post-injury. Participants wanted more flexible thinking to customize treatment, accommodations, and reintegration to fulfill workers potential. A few participants wanted to stay at work to work through disability accommodations rather than leave then try to reintegrate. A registered nurse with complex PTSD and autism found that staying at work was the only way for him to get through the day:

> Where I'm currently working is classified as one of the most toxic departments in the hospital. And so recently some of that complex PTSD […] surfaces a little bit.

> A lot of people, they can't cope − their physicians put them off work for stress relief […] while they develop tools to be able to deal with whatever is they're going through at their place of employment. […] For me there are no tools. (Participant 34)

He had developed his ability for coping precisely by staying in the toxic environment. A problem with sending workers home as a singular policy solution is that it can further isolate that person, according to participants. This firefighter felt that sending workers home was often worse:

> In my knowledge, and my experience, and everything that I've taken in the last five or ten years on this is to work with them. […] Don't take them away. Keep them safe but try and help them work through it. Well, what's HR [Human Resources] say? And what does a psychologist say? We'll pull him off the fire truck and make him work through it on his own. Well, to me that's a problem, because now you've just isolated them. You just put them on an island and said, 'Hey bud, work on this. You know what? We're a team event. But now you're solo.' (Participant 33)

Another PSP, a corrections officer, similarly iterated that she felt alone in her efforts to recover where the organization should be accountable to its employees and have supports in place:

> But [name of organization] does not really do anything. It's really, really hard to, to − how do you say it? You have to be ready to heal yourself. […] I have to do it completely on my own. Work is not really involved in that. And a lot of the procedures which actually should happen once we are involved in an incident at work are not being followed up. This is a big issue, because that's how a lot of officers are getting burned out. (Participant 13)

Participants concurred that more could be and needs to be done at the level of institutions and

organizations to reduce barriers to mental health help and improve access to supports (e.g., confidentiality in peer support, employee mental healthcare benefits, regular check-ups, flexible accommodations) for frontline workers.

Bullying, Harassment, and Conflict at Work

Some participants reported bullying exacerbated mental unwellness in a vicious cycle; workers were bullied for having psychological health issues, and the bullying undermined their mental health further. One woman police officer was rejected after she developed a mental health disability and was told in an 'ambush meeting' (i.e., by herself with several managers with power over her) that she was of no value to the organization anymore. She urged that there needs to be multiple avenues of recourse for bullying by one or more superior(s).

One woman firefighter described years of bullying from someone in a position of leadership at work that impacted her mental well-being. Her consequential mental distress was not alleviated by working with the general EAP therapist. She explained her dilemma with her superior and the power he had over her mental health and livelihood:

> I went there because at my [other] station, I was experiencing a lot of bullying. I was explaining about this bullying, and it's really bad. But [the therapist] didn't understand the dynamics of the fire department, […] how your district chief could be such an ass, but you still have to do what he says, and you can't complain, because then he'll just say he's going to kick you out. […] So, it was bad, but I am still here. (Participant 29)

Bullying by superiors can be psychologically destabilizing, involving intricate dynamics of real and perceived threats to financial, physical, and emotional survival (Lee & Brotheridge, 2006; Rigby, 2003). Participants were also concerned with group- and individual- bullying happening at the level of coworkers. A paramedic discussed his experiences with emotional contagion,

'group think,' and merging of personalities with coworkers that negatively impacted his mental health. He felt coworker harassment was a cultural norm where he worked which made it particularly difficult for him to reinvent himself via healthier behaviors. He relayed: "We become the five people we talk to most, so coworker mentality is crucial. […]. They wanted a particular version of me" (Participant 1).

Participants reported that in some workplaces, there is 'no team support for a weak link,' and being open and vulnerable about mental health issues is akin to being 'thrown to the wolves.' Participants described not being able to afford 'showing weakness' or not risking being 'seen as weak' 56 times in the interviews, sometimes linking weakness with gender. Not uncommonly, men and women participants conveyed that they could not trust anyone in their service. Some participants stated that enduring ongoing conflict at work was more disturbing than PPTE. This man firefighter exemplified:

> My general workplace dynamic stuff keeps me up at night more than the life-or-death − the literal, I might never like come out of this situation again. Everyone will tell you, the hardest part of being a firefighter is interacting with the group. The dead babies are not even on the list. It's the getting everyone in the group working effectively together. That's the challenge. (Participant 38)

Participants reported that when a serious call goes well, a team feels cohesive and rises above shared challenges; on the other hand, if someone is not mentally well and if that affects their functionality, the implications can become amplified through the group. Work atmosphere was considered by participants to be a key influence in mental health, and considering shifts can be up to twenty-four hours long, there is a certain intensity of pressure on these relationships. Firefighters described the importance of team cohesion for their job, for example:

> Firefighting is a team sport, and everybody has to work together. We're only as strong as the weakest link. I spend a third of my [life] with my crew, living with them. So, you need to build up that friendship and that relationship there, so that you're looking out for each other because it's part of the job. We rely on each other. (Participant 25)

Certain participants characterized coworkers as being a 'brotherhood' and having a 'family bond.' Just as families plays a monumental role in their members mental health, coworkers can have a vital bearing on the person's mental health, depending on the nuanced functionality – or dysfunctionality – of the work-family dynamics (Lewis, 2012; Stollberger et al., 2022).

In terms of harassment and hazing rituals, there were differences in participant reports on workplace cultures and subcultures depending on job sector, unit, department, crew, and so on, but there is an important pattern to note. Participants noted that hazing rituals are often a normalized part of firefighting and other occupations as a way of testing the new recruit (or minority person) prior to more long-term (or barring) their acceptance into the group. While I would advocate for clear and mutually agreed upon understandings delineating harmless initiation rituals and harmful harassment, participants reported blurriness around such distinction. I observed that ambiguity in the descriptions provided by participants evidenced that the one doing the hazing (or harassing) and the recipient of their behaviour can have differing perspectives and interpretations of the actions and words. When discussing group dynamics and hazing vs. abuse, for example, this firefighter wavered: "The abusive person's not good. But sometimes there's certain amounts [of…] what some people might consider abusive treatment. Others might consider like a breaking-in period" (Participant 38).

According to some participants, there is a need for increased awareness, sensitivity, and respect in collegial relationships, which can sometimes take years of seniority, proving oneself,

and building a reputation; however, some people will never find themselves accepted. Another firefighter added his version of justification for harassing someone:

> For sure, there is some in-fighting, back-stabbing crap in the fire department too. It's a rite of passage to really […] almost torture recruits, we try to get under their skin. It's a culture − it's been carried on for decades. Push the person to, not intentionally hurt them, but just test them constantly, because we want to know that even if they're extremely pissed off at you, when we go into a fire, they have your back. So, it's a testing thing to see if they measure up before they're accepted on the crew as one of the family. (Participant 8)

Seen in a positive light, as by some participants, such behaviours can contribute to team building. Depending how far the people involved are willing to go, hazing or harassing can become abusive, and provoke mental health sequalae, as experienced by some participants.

Lateral violence among coworkers was identified by participants. The term 'lateral violence' can be defined as displaced violence, anger, rage, and inappropriate behaviour misdirected at peers instead of those with more power to change the situation but benefit from maintaining the status quo (Cho et al., 2018). While some people have the impulse to stop violence and protect incoming personnel (i.e., new recruits, students), others may respond vindictively by perpetuating the poor treatment they received (Cho et al., 2018). Participant 14, for example, relayed of her superior: "She said, I had to go through this, you're going to do it too." Participant 14 felt that corrections officers needed a lot more supports and resources, and she countered her superior's attitude, asking: "But that was painful for you to go through. Why would you not help someone who needed help with this environment?" She asserted that passing on ill-treatment produced fear within correctional services culture that undermines

individual and organizational well-being. Participants wanted interventions to interrupt the normalization, internalization, and perpetuation of violence in the workplace.

Corrections officers described challenges related to their highly regulated workplace. Participants who made errors with regulations faced reprimanding and punishment (e.g., for accidentally bringing a cell phone or a fork into work), with additional lateral violence effect moved through coworkers. One participant was suspended, then put on undesirable modified duties. They felt miserable about being investigated. Coworkers started asking each other for details of the incident and engaging in harmful speech. "All sympathy and past relationships with that person are out the window. And they would take it out on me" and any 'inferior' in the hierarchy with whom they interact with at work (Participant 14). For a racialized woman like Participant 14, the punitive work climate permeated coworker relations, creating untenable work conditions, to the point that her only recourse was to leave that workplace. Corrections officers mentioned that their institution was facing several worker-instigated legal battles related to violence within the organizational culture, asserting that changes were desperately needed for the sake of the mental health of the workers on the ground. Though the details of the cases were not free to be disclosed, officers summarized the issue:

> Their big thing, their big push is 'respect.' Respect the company. But not respect each other. That's not what happens. The people are very disrespectful of each other, and it's like crabs in a bucket. (Participant 14)

A few participants referred to wolves, including one firefighter who went into depth with a wolf analogy about lateral violence. He likened a firefighting crew to a pack of wolves, saying: "The two alphas fight, the one that loses gets devoured, that's how it works" (Participant 38). He furthered that while it should be less like that, the reality was such that once the loser

showed his weakness; there was no sympathy, second chance, or opportunity for learning and growth. He said: “It’s not like ‘Oh, we’ll help you out. You can try again later.’ It's like, ‘No, you had your chance. You lost. That's it. We can't have you back here anymore’” (Participant 38). He referred to cycles of growing tension that lead the group to make fun of a member struggling with mental health until they are evicted from the group; he flagged how dangerous this was, to be ‘devoured’ by one’s pack. Participant 38 said of workers suffering psychologically: “They might see one too many things and freak out. Because they've never been supported. Because if they show an ounce of weakness, they're devoured” (Participant 38). The perpetuation of stigma is a function of this type of normalized social exclusion. Lateral violence and group ‘devouring’ cultural norms create further adversity and challenges to mental health in frontline workplaces (Cho et al., 2018).

Several participants criticized Hollywood depictions and narratives of PSP in film that show, for example, firefighters in heroic narrative, upholding unrealistic standards but also perpetuating a myth. Regarding firefighter culture, Participant 38 stated: “Our myth and our reality are becoming further separated.” When asked to expound, he said:

> The myth, it doesn't exist to [the insider] because [we’re] exposed to the bad behavior component of it. But the average person expects a certain level of functionality from us, and then the reality is, you're not getting that across the board. You might get it within pockets. […] Some groups are highly functional, and some aren’t. And some of the highly functioning ones are maybe a bit damaged because they don't feel they can talk. (Participant 38)

Participants described self-stigmatization and feeling that they need to hide perceived weakness.

Participants reported having at least one other trusted partner or mentor was critical for

countering workplace alienation and social isolation. A participant with experience in both EMS and fire elaborated:

> [With] a good partner, people that are going to do better with mental health are the people that have someone that can be empathetic and a listening ear. You can offload your problems, or you're going through it together, your mental health is going to be better. But if you feel like you're alone, and you've got a crappy partner, and you don't want to go to work every day because you gotta work with this person, then I think that also drastically impacts mental health. And unfortunately, our management with all those kinds of things, they don't care. (Participant 36)

Participants thought of having a trusted regular partner or mentor as a protective factor against harassment, bullying, and lateral violence, but this has become more difficult to secure in workplaces that are continually hiring new staff because retention is low and turnover is high. One corrections officer found herself sticking up for new colleagues because they were being exploited, knowing less about their rights as workers:

> Over two thirds of them are new officers, they are not saying anything because they are scared that if I say anything I'm out. So, you are taking also a mentor role on for them, and you have to stand up for them. It is brutal lately, what they are doing. (Participant 13)

Participants urged that management can better support worker mental health by rendering harassment, bullying, and lateral violence impermissible, and by actively improving and facilitating healthy partnerships, mentorships, and team dynamics.

Interruptions to Moral Safety During the COVID-19 Pandemic

During the COVID-19 pandemic, there were monumental losses to normal functioning

for public safety and healthcare systems, including the loss of training opportunities for new recruits, as well as losses to human resources due to numerous factors (e.g., increased staff illness rates, mandatory quarantines, vaccine refusal no-work policies, working parents dropping shifts to do their children's schooling-from-home, workers leaving their professions, a flush of early retirements), all of which impacted the frontline workforce (Denny-Brown, 2021; National Academies of Sciences et al., 2021; Roberts et al., 2021). Participants reported that training programs were often drastically cut in breadth and depth of hands-on learning, with negative results for new recruits, as this paramedic exemplified:

> I've got one medic that literally just graduated, and she told us last week she's done. This isn't the career for her. […] I'm blaming that a bit on COVID because the schooling part of it, they really didn't get enough time doing preceptorship with crews because with COVID they weren't allowed to. (Participant 15)

Participants stated that the cohorts of trainees who were going through training during COVID-19 did not get the same quality preceptorship, short-changed opportunities for skill development, work experience, and role modelling. Participants emphasized that insufficient training may be linked to overall career trajectory (with financial implications) for students, trainees, and new recruits of this time frame, as well as the need to re-embolden incentives for completion of training, retention, and return-to-work. Participant 19, a paramedic, stated: "I know there's a lot of industries right now that are suffering from not enough staff, but ours particularly, because […] COVID started it or set it off." Participants cited that on top off baseline staff mental health issues, they were dealing with increasing book-offs, a trend that has not ameliorated since the start of the pandemic. One paramedic/manager urged deeper inquiry into the meaning behind these patterns, as she shared her agency's concerns:

> The pandemic shifted a lot of people's ways of thinking about what's important in terms of even keeping your job or leaving the actual profession − there's been a lot of that, and we haven't had the people to replace it. With the failing system already, mental health has been at the forefront because they've had no choice. (Participant 19)

Participants reported that since the onset of the pandemic, more coworkers have stated they want to quit or felt trapped in their jobs. They stated that the additional stress at the height of the pandemic has not really slowed down, and workers have not had much reprieve but are experiencing a continuation rather, in part due to staff shortages. In discussing COVID-19, this nurse reported: "Since I've been a nurse, which is [about 20] years, this is probably the worst I've ever seen staffing. So that's a whole other layer, too, when you're working short, plus you're working with emergencies, it's hard" (Participant 15).

The lockdowns and isolation strategies to keep the highly contagious airborne COVID-19 virus transmission to a minimum had implications for many areas of participants lives. Diligent managers discussed trying to keep a pulse on their crew and watch for personality changes and mood disturbances in crew members, though it was more difficult when they were practicing social distancing, quarantining, and remote work. Wanting to be proactive, this firefighter in a leadership position emphasized:

> You know what? You can start to get ahead of it early. Coming through the whole COVID era where we couldn't do that, the challenge now lies − Where are our people emotionally and mentally right now? Everybody, in some shape, some form, has been affected by this. We had to cease our training. We've had to cease our public interactions. Some of them lost their spouses, lost jobs. Some of them kids got sick, some of them lost parents. Where does this all boil together? (Participant 33)

Accounting for all COVID-19 pandemic implications to Canadian society and the brunt of the burden shouldered by frontline workers remains difficult (Denny-Brown, 2021; National Academies of Sciences et al., 2021; Roberts et al., 2021).

Several frontline workers described moral distress and moral injury that arose during COVID-19 pandemic. Being forced to choose between donning multiple layers of personal protective equipment or attending to someone more quickly, for example: “Interrupts people's moral safety in the sense that you put them in a bad situation. They can't win either way, right? […] They sign up for the job because they want to help people, they want to get there [as fast as possible]” (Participant 30). Participants described situations in which they felt the lack of proper planning and oversight compromised their integrity as practitioners, in that they were expected to do was not in their scope of practice, an undeveloped system left them without adequate resources and supplies, or they were placed alone in unsafe assignments. A few people described working up north as morally unsafe; for example, a nurse who was assigned to a small health outpost in the Arctic was left completely alone with emergencies he had never been trained for. Several participants spoke about ‘moral injury’ as a moral and psychological harm they incurred as a worker who was supposed to respond to emergencies but was not equipped with the proper resources to meet the crushing demand.

Some participants avouched the idea that there has been a silent pandemic of moral injury happening in Canada as a repercussion of the COVID-19 pandemic. Participant 30 described: “Even in COVID, […] we told people not to come to work if you're sick. But then we still have the attendance management program, where you couldn't be over four days [of absences] or you're gonna have to answer for it.” Some tensions were irreconcilable without more resources, which were particularly limited during the pandemic.

Sanctuary Trauma

Sanctuary trauma emerged from the data as an important subtheme. Sanctuary trauma is a type of a psychological injury and suffering resulting from a betrayal on the part of an institution to whom one holds a membership that is central to one's livelihood or well-being (Bloom & Farragher, 2011). Sanctuary trauma (or 'institutional betrayal trauma') occurs in situations where after an initial psychological injury incurred (e.g., while working or studying) at the institution, one expects the leadership and the environment to be supportive and protective of their recovery and reintegration, as well as actively pursuing justice, reparations, and prevention of future repeating incidents (Bloom & Farragher, 2011; Smith & Freyd, 2014). Rather than this type of care response, the individual is met instead with victim-blaming, undermining, character assassination, or other stigmatizing, damaging behaviours that exacerbate the initial injury (Bloom & Farragher, 2011; Smith & Freyd, 2014).

A paramedic flagged sanctuary trauma as a key issue for frontline worker mental health, stating: "I kept saying that along with the actual physical trauma that I sustained, and then the mental trauma of helping everybody else, there was that huge component of sanctuary trauma" (Participant 24). She gave the example of feeling like she was drowning when PPTE calls were coming in rapid succession:

> Because it was never really addressed when you said, 'Hey, can I just take thirty minutes here, and I've just done a large car wreck, and I just need a few minutes.' […] But you're getting pushed out the door like, 'No, you're fine, here you go, here's the water, just get going.' […] I try to be a good advocate and explain those to people, because right now, at least here in [province] that's what we're experiencing is a lot of that sanctuary trauma. (Participant 24)

Participants believed that sanctuary trauma being absent from the conventional psychiatric diagnostic manuals created conflations with PTSD. Having a PTSD diagnosis allowed participants to get help suitable to health insurance plans but could be problematic because the diagnosis fell short of facilitating transformations and reparations with the institution, substituting those processes with only treatment plans for isolated individuals. After detailing years of brutal bullying and gaslighting, this police officer imparted what she came to understand:

> They were looking at symptoms, but the doctors, the therapists weren't putting together. And then a social worker actually had me take the trauma inventory test. And then even with the diagnosis, I couldn't find meaningful help. I have what's called sanctuary trauma and moral injury, and even the local psychiatrist here said that in his interview with me I didn't show the cardinal signs of PTSD. So, I just was going in a circle. I was working with no diagnosis and having piecemeal treatment. (Participant 11)

She expressed that what eventually helped her mental health was finding a trauma-informed therapist. She is still fighting a long battle on multiple fronts to gain any accountability from her institution with no satisfactory results to date.

The term ‘sanctuary trauma’ was not known to all the participants, but those who provided peer support were typically familiar with it. As Participant 4 said: “Sanctuary trauma is one of the biggest problems that we as peer supporters run into.” Many participants viewed sanctuary trauma as a systemic problem crosscutting through numerous organizational stressors and negatively interacting with frontline workers’ mental health issues (i.e., maintaining stigma, masking, isolation; dampening help-seeking; exacerbating other injuries).

Participants pointed out that with mental health training, there was sometimes increasing

self-awareness of cognitive distortions, including workers' questioning their perceptions – and this gets dicey but – at time, the perceived institutional betrayal could be an incorrect perception; for example, the worker misreads a question from a boss, and they react defensively, they feel paranoid, or they feel threatened. This example returns to the question of checking in on the workers who on mental health leave, as one peer supporter explained:

> Say you're a police officer, and you're injured badly, you're off work because of the injury that happens, and the trauma that happens. […] They often will think that when the personnel manager phones, or the inspector, or the chief, or whatever, phones to say, 'How are you?' And that can be misinterpreted [as a 'get back to work' call…]. Then they just go into more depression, and it becomes more difficult. They go to the place that you should be safe, which is your family, your organization, and they feel unsupported, and usually it's because the department, these days at least, just doesn't know what to do. (Participant 4)

In my analysis, this is an important excerpt because it exemplifies numerous processes at the same time. There may be − actual or perceived – stigma, disdain, and impatience coming from a superior who has power over the worker's life, and they are asking about mental health which is a precarious and sensitive topic, and this questioning can elicit fear of repercussions (e.g., stigma, rejection, job loss). As noted by participants, there is also a notable potential knowledge gap in that managers and leaders often are excluded from and have limited training on mental health, and they do not necessarily know what to do or what to say to disarm trauma responses and relay supportiveness. Participants urged trauma-informed approaches to management and leadership. This participant added:

> What I've seen recently from it, the understanding of how important your perception is,

> particularly when you're suffering from the symptoms of stress. People tend to perceive things as a threat that aren't necessarily a threat, or they misunderstand the motivation, and we understand that at least as peer supporters. (Participant 4)

Many participants relayed that people at work were not trustworthy, and some were particularly guarded. This police officer said, for example:

> I really struggled last year with my mental health after [private, detailed] losses, very close people lost, in my life. […] The fact that you can't trust anyone in this service also makes it very hard for your mental health. (Participant 6)

There were many similar participant comments about negative organizational reactions to workers' psychological injuries or unmet mental health needs. Participants relayed those coworkers generally, and peer supporters specifically (especially those chosen by the organization), were not always considered credible, trusted individuals, potentially interacting with sanctuary trauma.

Participants scrutinized the danger of running mental health training as a one-off checkbox without authentic institutional backing. The organization can use one-time training sessions to deny mental health is still an important issue, as this police officer exemplified:

> I found a bit of gaslighting in it too, being, 'We don't have a lot of mental health issues anymore because, see we're doing all these things [e.g., R2MR training].' And I'm like, 'No, I definitely lost a job because of my PTSD.' And they're like, 'No, that was a long time ago.' And I'm like, 'Not really that long ago. It was seven years is not really that long ago.' And it was like, 'Okay, next! Next!' It's like, 'Okay, no, this isn't really helpful.' (Participant 31)

She saw lip service to mental health interventions as undermining initiatives for more genuine

progress. She thought R2MR was problematic gaslighting: “It's where I talk at you, and we will tell you all the things that we're doing, and we're going to check a box and say, ‘Now mental health is not an issue because we are having this 3-hour course’” (Participant 31). A participant who is a corrections officer was similarly frustrated that mental health initiatives at his workplace were trivialized:

> It's lip service. That's all. There is − and this might sound nasty − but anyway, there is more concern for the mental health of the inmates than there is for the mental health of the staff. (Participant 40)

He was referring to mental health programming, behavioural interventions, education, and addictions treatment that are intended to prepare people who are incarcerated to eventually re-enter society; programming in any given prison facility can range from nothing to very extensive. This participant expressed frustration that while there is a range of programming and supports for inmates at his work, employees are given only a 1-800 number in case they feel suicidal, and that this is only a general hotline external to the organization. He struggled with PTSD incurred at work and framed the workers’ predicament: “Our relationship with our employer is an abusive relationship” (Participant 40).

HCW participants were not immune to hostilities and the lack of trauma-informed approaches to management in their organizations. Describing the hospital unit he works in, this nurse/manager said: “In this group here, there's always been toxicity for many years, long before me. They went through seven managers in less than ten years. I'm actually the longest manager here. I've only been here four years” (Participant 34). Participants spoke to how such trends demonstrate the need for time during a shift for interpersonal conflict resolution, for team-building, for trust-building, for emotional intelligence development, and for mental

wellness practices. Explaining his view of sanctuary trauma, this paramedic/manager asserted:

> A traumatized organization just doesn't support these things. […] And unfortunately, there's many traumatized fire departments and EMS organizations out there that struggle with this type of thing. It's hard to see the forest through the trees when you're traumatized, because you're so focused, you're myopic. You're always worried about the next problem. You can only focus on and react to certain things. (Participant 30)

He said that mental health leaves are so prevalent in part because of the absence of more proactive solutions from the organization. As it is, mental breakdowns and stress leaves are the expected norm.

Participants found the term 'sanctuary trauma' a useful mental health tool for explaining what had been previously difficult to articulate.

> I was able to validate that a lot of the stuff, especially around the sanctuary trauma, that it does happen. I was able to apply it to work because I could let others know that that they're not alone in feeling this way. That there actually is a name for it because we used to just call it 'bullying and harassment' before whereas that really doesn't encompass it properly. (Participant 24)

A seasoned medic herself, this participant shared that her husband can no longer function at work after almost three decades as a medic, and that though his symptoms align most strongly with sanctuary trauma, it is not recognized by the Workers Compensation Board. She described the systemic nature of sanctuary trauma:

> The lack of support that he gets from his leaders flows down into his position, which flows down to the employees, to assistant supervisors, and then to the employees on the street and front-line staff, and it's just, it's very hard. (Participant 24)

Learning about sanctuary trauma through mental health training programs and group therapy made a difference to her and her husband's mental well-being because, as she said:

> It feels like, you're not crazy anymore. […] I don't know how to explain it, because you just, sometimes they make you feel like you're going nuts. You're just like, 'Am I the only one seeing this?' So now to actually see it there, and have other individuals talk about it, and express the way that they've been impacted, it's huge. (Participant 24)

Going forward, it was important to participants that sanctuary trauma be incorporated into future trauma-informed approaches and trainings. In his analysis of the organization as a traumatized entity itself, this paramedic/manager asserted that sanctuary trauma is pervasive and structurally reinforced:

> What it really comes down to is that you've got injured people within the organization, traumatized people moving up the ranks with no leadership or education. It's been a boy's club the whole time […]. A lot of these people that move into these positions, they are people that are somewhat manipulative and traumatized themselves, which is just causing a traumatized organization. (Participant 30)

Participants drew on their learning of mental health to apply individual level psychology to social-psychological processes in the workplace. What they learned about psychological trauma, they applied to the organization, providing more understanding for how sanctuary trauma manifests and perpetuates itself systematically. Drawing important parallels, Participant 30 elaborated:

> Traumatized organizations look like traumatized people. […] They are controlling, they scapegoat, and they tend to be overly reactive, and more hypervigilant, which a traumatized person would be. They can't see the bigger picture that if they invest in

> people, they will be better. (Participant 30)

Participants asserted this conceptualization of sanctuary trauma be more widely adopted, and that will help deepen understandings of how the interrelated, surrounding issues need to be addressed at multiple levels simultaneously.

Middle Managers in Hierarchical Organizations

There were several participants with dual roles as frontline worker and managerial staff. Participants in management positions explained how they were vulnerable in specific ways, such as not belonging with those below or above them in the hierarchy and thus experiencing isolation. This paramedic said:

> I'm in a difficult position now because I'm an assistant supervisor, so I'm not quite in the management group, but I'm not quite still in the peer group anymore, either. I'm that middle person, where I'm not accepted by anyone. (Participant 24)

Participant 34 described the non-glamourous job of nurse/manager as always being the scapegoat, disliked by those above and below him in the hierarchy: “I’m the fall guy.” The organizational structure itself reproduces the power dynamics and social tensions within which a lot of his stress was exacerbated. Describing losing friends, this firefighter explained: “When you come up in the ranks […] into a leadership role, it's that whole from buddy-to-boss mentality. […] Now, you can't necessarily be buddies with [your former crew] because that’s seen as favoritism (Participant 33). Manager participants were responsible for conducting performance reviews, typically that they did not design, and one participant complained that the term ‘bullying’ gets misused to describe ‘performance managing’ someone in a lower ranking position. Managers are complicit in and required to implement organizational decisions, whether they agree with them or not (Mukhopadhyah, 2024). Participants noted that the role

also includes the specific stress of delivering bad news.

In the context of pervasive staff shortages, burnout, and mental health issues, participants also observed frontline workers are now less likely to want management and leadership positions. Participant 33 elaborated:

> Everywhere you're seeing right now in North America a huge hole in leadership positions. People don't want to move up. […] If you take a look at it, and you move up to the position of a captain, still in the union, still get to ride the truck, still get to do all the fun stuff, limited paperwork, 100% protection, paid overtime, right? Limited responsibility. Sounds pretty good. You move up to a chief officer, all the responsibility, no protection, no paid over time. And oftentimes your wage is lower than that of a captain. (Participant 33)

Participants had mixed accounts on how well management positions are incentivized financially, but these roles were typically non-unionized. Persons in the lower ranks and middle ranks each are separately fighting for health and safety, wages, and benefits, and competing for resources, as per participant lived experience.

> There's no support, and I'd be shocked if people knew that I said this, but I think if we could align the fire chiefs and the firefighters together for a common good, and we've got that common protection across the board, we would see a change in that demeanor for the top end and the leadership. (Participant 33)

Participants described the fire chief's job security as entirely dependent on their crew performing well. A fire chief who stands up against top-down violence on behalf of their crew can become vulnerable to being terminated or disciplined; the lower ranking workers, on the other hand, are protected by their unions.

Participants reported that on top of coping with the divisiveness, there are additional pressures on maintaining mental fortitude. The process of rising up in the ranks has mental health implications, as another firefighter explained, with the double-edged sword of intensified motivation and pressure to stay mentally strong for others: “You have to maintain an extra level of resiliency. Because if the people that you're leading don't have confidence in your resiliency, then it's going to be hard for them to work for you properly” (Participant 38).

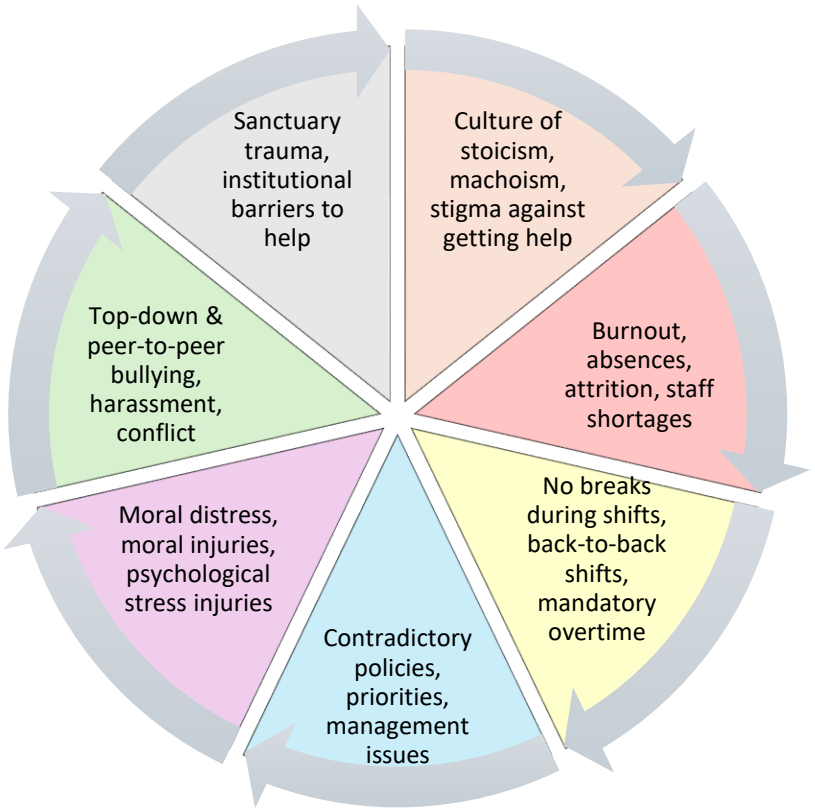
A common participant refrain was the need for leadership-specific mental health training. Tailored training was viewed by participants as necessary for leadership buy-in to mental health knowledge into whole-system procedures, but it is also needed for helping to tackle mental health specific to leadership roles. A police officer in leadership felt mental health initiatives needed to include organizational stress. He had numerous PPTE but was more focused on the role of organizational stressors and mental health: “I am a high-ranking police officer. Here's some of the things I've gone through. And stress is not all about calls. Stress is about the organization. And [if] they talked from a leadership perspective even, perhaps [training] would resonate differently” (Participant 10).

Participants described mentally-taxing workplace power dynamics, including cultural norms of harsh reprimands and scapegoating, while some in managerial roles were actively seeking ways to be trauma-informed in how they dealt with each employee and the collective staffing issues. Some were practicing non-punitive reparation processes to foster relationship-building between people at different levels on the hierarchy (e.g., facilitating dialogue, promoting understanding, team-building). These managers were working to de-escalate conflicts via principles of equality, a nod to flattening hierarchy within interpersonal relationships as an aspect of alleviating mental unwellness. Relationship-building runs into

tension with the power superiors have over subordinates but can be a very productive investment in people and mental health (Lee-Tauler et al., 2024); “the results [of relationship-building] I’ve always experienced in all my years have been positive” (Participant 34).

The following is a visual model to help demonstrate how the issues discussed in this current chapter feed into one another to affect the mental health of frontline workers.

Figure 1. Cyclical factors



This concludes the chapter on interactions between psychological injuries and mental health issues with organizational structures, systems, and stressors. The topics included stoicism and machoism, policies and priorities, scheduling and staff shortages, and attendance and attrition. Further, organization level factors such as bullying, harassment, workplace conflict, moral distress, moral injury, sanctuary trauma, help-seeking barriers, and the role of middle managers were discussed. The next chapter will briefly look into some of the intersectional

considerations and complexities of the results shared thus far.

Chapter 6: Intersectional Considerations Around Mental Health

This chapter presents the fourth set of study results, which address the fourth research question: do the results differ across social categories of diversity? This question is answered as far as the data will allow. Gender differences are then examined in relation to mental health and frontline work, including the societal expectations of women around unpaid caregiving; the bullying, harassment, and career barriers women face; and the status of what constitutes socially acceptable expressions of masculinities in frontline workplaces. Following that is a subsection on Indigenous-specific considerations, such as inclusion and spirituality, rural and remote communities, and the ongoing impacts of colonization and the Indian Residential School System pertaining to frontline worker mental health. There is a brief discussion on class, income, education, and job category, as well as disability status or labelling, regarding frontline worker mental health.

The chapter is intended to illuminate how some social locations play out in the lived experiences of frontline workers. The current sample is predominantly white, heterosexual, cisgender, middle-aged men, which approximates common demographics of Canadian frontline workers. Participants perceived absent diversity in many of their public safety and healthcare workplaces. As Participant 16 stated:

> My service has a huge issue with diversity. We don't have any. […] The first [female] was hired [a number of decades] ago. Then, there was no other female hired for almost [over twenty-five] years. […] There is no openly gay or no openly LGBTQ members in our service. And we are all very much the white or the Caucasian, male, alpha personality, brown haired, brown eyes individuals. Nobody could tell the difference between us unless they saw our name tags. Same haircut even. […] The biggest diversity

> we have is if you're left-handed versus right. Yeah, it's pretty bad, we are working on trying to improve that and it needs to be improved, but it's hard to get there. (Participant 16)

The participant serves as a representative quote for most participants, with some exceptions; for example, nurses with more women coworkers and two PSP who expressed they have worked with more diverse groups. One participant said: “Our local police force is very diverse culturally” (Participant 20) and some others indicated similarly, offering some exceptions to the prevalent sense of a ‘monolithic white culture’ in police, fire, paramedic, healthcare, and other services in an increasingly pluralistic nation.

Gender Considerations

Public safety workplaces are typically men-dominated, while healthcare is more varied by job category, department, and ward (Collins, 2023; Dube, 2020; Perrott, 2023). This section seeks to provide insights about challenges that may otherwise go underrecognized by those of the majority gender in a workplace. Participants described several important issues pertaining to women and mental health in frontlines workplace.

Working, Mothering, and Supporting Spouses

Participants spoke about the mental health strain that arises from multitudinous societal expectations on women who are held to high standards of gendered reproductive labour, mothering, and caregiving roles while often also working full-time on the frontlines. Women participants had a hard time finding breaks between work outside the home and work inside the home, especially when also caring for small or special needs children, caring for disabled spouses, or caring for aging parents, additionally so when facing their own disabilities and injuries. Women participants described internalizing high societal expectations of perfect model

wife, mother, and worker. The multiple roles worked by women participants were all high stakes and the social expectations were taxing as they tried to avoid compromising their children's care and being perceived as inadequate at work. Participant 6, a police officer and mother, remarked that there is women-specific mental health stigma on top of the high standards placed on working mothers:

> It is obviously a very male-dominated job. I think that a lot of females don't come forward because they're looked at as weak. I think that a lot of females probably struggle, being a mom, or trying to do shift work, your body changing, kids at home. I'm sure there's a lot of amazing people here at the station who are great fathers, but moms are just different. (Participant 6)

Workplaces with more family-friendly orientation and supportive policies were understood by participants to have more women workers. Some participants acknowledged that men tended to complain that women take less evening and weekend shifts on the one hand, but that on the other hand, men do not make a point of booking those times off which they could do just as often as women. Full-time working mothers reported challenges with being on time to pick up their children, to have time to functionally disconnect from work to achieve a positive headspace for providing childcare immediately after work, to drive their children to all their extracurricular sports and activities, and to attend to self-care or wellness programs themselves, such as group therapy or physical fitness. Fathers may have felt similarly but none mentioned these strains. Fathers were more likely to express regret about missing out on their children's upbringing or about their children seeing them at their worst (e.g., when using alcohol or substances as coping strategies). Participants expressed support for more stronger gender parity policies in frontlines workplaces to more evenly distribute parenting workloads and

expectations.

Working mothers reported being more in tune with, and taking more responsibility for, their children's many needs, including practical (e.g., ensuring they have nutrition, clothing, shoes, hygiene, school supplies), logistical (e.g., scheduling appointments, activities, childcare, transportation), emotional and mental health (e.g., problems with friends, self-esteem, experimenting with substances, social media, screen time), and educational (e.g., monitoring and supporting homework, school and community volunteering, fundraising) than their partners did. Working mothers were also providing more emotional and practical supports for their spouses.

Primary supporters of first responders who were wives and full-time first responders themselves struggled with inequitable expectations, socializations, and relationship dynamics. None of the current men participants made similar observation about their wives, not even the most emotionally aware (e.g., the spiritual care provider, the trauma specialist paramedic). Women participants acknowledged gender-specific stressors, such as internalized societal pressures and gender role double standards, overt and internalized sexism and misogyny, caregiving multiple dependents, and overwhelmingly feeling they are being set up to fail because they are 'never enough.' Participants explained the strain of trying to be a 'good mother' even when they come home from work exhausted and psychologically vulnerable after a PPTE, for example. A law enforcement officer with a diagnosed brain injury and PTSD discussed this type of aftermath:

> I kind of felt like a bag of shit after. […] We were talking about, how PTSD affects our ability to connect with other people, and how it can affect kids. […] And I'm like, 'Well, I feel like a shitty mom.' […] It was mom guilt. (Participant 31)

Some women participants reported role strain and questioned how to divide themselves successfully among all their multiple roles without greater supports, such as flexible work hours, affordable childcare, parenting policies that promote equity, and healthy, proactive spouses.

Gender-Based Bullying, Harassment, Delayed Promotion, and Mental Health Stigma

Women participants faced comments and insinuations that women are given easier public safety career entry tests, despite the same standards (e.g., knowledge tests, weightlifting tests, physical fitness tests) applying to everyone regardless of gender. A few older women participants described experiencing delayed promotions or being forced into early retirement. One firefighter who was near sixty years old described: “I passed the testing to be a captain years ago, but I didn't get the position […despite that] I've been qualified for a while” (Participant 29). She continued to faced discrimination even after she was finally placed in the captain position. Another woman police officer described years of bullying by a superior, summarizing: “He really destroyed my mental health” (Participant 6). She continued to have to work in the same department as her aggressor, and meanwhile he had been granted a promotion, still, she spoke from a place of strength:

> It's hard right, because I'm a female, and he's a male. But I stand up for myself, which is different than a lot of people. So, of course, I get the perception that I'm a bitch, right. But I don't care… that's taken me a little bit of time. (Participant 6)

Another woman police officer had years of being subjected to bullying behaviour from an individual with more status and power than her in the organization. Over time, multiple people joined in and ganged up on her to remain sided with the influential bully. This participant reported that she developed PTSD, depression, and sanctuary trauma. She said that when she

was diagnosed with breast cancer, she was partly relieved because at least the latter diagnosis would not be subjected to the same type of bullying, as it was distinct from mental health stigma. She related:

> I was diagnosed with a very aggressive form of breast cancer. And I thought, Oh, good! They're going to understand, this past year, that's why everything has been so out of whack for me, because it was the size of a tangerine, it was just growing and living in there. And I was treated abysmally because of their perception of my mental health. (Participant 11)

Women participants reported years long abuse and harassment while they were just trying to do their jobs. Some discussed continually trying to set boundaries regardless of facing ongoing disrespect, choosing one or two 'smaller battles' they might win while taking the damage in the 'larger battles' they knew that they could not win.

Women participants also experienced misdiagnosis, as well as not being believed about their health symptoms by coworkers and physicians. Older women participants suffered undiagnosed PTSD until more recently, perhaps a holdover from women's exclusion from the military − the context in which PTSD as a diagnosis was first developed. Participants inhabiting two or more categories of oppression and marginalization (e.g., gender, age, disability status) faced serious adversity at work when trying to seek help and to manage medical issues. Gender-specific mental health stigma stopped women participants from taking mental health or medical leave as needed. For example, Participant 6, a woman police officer said:

> Looking after mental health − we don't. And I realized that through last year, I kept on trucking, and really, I should have probably gone off for a month to get myself straightened out. […] I'd been so worried about the perception, including myself. I was

> worried what people would think. And is it because I'm a woman? Yeah, 100%. We have more to prove, in my opinion, on this job than men do. (Participant 6)

Another woman working in correctional services said of her workplace: "It's very male-dominated and very militarized, so women in security struggle a lot. They go through a lot" (Participant 14). This participant remarked that numerous court cases were underway to expose and address sexism in corrections workplaces, and that until there were widespread changes, the work was especially brutalizing for women. Women participants tended to occupy lower-level positions within their organizations and experienced the brunt of poor treatment endemic of structural violence. Participant 14 explained everyday experiences with insensitive men coworkers:

> I had a lot of stress with dealing with people who were unhappy, and they would take it out on me. Stupid things like, 'You need to take off your sweater before you walk through the X-ray machine,' and I'm like, 'No, I have a tank under this I'm not showing you more of my body than needs to be.' […] It was a male. So just those kinds of things. What's scary about that working in a women's prison is having a male not understand that one out of three women have been sexually abused in some way. And you're asking someone to remove a piece of their clothing, that tells you that that person shouldn't be working in a women's prison because they have no understanding of the trauma and abuse that women have gone through. (Participant 14)

Women participants brought up the need for frontline workplaces to be trauma-informed specially regarding sexual trauma.

Women participants had also experienced subpar support from men in peer support. Peer support was sometimes less accessible for women, and peers sometimes gave problematic

advice to women. One participant relayed, for example, that when she was suffering depression and substance dependency that a peer supporter had responded by advising a change of appearance: “He said, ‘Do you think if you wore makeup and maybe a dress, and did your hair, do you think you might feel better about yourself? Do you think people might be more accepting of you?’” (Participant 11). She said that his advice was unhelpful and counterproductive to addressing the psychological injuries which were entwined with chronic workplace bullying and harassment. This type of gendered attitude reproduces a barrier to women’s help-seeking: “We didn’t talk about calling peer supporters. We didn't trust them” (Participant 11).

The women in this current sample highlighted numerous important points that require attention, including but not limited to the pervasiveness of gender-based bullying, sexual abuse and sexual harassment survivorship, structural violence, and discrimination.

Masculinity, Anger, and Other Emotions

Socially acceptable expressions of masculinity and emotion by men may be changing over time in Canadian culture, subcultures, and society (e.g., Grahn-Wilder, 2018; Herron et al., 2020; Murray et al., 2008; Pasciak & Kelley, 2013), with some participants opining specifically about such changes. The shift has been influenced by several decades (since the 1970s) of women being increasingly present in men-dominated workplaces (Perrott, 2023). Workplaces differ in how hospitability towards women and minorities, openness to rethinking stoicism and machoism, and eagerness to undertake efforts including mental health training and trauma- and violence-informed cultural shifts, which hold potential for fostering gender inclusion in the workplace (Faltas, 2020; Herman, 2023; Perrott, 2023).

Current participants – typically white heteronormative men – presented as reasonably

moral human beings individually; however, the frontline cultures appear to facilitate the dominance of white, able-bodied, heteronormative men (some of whom are trained and armed in paramilitary defense), which can represent a power that leaves minorities vulnerable to abuse without moderating factors of a diverse society. The lived experiences of current participants suggested some perceived threats to masculinity and surrounding cultural norms. A firefighter in a large urban centre said:

> I'd probably be biased towards the white male perspective. […] The mental health training programs] aren't outright saying how bad we are, and that's really appreciated because there's a lot of like, 'White males are no good.' […] The city propagates that stereotype sometimes with some of their diversity training. I didn't feel like you were saying my group is part of why society sucks, and that that was noted. (Participant 38)

Accordingly, trainings like the BOS mental health program may help participants (often white men) recognize challenges of conflating individual participants with their social identity categorization (i.e., one white man representing all white men). There may also be opportunities (e.g., for white men in positions of power) to extend similar understanding and empathy to people in minority social categories. Participants noted that many white men coworkers tended to be defensive during diversity training and that training often does not address the defensiveness. Participants spoke about the need to motivate the worker's positive self-image as a 'good person' rather than igniting reactiveness: "All the white males are like, 'Well, you're basically like saying we're animals. And in reality, most of us are pretty good, right?" (Participant 38). Participants highlighted such gendered and racialized workplace dynamics as interacting with defensiveness and limiting learning, self-reflection, and self-improvement: "You would lose the group instantly" (Participant 38). Women participants did not make similar

comments, but an individual woman was “never one of the guys” (Participant 29), limiting power-sharing and social inclusion to only degrees of acceptance as enacted by men coworkers and bosses.

Many participants commented on anger being a much more acceptable emotion in men-dominated sectors. Participants have been socialized and trained not to show emotions other than anger in certain circumstances. This woman corrections officer described: “Anger is much more acceptable, rage is much more acceptable, crying is not acceptable. As a correctional officer, they say crying is a weakness. And so, anger and rage become the big emotion up there” (Participant 13). Participants stated that either showing anger or no emotion at all were the general cultural norms. They observed that, while sadness is a normal human emotion in response to witnessing the horrors and traumas prevalent in frontline work, frontline workers, especially men, were extremely guarded.

> I also see a lot of tears in people’s eyes, and the holding back, as this is seen as weakness. It's terrible. Because it needs to be let out actually. I always tell people, crying is the same as laughing. If you hold in your laughter, it's not good, same as crying. If you hold it in eventually, it's, you’re dying from the inside. (Participant 13)

A couple of women participants thought showing emotion such as sadness could be appropriate when something awful happened while working in community relationship development or schools. Many participants said crying was difficult because they are trained not to, though a couple of the older men participants explained crying became easier with age. Even older men participants still never cried on the job, only at home with a certain family member, like a daughter. Expressions of normative masculinities appeared to change with age, between different spaces, and with different people present. Participants’ acceptable emotional

expressions were gatekept at work to maintain group membership and because "You have to because otherwise […] you are a target from everybody. You are being a target for management, a target from your co-worker, and a target of the inmates" (Participant 13).

Participants said that men in their workplaces tended to switch rapidly between anger and very crude jokes or dark humour to redirect strong emotions. A firefighter described coming to terms with suppressed anger for the first time, acknowledging it, and seeking a deeper understanding of himself-in-frontlines work and mental health through psychoeducation:

> I had the stereotypical, emotional dysregulation and lots of angry outbursts and just anger for me, I thought, all firefighters have marriage issues, it's normal. […] But I have a better understanding of like, no it's not normal. Those angry outbursts aren't normal, which would have maybe helped me reach out sooner than I did, which may have helped or decrease the negative impact on my family [if I'd learned sooner]. (Participant 22)

He and many others described mistakes as costly to their relationships and advocated for more supports for frontline worker families who are often the first to see changes in the frontline worker. These participants stressed that family members are typically the first, primary, and sometimes only social support system. Family members may bear the brunt of the emotions that the worker suppressed at work.

Not being able to express a range of human emotions, being trained not to emote, and the emotional spill-over between the at-work and at-home worlds of frontline workers, was understood retrospectively (e.g., by older participants looking back on their lives) or comparatively (e.g., across genders) as a type of denial of full personhood and human potential which could be approached differently. A firefighter captain reflected on how gender played a part in her trauma-informed leadership and decision-making style. She said, for example, that as

a matter of routine, she checks in with her crew after PPTE more than any captain she has worked under:

> There's all these things that could happen. So, afterwards for me personally, I don't know if it's a woman thing, but I look at more the personal level and say, 'Are you guys okay? Do you have anything that bothered you? Or do you want to talk to anybody, you need some downtime?' Cause you don't know. (Participant 29)

I theorize her perceptive and trauma-informed leadership style may be increasingly important as crew members develop their own self-awareness about mental health processes and needs; indeed, trauma-informed leadership may be an upstream intervention for mitigating accumulated of psychological trauma at individual and organizational levels.

2SLGBTQI+ Considerations

There were no individuals in the sample who were openly 2SLGBTQI+ participants which is unfortunate because such people could provide key insights into experiences of majority culture and minority subcultures. Statistically speaking, it is reasonable to think there may have been participants who were 2SLGBTQI+ but who remain closeted. Participants generally described their workplaces as increasingly inclusive, that inclusivity is not posing a huge challenge, and that 2SLGBTQI+ people "need to have the same respect and the same pathways that everybody else does" (Participant 33). Participant reports could not inform on how 2SLGBTQIA+ frontline workers may feel, and perceptions may differ, and variance may present across different workplaces. Participants stated that inclusion in the workplace for 2SLGBTQI+ people had come a long way in even the past ten to twenty years, but that there was along way yet to go – paralleling their comments about mental health awareness.

There were some participants who drew parallels between stigma around mental

unwellness to stigma around sexual orientation or gender identity; for example, the psychologically and socially meaningful process of coming out as 2SLGBTQI+ was sometimes understood as similar to or repeated in the process of disclosure of mental health status. Participant 20 reflected on the two types of disclosure from what he had noticed about others overcoming stigma: “You get to a place where you don't try to live in fear about those things.” The choice to disclose or not is calculated through assessing whether it is safe (or not) and beneficial (or not) to do so, and if one will be met with a supportive social environment or a homophobic and stigmatizing social environment which induces a sense of shame rather than worthiness and validation (Colvin, 2009; Giwa et al., 2022; Moagi et al., 2021). I theorize that there are likely many unknown co-existing, compounding, mediating, moderating, or protective factors; for example, being openly gay, accepted, and included at work could be a protective factor for relevant mental health indicators.

Inclusion in psychoeducation can be an important role for 2SLGBTQI+ people’s visibility and acceptance (Colvin, 2009; Giwa et al., 2022; Moagi et al., 2021). There was some participant awareness of the role of 2SLGBTQI+ visibility in PSP- and HCW-specific group therapy, though this would be different for each group. One police officer, who was more explicit about goals of inclusivity than most other participants, and who volunteered for a program to put ‘safe place’ 2SLGBTQI+ friendly stickers on shop windows, said of his therapy group: “Everybody puts their pronouns in as an automatic thing these days, and this is good, and those are always respected really, really strongly. Thank goodness that things have improved so much in that respect” (Participant 4). Participants reported that some parts of the country, organizational cultures, and workplace subcultures are more progressive or more conventional than others. A few participants expressed confusion and aggression regarding the practice of

stating and using pronouns. For example, I received occasional rebuke and pushback when asking participants how they self-identified their gender at the end of the interview. I observed a lack of education around gender parity, gender diversity, and gender identity issues (e.g., “There's blue jobs and pink jobs,” as per Participant 18), including in the psychoeducation program we were discussing. As summarized by Participant 30: “There is so much more room for what we could do” and Participant 4 “There’s a long way to go.”

The current results support the following questions for future research: Are people in healthcare and public safety workplaces are more often unsafe disclosing than in the general population and other job sectors when stratified by age range? How many frontline workers have at least one coworker to whom they have safely disclosed these aspects of themselves? What examples do we have of cultures that embrace 2SLGBTQI+ frontline workers rather than requiring sexuality and gender suppression and conformity?

Indigenous Considerations

There were several things important to Indigenous participants. I did not want to lose the unique contributions specific to the Indigenous participants even though there were only two. Indigenous people were not a specific focus for the current study, but there were enough data to highlight important elements that can inform the current results and future research.

Spirituality and Inclusion

Indigenous participants described the Seven Sacred Teachings of the Anishnaabe People as guiding principles for their work in their jobs and in communities. They shared that these teachings correspond with values, such as love, respect, humility, wisdom, truth, honesty, and courage to inform their actions and thinking across a range of matters, as broad as cosmology, worldview, and ontology, and as narrow as interpersonal interactions.

One Indigenous woman noticed that in psychoeducation groups, people gave their names, pronouns, and mental health diagnosis in the first round of personal introductions. She bristled that people identified as a diagnosis (e.g., 'I'm Sara, and I have PTSD'), but further, wished for a more spiritual understanding of their purpose in coming together for healing. She wished for more Indigenous understandings in the groups she was a part of, expressing what is a customary way of introducing oneself in Indigenous ceremonial or healing spaces: "When can we say? 'Hi, my parents gave me the name […], my Spirit name is […].' My name is important" (Participant 17). She felt that this created a culturally safe space and importantly included Spirit in introductions, while facilitating discourse beyond synonymizing people with diagnoses, as well as group membership and belonging.

Indigenous-led spaces are often powerfully charged and primed for individual and collective healing through ceremony and prayer, but many mainstream mental health initiatives overlook such spiritual and cultural practices; individual frontline workers seek them out separately (Kinew, 2015; Menzies & Lavallée, 2014; Wagamese, 2008, 2016). Indigenous participants pointed out that they typically do not have access to a lot of Indigenous-led spaces, but that the cultural safety increases when this is the case. Indigenous participants found it welcoming that there be an acknowledgement of Indigeneity when starting a therapeutic relationship in one-to-one therapy or in a facilitated group. There was generous understanding on the part of Indigenous participants that most people did not speak Indigenous languages in these settings despite the inequitable forced assimilation of Indigenous people into English through colonization and Residential Schools:

> I'm sensitive to the fact that if you're in a group of mostly non-Indigenous people, first of all, they're not going to maybe know how to pronounce. […] The names are long, and

maybe sometimes a bit complicated to say to the average person. (Participant 17)

Indigenous participants did note that it can be important to consider Indigeneity or spirituality for contexts of therapeutic benefit because people are not single faceted. Participant 17 effused that people bring multiple facets with them, that there is therapeutic benefit to embracing complexity, to add depth to group discussions. She suggested having grace, curiosity, and approachability around these topics which can be polarizing if not well-facilitated. In my analyses, bringing diversity and complexity into psychoeducation and group therapy sessions (e.g., Indigeneity, spirituality, culture, ethnicity) may help people who will ontologically equate mental health with spiritual health. Indigenous participants felt that their differences were respected in their group therapy experiences; people were open and curious to hear from them, and they were respectfully supported in their discretion to explain (or not) to non-Indigenous people about Indigenous experiences and realities.

Many participants found that the functional disconnect functional reconnect (FDFR) technique resonated with their experiences and was designed to empower, and one Indigenous participant highlighted FDFR. She drew connections between FDFR and some teachings given to her by an Elder that she gave permission to share to help others in the current study and future studies. This Nehiyawak (Cree) woman working in correctional services said that she had struggled when she was leaving work at the end of a shift, and particularly when the work had been taxing mentally, emotionally, and spiritually, and that her Elder had taught her how to set about an intentionality and to invite her Spirit to come with her, to help her Spirit not get lost or left behind at the prison.

I tried to use deep breathing and changing my way of thinking. When I had a stressful day, coming home from work, I would invite my Spirit with me. And that was my

> reconnection. That definitely fit with disconnect, reconnect. […] I didn't want to leave my Spirit there. What was taught to me about from an Elder about that was that if I leave my Spirit there, then in the night, I'm going to be worrying and thinking about how I can solve the problems that are happening at work. I was stressed out, and I knew that I was thinking too much about things all the time, and that's what she had said to me that had helped her. It was very helpful. (Participant 14)

She also shared that water was perceived as a significant healing and cleansing force that resonates with the western psychology; for example, in FDFR, taking a shower or bath and changing clothes can facilitate disconnecting from work, leaving the work role (e.g., as a steely corrections officer), and returning to the home role (e.g., as a loving mother and wife). This participant observed that using water in a prayerful way can cleanse away the past difficulties of the shift and help her to start again in a new moment.

Furthermore, she emphasized the importance of having access to an Elder who had done similar work to her. She reported that the most positive and mentally steadying factor that she had experienced at work was the Elder-in-Residence at her organization to whom she could turn to for guidance and healing. She discussed how the presence of an Elder was inherently calming and a type of medicine. Similarly, access to plant medicines (e.g., sage, cedar, and sweetgrass for smudging, tobacco for praying with) in the workplace was helped her feel calm and reassured her as well. She felt that the presences of Indigenous medicines and Elders were essential, among other Indigenous-specific resources. She extended this to Indigenous practitioners of psychology, psychiatry, and other branches of western medicines: "I was so happy that she was able to give me the connection to get the Indigenous psychologist that I have" (Participant 14).

Participants reported that Indigenous psychologists, Elders, and other practitioners are key to Indigenous health (inclusive of mental, spiritual, mental, and physical aspects of health), and sometimes even for respectful non-Indigenous people seeking healing where there are notable gaps in Western medicine systems. When discussing non-Indigenous people participating in Indigenous ceremonies and spiritual healing practices, she said: "It's good that people participate in those ceremonies. That's my understanding of it is that those treaties, those teachings, all that stuff − it's for all the people, not just Indigenous people. It's for all of us" (Participant 14).

I theorize that many people living in Canada are uneducated in terms of how to be respectful invited guests in Indigenous spaces, how to engage in a good way with the right intentions, and to be sensitive to not overstepping protocols that protect against cultural appropriation. This respectful engagement is particularly pointed given the macro-relationships and history between European settler/immigrant groups and Indigenous communities (Truth and Reconciliation Commission of Canada, 2015). Profound, culturally safe, psycho-spiritual healing can occur if care is taken in following instructions of community-sanctioned Indigenous medicine practitioners within the frameworks of appropriate cultural and ceremonial protocols (Kinew, 2015; Menzies & Lavallée, 2014; Wagamese, 2008, 2016).

Working in a Small Rural or Remote Community

One critical aspect of some Indigenous participants' experiences was the impact of working in one's own community, especially if small, rural, remote, isolated, or where 'everyone knows everyone else.' Answering calls your own community calls becomes more personal than anonymous calls and thus presents a difficulty in functional disconnection aspect of psychologically surviving the work in the long run, as per participants' experiences.

> From an Indigenous perspective, when you're a probation and parole officer in your own community, and you know the people, and you have relationship with the people, and when those people that you have relationships with because Indigenous communities are close-knit communities. When one of those members that you're serving in the community dies by suicide for example, it hits home a little harder. (Participant 22)

This relational proximity can be true for non-Indigenous workers in small communities too, and a few participants shared stories about freezing up when they were called to the home of someone they knew (e.g., a parent who was nonresponsive). Participants reported that the longer they lived in a small community, the more people they get to know. Further, participants from rural and remote places reported additional stress from provided multiple types of emergency response at the same time, often with limited resources or back-up.

Several Indigenous and non-Indigenous participants had experience working in rural and remote Indigenous communities. One police officer described his frustration with problematic jurisdictional issues that caused inequitable funding for Indigenous communities as compared to non-Indigenous counterparts. He described trying to respond to calls over vast tracts of land without adequate resources allotted for the needs of the population and the land base. Where he worked, policing was not considered by the federal or provincial governments to be an 'essential service' and thus was underfunded:

> Because it is [rural and remote] First Nations policing, and the way that's gone for so long where it's not actually funded based on needs, it's basically a flat rate check of 'take it or leave it' – but 'it' is nowhere near what's actually needed. […] As it is, we're being funded – we're making do with about half as much as we should. And so that's just extreme strain on everyone on the road. You're constantly working short where you're

> covering multiple communities. And just a lot more danger because you don't have another cruiser for another like three hours. So, if something hits the fan, and you don't manage it, it's not going to be good. (Participant 41)

Participants referred to being short-staffed or completely alone in responding to calls, including very bad calls 'in the middle of nowhere.' They told many tragic stories of violence and trauma that they could not prevent or adequately address given the chronic shortages. The experiences taxed workers' mental well-being and left them vulnerable and lacking their own personal physical safety. Participant 30 said, for example: "I was in a murder scene. […] The assailant was still in the house. We didn't know, we walked in, it was someone got stabbed. […] And sure enough, the assailant with the knife is still in the house" (Participant 30).

This participant went on to describe race-based violence. Some white-presenting participants described facing hatred and distrust in communities when they were perceived to represent the colonizer or the oppressor. Some participants were moved to different assignments to make room for Indigenous and Black workers in Indigenous and Black communities, which was met with disappointment and sadness at lost relationships and opportunities. Participants thought that racialization was exacerbated by staff shortages in some communities. Indigenous and Asian participants did not comment on this aspect of their work, but were not directly asked about experiences of racialization, creating a limitation of the current study that requires further inquiry. Structural racism perpetuates structural violence and divisiveness with many repercussions, including exacerbating strains in under-resourced services, such as small rural, remote, and Indigenous communities (McCallum & Perry, 2018; Stelkia, 2023; Woodgate et al., 2017). The Truth and Reconciliation process is a part of the work of addressing these and similar systemic issues (Truth and Reconciliation Commission of Canada, 2015).

Intergenerational Trauma and Residential Schools

A few participants shared their knowledge of how colonization and the Indian Residential School System − as well as the Sixties Scoop and 'the Millennial Scoop' − disrupted traditional parenting practices, replacing them with multiple forms of abuse (i.e., sexual, physical, emotional, psychological, verbal, cultural, and spiritual abuse) and subsequent intergenerational trauma. A police officer with First Nations communities discussed the impacts of Indian Residential School System at length, as well as a vision forward:

> All this trauma that's undealt with, it just continues in its cycle. If somebody doesn't know how to parent, and they don't pick up the tools along the way, they're just going to pass on what was given to them, and unfortunately that wasn't anything good. And so, then, those kids, they grow up in that environment, and it continues. There's just so much sexual assault, so much substance abuse, so much just inappropriate behavior. With greater understanding of ourselves, of our mental health, and how to foster that in a healthy manner in ourselves, in our offspring, it would be a whole different world out there. (Participant 41)

Participants were often called to neighbourhoods where people are enduring chronic poverty and violence − issues that are not easily solved; a few participants highlighted how they struggled to reconcile their roles and responsibilities in these communities where they want to ensure safety and security for all when it could feel like an impossible, endless, and thankless task, worsened by animosity and lack of healthy relationships. While intergenerational trauma was discussed by participants, they also said that some communities are very successfully reclaiming cultural and psycho-spiritual health and well-being.

> That's why I like to point out, more so those extra remote northern communities, not all

> of them are like that. I've been in many communities where they're thriving, and it's amazing, and we just wish you take whatever knowledge got them there and share that with everybody else. (Participant 41)

We need more research with Black, Indigenous, mixed race, and other perspectives to increase understanding while avoiding tokenism. A few participants mentioned doing Truth and Reconciliation training through their workplaces and indicated more training could help build trauma-informed and cross-cultural understandings while hopefully reducing violence.

Class, Income, Education, and Job Category Considerations

Participants discussed how differing levels of income and education were important intersectional considerations that affected rates of violence in the various neighbourhoods in which they lived and worked. They reported how income interacted with frontline worker mental health, such as via responses to financial incentives for overtime work and even reasons for entering the occupation in the first place. For example, corrections officers were often located in rural places where there were fewer job opportunities to choose from than in urban places. Many participants indicated that they could not have afforded the mental health training funded by the government if they had to pay out-of-pocket, and they are often limited in accessing for psychological help to only the avenues that are covered by their employee health benefits packages. Many participants reported that they could not afford consistent high-quality professional mental health help on their own accord, though the more they work and are exposed to PPTE, the more they may need psychological help. Some participants suggested that there may be class issues entangled with mental health relating to low rates of secondary education in police officers, for example:

> Law enforcement officers often have low levels of education which reduces their ability

> to be able to talk about and deal with all these issues. They don't believe it will happen to them if it hasn't happened yet. Which is ironic given how prevalent mental health issues are in the PSP population. (Participant 26)

Income, education, and class background impacted how participants felt regarding potential job loss and job security, including younger people who have little or no work experience, as well as older workers with injuries or disabilities who felt they were not mobile and had few transferable skills. A first-generation immigrant corrections officer said she saw pervasive fear for livelihood:

> Fear of being let go, and especially right now, we have, with the recession coming and everything, people need that money, people need that job. It's not something you just give up lightly. And people are willing to take a certain amount of bullying for that. And I find this terrible. I find it appalling. (Participant 13)

Some participants described experiencing 'job-ism' or being judged according to their job category, rank, and title. Further, frontline workers from low income backgrounds are likely conditioned to accept poor mental health as part of life, as well as exposures to PPTE, dangerous work, shift work, night shifts, working without breaks, low job control, forced overtime, and other types of self-sacrifice without a sense of privilege or entitlement to better working conditions (Burgard & Lin, 2013; Government of Canada, 2022b; Manstead, 2018).

In term of job categories, participants discussed a mental health toll specific to police work as individual officers are representatives of a larger power structure with multiple potential subjective meanings, positive and negative, for the public. Participants reported that it is easy lose morale when social media and news media attention shine light on instances of police misuse and abuse of power (e.g., Black Lives Matter, National Inquiry into Missing and

Murdered Indigenous Women and Girls). Participants described how facing these systemic realities can disrupt their individual sense of purpose and moral integrity, implicating them by association, and aggravating moral distress and moral injury. Police participants described how officer mental health can suffer in specific ways, even if they are working in a less controversial specialty or unit (e.g., child abuse, human trafficking), department, province, or country, by way of representing the same system of state power implicated in socio-historic patterns of abuse and violence (e.g., enforcing slavery in the US or the Indian Residential School System in Canada). A community and school police officer woman said she often fought with her loved ones about misinformation:

> A lot of these officers get deflated. All of a sudden, it's their fault. It's such a big deal if something happens to the police, it's splashed all over the place, yet they only are taking captions. Through the years, I've realized, they're trying to make a story to get people, and half the time they don't even have the proper [facts], and we know that because I was right there, but it's just perceptions. You're taking something on, what the media says. (Participant 6)

According to participants, there can be frontline worker mental health effects when media and social media employ sensationalism and cherry-picking facts to produce a good story. Participants described effects such as crises of identity, destabilization, and confusion around being the 'good guys,' 'using violence for good,' and 'being on the right side of justice' which are familiar tropes also propagated in media. Participant sentiments generally indicated that there are bad actors in every profession, that 'bad apples' need to be held accountable, that there are a lot of decent people working hard to maintain a stable society, and that there is a distinct but underrecognized mental impact regarding short media cycles and public backlash.

In my analyses, each frontline job category has different cultural and intersectional considerations surrounding mental health. The current section represents the most salient issues that emerged from participants.

Diversity and Disability Considerations

Participants interpreted ‘diversity’ in a variety of ways. In reflecting on diversity and intersectional considerations, there were a few participants who worried that ‘too much diversity’ (stated to not necessarily be along racial, gender, or disability lines but rather diversity of training, abilities, purpose, or values) could negatively impact the operational function of their crew; there was a fear that incompetence could get them killed and be dangerous for all involved which is understandable but also entangled with mental health stigma. Some participants expressed that the shared uniform trumps all other categories of potential division. Another sentiment was that the psychological injury, work-associated disability, or trauma was the ultimate unifying category. All participants who experienced interdisciplinary facilitated group therapy or psychoeducation felt they benefitted from cross-sector learning. Another conceptual interpretation of diversity that was discussed was the diversity of people in different stages of healing and recovery; some did not have a diagnosis, some were in early stages of recognition, some were decades into management and treatment.

Regarding varying stages of healing and recovery, participants warned against getting stuck identifying in trauma stories (e.g., repeating ‘war stories’ but never transcending, competing for who had ‘the worst’ trauma). Participants could get frustrated in group therapy if they reached a point of compassion fatigue, started reexperiencing their own traumas, or felt progress was being inhibited by rehashing. As this registered nurse said:

I found many people were so identified with diagnosis. I felt like I'm …, my name is

> […], I'm a woman, and I have interests, […] but *I am not 'PTSD.'* I experience symptoms of it. But when that becomes a person's identity, I think that's such a strong label and suppresses a person. And so, when I was noticing that was how they were introducing themselves, I felt a bit of concern around that for myself because I thought that it's not an environment I want to be drawn into and be in. (Participant 17)

Participants noted that strongly identifying with a diagnostic label was the norm in some group therapy settings. Participants described how the benefits can include to help come to terms with difference, to facilitate overcoming denial, to deepen self-knowledge, and to become more comfortable having difficult discussions about psychological issues, but there is more nuance needed too. Basing identity on a diagnosis or a victim status may at one point impede recovery, according to participants. A paramedic commented on a phenomenon that occurs when a victim mentality takes priority and holds power for people that they cannot access elsewhere. He stated:

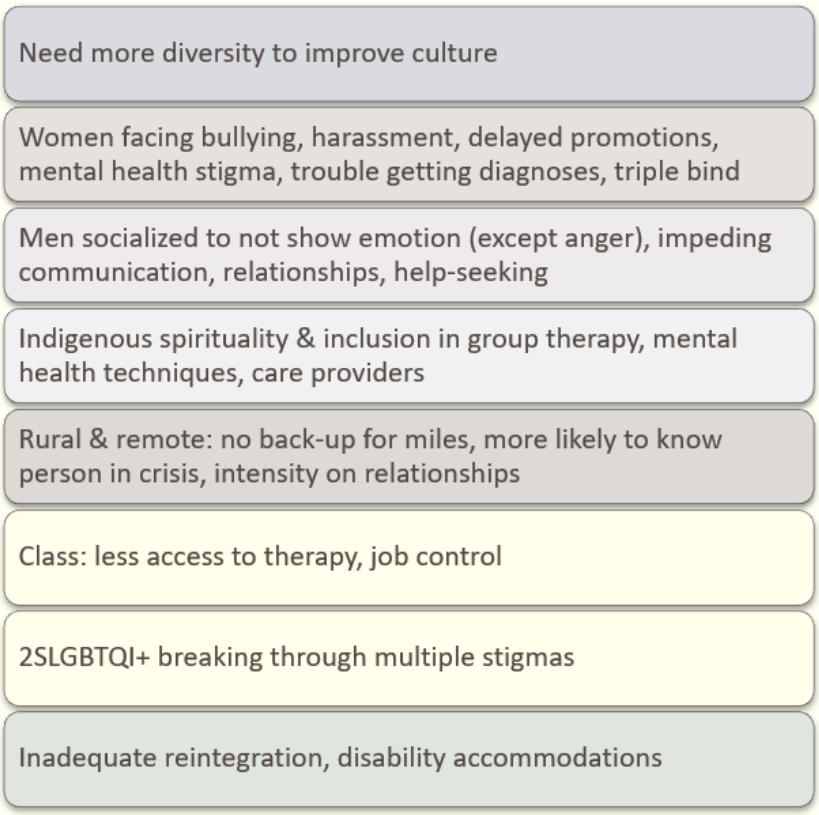
> Some people like their victimhood. I have co-workers […] they're attached to the experiences that traumatize them. [...] Their identity − it's so entwined in their traumas that they don't want to do the work [of recovery…]. Some people still feel they need that validation, that they still need the negativities to exist. (Participant 1)

There was some discussion from participants about transcending trauma narratives by moving through different stages of healing, for example, from victim to survivor to peer supporter. Some participants eventually become most interested engaging outside the trauma-associated communities to experience groups focused on 'normal' activities (e.g., crafting circles, sports teams). Participants described conducting their own behaviour experiments to challenge their core beliefs and fears that were previously associated with avoidance.

This chapter on intersectionality did not focus on age, rank, and generational differences, which are also important intersectional considerations. Participants had divergent opinions; for example, older frontline workers were sometimes more open to psychoeducation and professional help than younger workers because they were more likely already injured. In contrast, older workers were thought to be intransigent relative to younger workers who were more open-minded about mental health, having grown up in a less stigmatizing generation culturally. Others said that younger workers often thought themselves invincible and were not open to talking about psychological injuries because attitudinally, they thought 'that won't happen to me.'

The following is a visualization to offer a brief summary of some of the key issues in intersectionality in terms of the mental health of frontline workers.

Figure 2. Selected intersectional considerations



The current chapter provided more nuance to the previous chapters' presentation of study results, seeking to deepen understanding of diversity and mental health in the frontline workforce. The chapter attended to some of the interplay between sexual orientation, gender, ethnicity (especially Indigeneity), class, income, education, job category, stages of recovery, and age in this current sample of frontline workers regarding mental health. The following chapter will look at recommendations going forward, from participants' individual and collective lived experiences.

Chapter 7: Directions Forward for Frontline Workers' Mental Health

The current chapter presents the fifth and final set of study results, which address the final research question: what developed as a theory that is responsive to the mental health needs of the individuals working within Canadian human service delivery systems, as well as their organizations as entities? The chapter lays out the main recommendations from frontline workers' who collectively called for the implementation of comprehensive psychological preparation and repair, the humanization of frontlines' workplaces and conditions, a more community-minded organizational culture, and the assurance of mental health knowledge to become main policy driver. Several recommendations at various levels are provided toward organizational system transformation and a vision going forward.

Widespread and Sustained Mental Health Training and Therapy

Participants appreciated that the BOS program was made more widely available in 2022 and wanted to see more mental health initiatives rolled out in comprehensive and consistent ways to support mental health literacy and cultural momentum in frontline workplaces. Participants liked when there was a tangible incentive and external validation toward educational or professional development, even as small as a certificate of completion for which they could get credit from the employer. In my theorizing, given many workers are subject to maintaining accreditation requirements with associated systems already in place, mental health training could be added to these existing systems. Participants reported that they already shoulder a lot of out-of-pocket expenses for certifications, and they welcome training that is covered by the organization or government funding which helps to remove financial barriers.

Participants reported needing temporal resources to learn mental health literacy and to work through their psychological injuries and unresolved traumas. Participants described how

both types of relevant and important work require supervisors to be on-board with such practices as flexible shift scheduling; attending once-a-week sessions over eight weeks, in the example of the BOS program, requires planning and support at management and leadership levels. Managers may immediately think of chronic staff shortages as reason to reject time flexibility, but such long-term investments help rebuild capacity, and incentivize recruitment and retention (Mukhopadhyah, 2024; Race & Furnham, 2014).

Participants reported supervisors who demonstrated commitment to frontline worker mental health made workers feel valued by their organization. Accordingly, training was described by participants as an important step towards countering the deeply held belief and predominant narrative that their employing organizations give only lip service − with no authentic power or fiscal commitment backing. Participants who were doing mental health training at work between calls, for example, had difficulty completing, implementing, and optimizing the learnings. Participants reported that the same was true for both the therapeutic and the educational aspects of the BOS program, given continuous workplace interruptions. Participants in some locations were frustrated that their organization's executives had received accolades for championing mental health when the real and tremendous efforts were made by workers themselves who had fought those same 'superiors' for change: "The juxtaposition of that, and the state that we're in, it left me without words" (Participant 7). One frequently repeated statement was that participants felt mental health training should be a part of the standard curriculum across public safety and healthcare sectors. This paramedic exemplified the common refrain:

> I think it should be part of a standard curriculum for anybody entering into that first response organization, whether that is dispatch, corrections, parole officers, fire, EMS,

> police. I really believe that this should be included within their educational or hire package to be honest with you, along with some of the other courses, like the ASSIST course for suicide. (Participant 24)

Participants thought that training incorporating credible and well-liked PSP and HCW was most effective. As a police officer said of trusting the cultural insider: "As soon as you have somebody that has walked the walk, and they're talking, you have so much credibility in front of first responders" (Participant 36). Participants with facilitated group therapy/psychoeducation wanted to continue with the sessions to help them to build on the momentum of shared language, knowledge, skills, and cultural developments. Recommendations were to continue groups on a regular basis to help to manage arising and ongoing issues, to engage with additional supports, and to allow space for more reflection and learning with supportive peers. Participants recommended research and development for continuous improvements to training, debriefing, peer support processes, mental health apps, websites, social media campaigns, and overall cultural awareness. Participant 20 described a quick, tactical, peer check-in approach as the best model he had seen for an effective, low cost, and socially acceptable intervention:

> The most positive model I've seen […]. The peer-to-peer program was at a fire hall in [name of city], and they trained fellow firefighters on checking in with each other, and what it should look like. A good model of – coming in intellectually, getting down to the heart, and back out intellectually on the other side in a fairly short time, ten to fifteen minutes. (Participant 20)

Participants who were aware of trauma recovery retreats specific to PSP and HCW mentioned how influential those could be for recovery work. Having a fuller separation from work was at times needed for more comprehensive, deep psychological work.

> To go away to a retreat and deal with it for like a week or two and go through it with that same group of people. That way you're building on what you're learning and listening to because you want to build up that trust and confidence in a group atmosphere. It's like trying to find a […] psychologist or a psychiatrist, you want to feel comfortable when you're telling all your deepest, darkest secrets or whatever because if you don't build up that… (Participant 25)

He alluded to exacerbating mental health problems, highlighting how frontline workers need time and space to build trusting therapeutic relationships with the facilitators, practitioners, and group members to create the proper conditions for safely attending to psychological injuries. Other participants described how retreats were a part of employee health benefits packages in some countries, such as this corrections officer who described her former employer (in Europe):

> Everybody was sent once a year to a doctor for a full check-up, for a full physical checkup, and if you had any sign of physical or mental distress, we were actually sent for two weeks […on retreat] to do yoga and stuff like that, and it was away from the family, away from every stress, it was fully paid. […] What that did was, it cut down on the sick time. We almost had nobody sick ever. And it did us all good because we all knew we are healthy, we all knew we were looked after, and that's what is needed. You wanna hear that from your employer that you are a valuable member. (Participant 13)

Participants advanced that there are key policy barriers to accessing professional psychological help, such as the limitations placed on allowable number of appointments per year, types of therapy that are covered, and the specific practitioners sanctioned by their employer or their employee assistance programs which may or may not be a good fit for the individual. This excerpt provides a vision of proactive normalized counselling in the workplace

starting prior to frontline workers even been placed on assignments:

> The other thing that that I believe, and I think we all believe, is that people should have a counselor with whom they have a relationship from almost day one, and before they're exposed to trauma. And it's too late for them to start going to find the right counselor when the trauma happens because then they're already injured and they're down the road. They need somebody, and if they don't find the right person, then they − and even if they find the right person, it can take four or five sessions to get to the point where they're really doing anything. (Participant 4)

Several participants' employee health insurance benefit plans only covered four or five sessions at maximum per year, for example, which could mean waiting months between sessions; in many instances, much more frequent sessions were needed. Participants recommended that frontline workplaces integrate regular sessions with mental health professionals who become normalized as members of each team or unit.

Participants generally wanted more time to work through the BOS program topics such as cognitive behaviour therapy and expanded training that includes topics such as emotional intelligence, debriefing PPTE in groups, and the de-escalation of violence. There was an exception in that two participants felt that mental health training had pushed workers too far to the other extreme end of the pendulum swing, that mental health stigma served as a necessary function to keep workers tough enough to keep showing up for work. In discussing these attitudes with a seasoned RCMP officer, he chuckled: "Yeah, I think that's somebody who has an untreated injury who hasn't, you know, necessarily dealt with everything" (Participant 39). He argued against too many people were taking time-off in his department and using mental health as a 'get out of jail free card' that was making everyone too weak to do their jobs. In

contrast, Participant 39 responded to this sentiment:

> I don't think that everybody's weak, I think people are starting to manage these things better now, and I think the goal is that when something happens you, you explore what that is and get treatment for it if you need it. […] After something shitty happens, everybody gets together, recognizes that that was a tough situation, and check in on everybody. I think that if we do more of those types of things then, then we'll all be better off, if you can discuss how those things impact you at the time, and you're not carrying that with you. […] So, is that saying that everybody's weak? I don't think that's accurate. Is stigma totally gone? I don't think that's accurate either. I think there's still some of that there, and I think it still exists in senior management too. (Participant 39)

Backlash against mental health training and the call for 'a return of stigma' may also stem in part from chronic and pervasive staffing shortages that have perpetuated conditions in which those remaining at work face increasing pressure to under-report their own injuries and vulnerabilities, as per participant lived experience. Most participants felt discussing mental health needs had become more acceptable, but stigma remains problematic. Participants advanced a need for sustained mental health attention and resources, given the road to recovery can be long and arduous, and mental health challenges are not easily solved in a one-hour one-time training. This corrections officer said:

> I have to accept the fact that it is a slow process. I will not do this in the next six months. I will always have fall backs. I have to accept that too because that's what you are. You are human being; you cannot be on the same level all the time. (Participant 13)

In my analyses, the employing organization is implicated in supporting mental health through labour laws (e.g., health and safety, workers compensation), stability, sustainability, and

psychological safety. I think laying the relevant groundwork of supportive organizational policies and cultures are important to protecting worker mental health across their life trajectory. I also think supportive organizational policies and cultures are needed to address PPTE accumulation over time. A firefighter in his fifties said:

> If you really truly want to ensure the vitality of a group of people that work for you − like if you're a chief, or a city manager, or a CEO, or whatever − if you really care about having a healthy workplace, you have to be able to carry that across one's career. (Participant 2)

Participants further summed up what needed to change as 'the workforce sustainability factor' − which included unrealistically high call volumes, mismanaged services, staff burnout, lack of adequate retention incentives, low quality resources, and inadequate professional training, development, and opportunities. Overall, participants agreed that more and improved mental health training and access to appropriate and effective therapy were needed in public safety and healthcare workplaces. Some participants expounded on this vision to include people beyond their own sectors to other workplaces, to schools, and to society at large. When discussing psychoeducation, Participant 41 expressed:

> My dream is, I think the best thing would be for this type of information to be as upstream as possible. Like the best the future world would be from grade one, as soon as you are learning physical health, you also learn about mental health. (Participant 41)

Participants' vision included embedding mental health education in Canadian provincial school curricula, as well as to embed it for public safety and healthcare sectors in initial training, even prior to the career entry, and throughout their careers on a regular basis.

Building Community and Humanizing Frontline Organizations

I observed a recurring crosscutting theme in the need to humanize frontline workplaces, including reaffirming shared humanity across diverse categorical divisions of workers, as well as those calling 911 or going to the hospital for help with urgent and emergent situations (including high-frequency callers). One long-time police officer described how he kept his own humanity – and the humanity of those he responded to – close to his understanding of the important work at hand. While discussing long-term thinking and sustaining well-being as a frontline worker, he said that his practice of volunteering in a homeless shelter as a plain clothes officer informed his ability to enforce law and order in his community with a more fair and empathetic measure of balance. He asserted that this would be useful to include this in training new officers: “Working at the homeless shelter that gives you and exposure to the other side of things. It's just being aware of people's impressions of you from the other side” (Participant 36). Increasing empathy can also help with de-escalation skills.

Many participants identified the loneliness of mental unwellness as an important obstacle to overcome. Many described going through mental distress, fracture, illness, injury, or disorder as a very isolating journey, especially in their workplace cultures, underscoring the need for loud, clear, and repeated counter-narratives and humanizing messages. Many participants reported taking a long time to admit they are struggling. A fire chief imparted what he called the most potent thing he tells his crew members: “It's okay not to be okay, 100% it is. We're not a machine. It's okay to have an off day, it's okay to struggle. But know one thing − You're not alone” (Participant 33). Participants described a restorative quality in being accepted, despite mental unwellness or injuries, which appears to be the core issue with stigma. This firefighter expressed a desire for more cohesive therapeutic communities with language tailored to firefighting, a job that is often referred to as a team sport:

> Recovering from PTSD is a team sport, you can't do it yourself, and it's not going to get better by yourself. You need a team, and that team includes your support network, your mental health professional, your peer support, your family. It's really a team effort. (Participant 22)

In juxtaposition, a paramedic/manager remarked on the loneliness of mental unwellness, saying "the reality is it's a solo journey" and urging for the development of communities around mental health support to build strength and understanding where: "they themselves begin to feel a type of relief as a part of a community, and then they begin to heal through that" (Participant 30). Finding acceptance and belonging to a supportive group of people – and having a sense of purpose and important role in the group – help fulfill a basic human need described by participants. Speaking of trauma and addictions recovery groups, this corrections officer said: "The community and the group part of it has become a huge part of my life. […]. I mean, it's like family" (Participant 40).

Participants reported that actively supporting others requires understanding and empathy for the journey – a sense of purpose arisen from those who have also travelled the path – and of resisting compulsions of social exclusion and rejection, which takes work on behalf of frontlines community members. The experiences of being supported in turn teach workers how to support others, as per participant lived experience. I think that learning to speak about and address one's mental health represent more constructive solutions than spreading mental health challenges through an organization (i.e., via lateral violence, vicarious trauma, angry outbursts, bullying, emotional displacement). I would advocate that learning to speak and address mental health challenges become recognized as an important type of work that needs to be valued and resourced in meaningful ways by frontlines organizations if they are to become more

sustainable in terms of retaining skilled human resources.

Peer support can help support positive workplace communities, but several participants across job sectors stressed the loss of mentorship due to the COVID-19 pandemic and to ultra-lean management trends. Participants reported that being properly trained and well-supported can solidify a trainee's skills and commitment to the profession. They asserted that having a high-quality mentor provide a positive role model in ethical and operational decision-making is an important part of a new recruit's training to completion and retention. The mentor can also help their mentee with processing the realities of work that regularly involves death and PPTE and thus represents potential for promoting mental health in the work community, according to participants. From what participants shared, this would be key in regrowing a mentally strong frontline culture. Participants noted that matching the mentor and mentee is important, as is relationship-building more broadly. There is a role for spiritual care providers in supporting this direction as well. This spiritual care provider with the RCMP stated that a critical aspect of his job is developing relationships with frontline workers who are too often alone with their experiences: "Relationship-building. We call it 'presence,' the idea being that it starts out pretty simple, like 'What's the best and worst of your job?' and just getting people talking. It's a lonely job" (Participant 20).

Frontline workers (with some exceptions such as firefighters) otherwise often spend a considerable amount of time alone, with participant examples given of entire 12-hour shifts predominantly driving the streets alone in a hypervigilant or anxious state. Having a human 'presence' and having that person also be a skilled listener should not be underestimated: "They don't have other people in their life that want to hear it" (Participant 30).

Participants observed that previously assumed norms around everyday human

interactions have eroded over the last several decades to the point that workers now endure longer and longer periods of isolation. Participants described that an integral part of what has been lost is positive or at least neutral everyday human interaction; historically, work used to be more embedded with socialization. For example, policing used to more reliably have:

> Officially a briefing at the start of shift and then, during the course of the shift in everyday conversations, cruiser-to-cruiser, window-to-window, or just across the desk, in a social setting, a coffee break. I think the power of those conversations is quite important. (Participant 36)

When discussing mental health, participants connected also to spiritual health (as broadly defined and related to well-being) including the humanizing role of relationship-building. Describing what has changed over the years, this police officer elaborated:

> Now there's no stimuli to start those conversations, at least not enough where those conversations will happen. Because I think the level of anxiety and stress and people's everyday lives is quite significant. And of course, that talk therapy, that talking about it seems to really help. And [otherwise], you don't know where you're going to get your answers from, your solutions. (Participant 36)

Participants described not having time for regular conversation as similar to the lack of organizational support for time allotments for workers' physical fitness, as social interaction tends to transpire organically at fitness centers and classes.

Employee fitness is also a wise investment for organizations, supporting mental health, stress relief, and work performance (Biron & Burke, 2014; Kerr et al. 1996). Employee fitness programming or allowances would require systemic adjustments in many places as currently: "They don't even have time to work-out on that shift, which is just adding to the stress, it's just

compounding it, which is not great" (Participants 36). HCW participants similarly wanted to pushback on work conditions that perpetuate ceaseless job pressures which cause them to forfeit their own health. A nurse spoke of the prevalent phenomena exacerbated by the COVID-19 pandemic this way:

> We are not just healthcare worker machines; we are humans with needs and desires and wants. And yes, we went through something terrible. And drawing those lines was incredibly hard because it always felt like I needed to be at the hospital, regardless of what my family needed or what I personally needed. (Participant 23)

I theorize that organizational culture that genuinely prioritizes the human needs of frontline workers would support the setting and assurance of realistic boundaries for mental health capacity, endurance, and sustainability, rather than perpetuate uninterrogated drivers of burnout and mental unwellness.

Participants described the need for the humanization of frontline workplaces as related to external processes as well. Participants expressed that how the public perceived frontline workers' humanity has been affected by media sources that misdirect and limit public awareness. They stated that online misinformation and disinformation have played an important role in skewing public perceptions in dehumanizing ways that play into stereotypes. There is mental and emotional toll on frontline workers, and they tend to be met with surprise if they do show that they care:

> I've had many tears, it's just not normal to see the horrors sometimes. […] A lot of people think you can't be human, the public when they see you. This family was actually like, 'Okay, you're feeling emotion, hallelujah, you're human!' […] In my position as a neighborhood officer, we're like, 'Yeah, we're human people. One of our jobs is to try to

> bridge a gap between the community and the police, so we have that conversation quite a lot. […] We are human. We are people. We have families. We have friends just like you have friends. We have problems just like you have problems, like you're just really depicted from the uniform. So as soon as you see the uniform you get your back up. (Participant 6)

Participants described how seeing the uniforms can trigger PTSD symptoms in community members. Some participants articulated their responsibility in these relationships, including acknowledging the position of power they hold over members of the public, and they described some small ways to resist being immediately perceived as adversarial. One police officer emphasized empathetic practices facilitated the mental health of members of the public, as well as his own: "Putting yourself in the place of the person that's being stopped by police, and the anxiety and the reason they're so upset because of all that stress. Just taking a couple of minutes […] connecting with them before you get into the ticket-writing process" (Participant 36). In his vision of what mentorship and training should be, humanizing and empathizing with the members of the public is critical for all involved. I would argue that this type of approach requires frontline workers who are well enough themselves to extend empathy to others; thus, creating more humanizing working conditions for frontline workers could benefit multiple actors, including community members.

This paramedic was one of many participants calling for new directions:

> I'm going to reiterate − the organizational culture is the strongest barrier for a lot of us. They give an illusion of due diligence, and when you ask for change, 'We can't do that. […] We've always done this.' But it's clear it hasn't worked. […] I'm like, Oh my god! It's so frustrating! Because now, I'm no longer that person that just went along with it. It

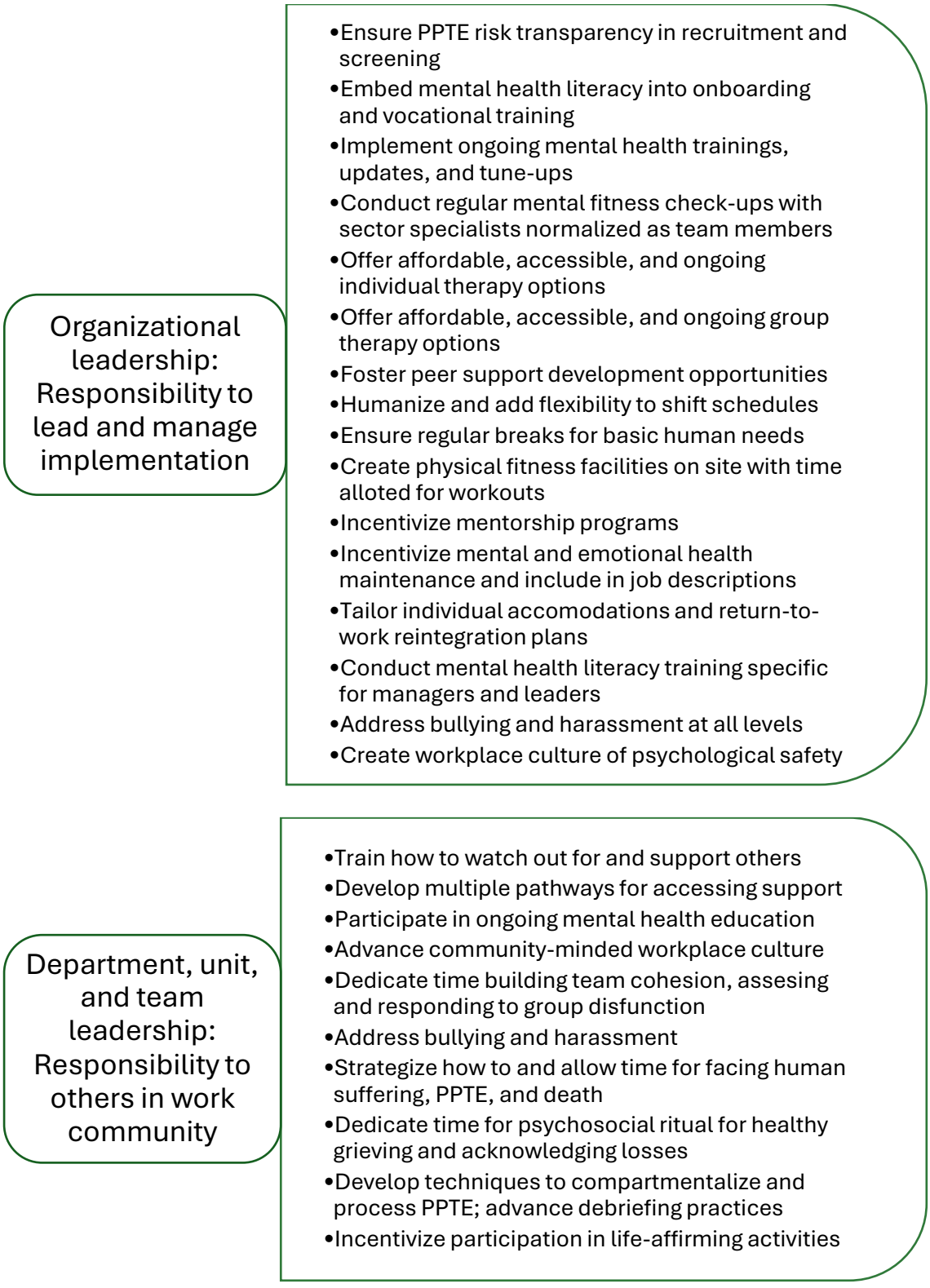
isn't working for us, it needs some innovation, needs some new ideas. (Participant 1)

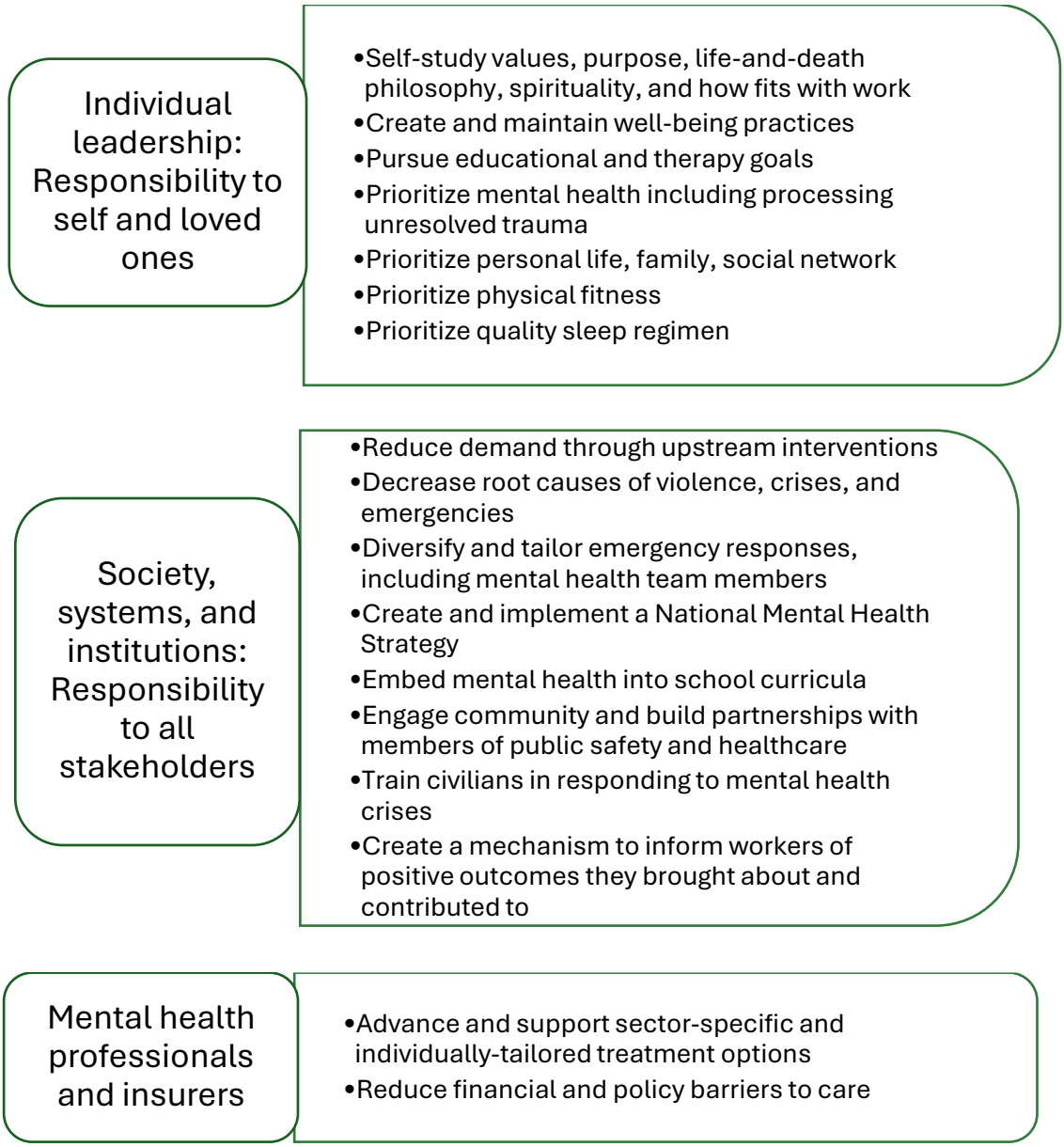
He purported that embracing 'a growth mindset,' a concept currently gaining ground in individual level popular psychology, could be applied to organizational levels as well.

Theoretical Model of Change

Overall, participants recommended comprehensive mental health training and treatment, as well as movements to humanize frontline workplaces. Figure 1 is a visual model of the key recommendations at several levels. All the recommendations flow under the need for mental health to be a top priority policy driver and the need to humanize systems and processes to align with the physiological health needs of the humans operating within them.

Figure 3. Levels and steps of system transformation


Organizational leadership: Responsibility to lead and manage implementation
•Ensure PPTE risk transparency in recruitment and screening
•Embed mental health literacy into onboarding and vocational training
•Implement ongoing mental health trainings, updates, and tune-ups
•Conduct regular mental fitness check-ups with sector specialists normalized as team members
•Offer affordable, accessible, and ongoing individual therapy options
•Offer affordable, accessible, and ongoing group therapy options
•Foster peer support development opportunities
•Humanize and add flexibility to shift schedules
•Ensure regular breaks for basic human needs
•Create physical fitness facilities on site with time alloted for workouts
•Incentivize mentorship programs
•Incentivize mental and emotional health maintenance and include in job descriptions
•Tailor individual accomodations and return-to-work reintegration plans
•Conduct mental health literacy training specific for managers and leaders
•Address bullying and harassment at all levels
•Create workplace culture of psychological safety
Department, unit, and team leadership: Responsibility to others in work community
•Train how to watch out for and support others
•Develop multiple pathways for accessing support
•Participate in ongoing mental health education
•Advance community-minded workplace culture
•Dedicate time building team cohesion, assesing and responding to group disfunction
•Address bullying and harassment
•Strategize how to and allow time for facing human suffering, PPTE, and death
•Dedicate time for psychosocial ritual for healthy grieving and acknowledging losses
•Develop techniques to compartmentalize and process PPTE; advance debriefing practices
•Incentivize participation in life-affirming activities



This chapter informed the state of knowledge on directions forward for mental health and frontline workers in Canada. The key points included participant calls for more widespread and sustained mental health training, as well as the increased humanization of organizations and work conditions. Recommendations were provided to support transformation at multiple levels and sites of potential.

Chapter 8: Discussion

This chapter places the findings of the study in dialogue with extant literature. These are presented in the same order as the previous chapters of results, namely, mental health challenges, supports, interactions with workplace culture, differences among diversity, and the theory of change.

Mental Health Challenges and the Literature

This section is not a comprehensive, systematic review of literature for each type of frontline worker; nevertheless, this section provides some context on the current state of knowledge and the contributions of the current study, starting with mental health challenges as presented in Chapter 3. We know, for example, that PSP and HCW have been exposed to a lot more PPTE than most average citizens (Bahji et al., 2022; Di Nota, Bahji, Groll, Carleton & Anderson, 2021; Lentz et al., 2022; Stelnicki, Jamshidi, Ricciardelli & Carleton, 2021). We also know that experiencing frequent PPTE exposures can cause difficulties in emotional, mental, and behavioural health (Canadian Mental Health Association, 2023; Carleton, Afifi, Turner, Taillieu, Duranceau, et al., 2018; Heber et al., 2023; Stelnicki, Jamshidi, Ricciardelli & Carleton, 2021). PSP can experience as many PPTE on one work shift as the average citizen experiences in a lifetime (Carleton, 2024). Chronic PPTE, along with a constellation of other types of occupational stressors, are known to compound into compassion fatigue and professional burnout, and the current study found these connected issues as well (e.g., Newell & MacNeil, 2010).

Emotional survival skills

Gilmartin (2021) is a behavioural scientist with twenty years of experience as a law enforcement officer. Gilmartin described policework as a rollercoaster of emotional and

biological stress that demands a unique set of skills specific to surviving intense and chronic fluctuations. Despite extensive training for officers in other types of survival skills, surviving intense and chronic physiological and emotional fluctuations is typically overlooked by agencies despite the predictable health risks systemic to policing (Gilmartin, 2021). Without interventions, the established pattern remains that in which officers experience increasing distrust, anger, hostility, and negative worldview stemming from chronic hypervigilance stress at work, as well as the corresponding daily post-shift crash into adrenal fatigue, catatonia, and loss of sense of self and relationships outside of work (Gilmartin, 2021). The current study participants similarly reported developing a negatively skewed worldview, anger, suspiciousness, burnout, and loss of relationships. Upgrading training and supports to more comprehensively include this special set of survival skills, namely emotional and mental health fitness and survival, is indicated.

In her research on emotional intelligence for law enforcement, education, management, and leadership, Faltas (2020) pointed out how the frequent emotional and biological vicissitudes impact the functioning of the frontal cortex and temporal lobes of the brain which control cognition, decision-making, memory, learning, communication, and emotion. Holistic training on actively managing stress and regulating emotions holds promise based on a systematic review and meta-analysis on psychological interventions for posttraumatic stress injuries among PSP (Bahji et al., 2022). Bahji and colleagues (2022) highlighted evidence that emotion regulation training improved police officers' mental health and skills. The current study participants welcomed training and wanted more help with such things as emotional regulation, emotional intelligence, cognitive challenges, communication skills, and psychological advice, including functional disconnection functional reconnection (FDFR). Participants were

particularly interested in effectively reconnecting with emotions and loved ones, and the transitioning between the two states. The current results suggest potential benefits from deepening the understanding, training, and practice of FDFR, as well as greater selection and nuance of methods for mentally preparing for work and processing PPTE.

Cognitive distortions

The current study participants were keen to keep learning about cognitive biases and cognitive distortions, including developing awareness of common 'thinking traps.' Cognitive distortions identified in the literature include: over-generalizing, jumping to conclusions, pessimistic fortune telling, catastrophizing, magnifying negatives, negative labeling self or others, perfectionism, blaming, over-personalization of blame, should statements, discounting positives, emotional reasoning, dualistic thinking, unfair comparisons, too high expectations, needing to always be right, control fallacies, fallacy of changing others, and fallacies of fairness (Friedman, 2023; Hong & Cheung, 2015; Stelnicki, Jamshidi, Fletcher & Carleton, 2021). The current study evidenced room for more knowledge development of cognitive distortions specific to frontline work, as well as how institutional policies and practices (e.g., punitive systems, reward systems) interact with each cognitive distortion. Most study participants had no prior psychological education on cognitive challenges and were grateful for any information and supports they could access.

Behavioural challenges

Some participants attributed part of their recovery from substance or alcohol addiction to having been able to access psychological knowledge and support. Associations have been established between alcohol use, substance use, emotion dysregulation, PTSD, and dissociation

among Canadian PSP and HCW (Patel et al., 2023). Patel and associates (2023) demonstrated emotional and mental health to be useful strategic therapeutic and interventionist targets. Workplace wellness programs can be especially well-positioned and effective for alcohol or substance use interventions and referrals to specialized treatment (Bulut & Akvardar, 2021). The current study identified participants trying to outgrow self-destructive behaviours were met with barriers, particularly where alcohol- or substance-dependency are social norms in the workplace. Programs that address workplaces comprehensively would support the workers who feel they are being forced to choose between their jobs or their mental health. Participants lived experiences suggest that eating disorders, sleeping disorders, self-harm, and other behaviour issues related to frontline environments may be too often overlooked in their mental healthcare and programs.

Accumulative PPTE

The lifetime prevalence rates of PPTE exposure in the general North American population ranges from 51% to 90% (Rogers, 2018). A quarter of people have encountered at least one PPTE prior to their early adulthood, and the remainder by mid-adulthood; the rates skew earlier for those living in poverty (Rogers, 2018). Peer-reviewed literature sources agreed that PSP are exposed to death, violent incidences, and traumatizing events at a much higher rate than an average citizen (e.g., Bahji et al., 2022; Carleton et al., 2020; Morganstein et al., 2019; Richards et al., 2021). Consistent with the current study participants, Morganstein and colleagues (2019) described witnessing of death or injury to an infant or child as particularly psychologically traumatic. Emergency department nurses, more than other types of nurses, appear particularly vulnerable to PTSD due to repetitive PPTE exposures (Adriaenssens et al., 2012). To support nurses, and therein quality of care, cognitive-behavioral interventions, on-

demand psychological counseling, and quiet spaces for reflection were recommended, along with "supportive, communicative, empathic and anticipatory leadership" (Adriaenssens et al., 2012, p. 1411). People working in gang violence, child abuse, and other specialty units appear to be at heightened risk for PTSD and suicide, supporting the need to tailor attention and supports for PPTE exposed populations (Doyle et al., 2023; Garbarino et al., 2013). The current study results underscore the need for advanced mental healthcare care specific to those working directly with victims or perpetrators of such crimes as child abuse, rape, and murder, including addressing workers' existential, ethical, and empathy-related crises.

Exacerbations in the COVID-19 pandemic

Heber and colleagues (2020) highlighted the essential role of PSP in serving and protecting Canadians throughout the COVID-19 pandemic. These authors asserted that PSP were already overburdened with mental health challenges prior to the exacerbators of the COVID-19 pandemic, and without serious investment to address these problems and keep workers well, the current service delivery systems will not be maintainable. Heber et al. (2020) advocated for opportunities for workers to do "sustained self-care" as part of maintaining work performance capacity (p. 350). The current study added that workers often do not have access to regular breaks for basic human needs, let alone for self-care or psychological recovery work. Thusly, if regular breaks, self-maintenance, self-care, and psychological recovery work were embedded into frontline work (e.g., from job descriptions to institutional culture), then workforce sustainability would be better supported.

Violence against frontline workers

The current study evidenced mental health challenges included regular exposure to violence and aggression. Morganstein and associates (2019) found that corrections officers face

some of the highest rates of workplace aggression of all public service occupations in the United States, with 96% of officers being concerned for their own workplace personal safety. In healthcare workplaces, emergency department and psychiatric nurses bear the highest rates of violence against them on the part of patients/clients, which includes verbal assault, death threats, physical assault, use of weapons, and homicide (Morganstein et al., 2019). The disproportionately high levels of violence against PSP and HCW have been linked to higher levels of anxiety-, depressive-, and trauma-related symptoms (Morganstein et al., 2019).

Anticipatory training and organizational resilience

In line with the current study participants, Morganstein and associates (2019) described people struggling with how to mentally prepare for worst-case scenarios:

> Anticipatory training is an important aspect of enhancing the resilience of employees to work-associated trauma. Individuals are most likely to fear things they do not understand and feel unprepared to manage. Providing employees with an understanding of traumatic events, normal and expected behavioral and psychological reactions, methods of self-help and peer assistance, and access to helping resources can enhance coping and reduce distress (p. 169).

The current study results identified an important nuance where anticipatory mental preparation can border with repetitive intrusive thoughts that disturb mental balance. Many PSP try to cope with trauma one their own, via suppression or dissociation, caused by a deeply ingrained focus on independence, the need to present as strong and capable, and stigma against help-seeking perceived as weak (Ewles et al., 2021; McCreary, 2021; Mortali & Moutier, 2019). HCWs also tend to avoid help-seeking (Dutheil et al., 2019). Common individual traits of HCW include cognitive distortions, self-punitive perfectionism, compulsive attention to detail, exaggerated

sense of duty, and excessive sense of responsibility (Dutheil et al., 2019). Research on HCW suicide related to the psychosocial work environment illuminates important risk factors, including conflicts with colleagues, lack of team cohesion, lack of social support, regularly delivering bad news, and frequently interacting with severe illness, anxiety, human suffering, and death (Dutheil et al., 2019). Morganstein et al. (2019) urged the need to build 'organizational resilience.'

Suicide

The current study participants were very concerned with death and suicide rates. Suicide risk varies by occupational groups, but first responders have a higher prevalence of suicide than the public (Mortali & Moutier, 2019). Risk factors include working in industries with exposure to psychological trauma, access to lethal means (i.e., law enforcement officers with access to firearms, HCW with access to controlled substances), "sleep disruption due to long or irregular working hours, and a culture of stoicism and control, in which individuals are rewarded for presenting a tough exterior, which may reduce the likelihood that they will reach out for help" (Mortali & Moutier, 2019, p. 150). Restriction of lethal means in one of the most effective forms of suicide prevention (Mortali & Moutier, 2019). The current participants stressed the need for sleep regulation for better functioning, mental wellness, and decision-making. Participants also highlighted many barriers to accessing psychological help, including stoicism, stigma, finances, and health insurance policies.

Dutheil and colleagues (2019) completed a systematic review and meta-analysis of suicide among global physicians and health-care workers, evidencing women at higher risk for suicidality, and increasing gender parity for death by suicide. Women are particularly vulnerable because of compounding stress from full-time paid employment, disproportionate domestic and

childrearing responsibilities, and "pressure to demonstrate to their male counterparts that they are as strong, self-sufficient and worthy as them" (Dutheil et al., 2019, p. 18). Women have higher rates of self-harm hospitalizations, suicidal ideation, and suicide attempts, whereas males account for 75% of all completed suicide attempts in Canada (Government of Canada, 2024b). PSP and HCW have higher than average suicide rates, as do 2SLGBTQI+ people, Indigenous people, rural farmers, and those living with chronic pain; anyone belonging to multiple categories may have particularly high risk (Mortali & Moutier, 2019; Government of Canada, 2024b). Statistically speaking, the current study sample was comprised of people in the highest suicide prevalence category if analyzed by age group, namely adults 45 to 54 years old, an age typically associated with numerous competing responsibilities (Mortali & Moutier, 2019).

In global comparisons, there have been notable decreases in the suicide death rates among HCW in Europe concordant with the policy developments of the European Working Time Directive (Dutheil et al., 2019). Work time policy and other preventative measures can enhance recognition and treatment of depressive disorders and substance abuse, as well as support occupational stress reduction programs (Dutheil et al., 2019). Vocational and professional school curricula must more consistently provide streams of learning that increase learners' self-confidence and self-expression of emotional needs, "to teach that anyone may be suicidal – regardless of his status, […to provide more] screening, assessment, referral and education, and to destigmatize help-seeking" (Dutheil et al., 2019, p. 19). Emotional intelligence is an evaluable science with a set of learnable mental health skills which can be offered as programming at an institutional level to strengthen the frontlines (Faltas, 2020; Kuss, 2024).

Employee assistance programs can offer continuing education, such as suicide

prevention training, as a regular offering in high-risk populations such as frontline workers (Mortali & Moutier, 2019). Further workplace strategies include routine mental health screening, crisis management, and lethal means restriction for unwell workers (Dutheil et al., 2019; Mortali & Moutier, 2019). The current study clarifies that frontline workers are vulnerable to suicide exposures from multiple categories of people in their lives, (e.g., patients/clients, colleagues, PSP/HCW spouses). The participants in the current study results also emphasized that, unless there is a concerted effort to check on workers on-leave for PTSD and other mental health challenges, they are likely to feel isolated with a default perception that they are deemed unworthy of care, attention, or help.

Vicarious trauma

The current study found dissociation and vicarious trauma were challenging frontline workers' mental health. Newell and MacNeil (2010) defined 'vicarious traumatization' as a process of cognitive changes resulting from enduring empathic engagement with survivors. Vicarious trauma is associated with changes in what workers believe and how they think, which can include sense of self, spirituality or religiosity, and worldview on safety, trust, and control (Newell & MacNeil, 2010). Dissociation and secondary traumatic stress are common for workers such as HCW and PSP who regularly serve people who are suffering (physically or psychologically; Tsouvelas et al., 2022). Prolonged and accumulated PPTE are linked to secondary traumatic stress, particularly during acute and widespread crises (e.g., the COVID-19 pandemic; Tsouvelas et al., 2022). Secondary traumatic stress is also associated with denial and dissociation coping strategies, which require "trauma-informed care psychosocial interventions" to support overburdened workers (Tsouvelas et al., 2022, p. 264).

Participants described their interwoven compassion fatigue, vicarious trauma, stress, and

burnout, which are all associated with serving trauma populations (Newell & MacNeil, 2010). 'Professional burnout' is a state of physical, emotional, psychological, and spiritual exhaustion resulting from chronic exposure to − or work with − populations that are vulnerable and suffering (Newell & MacNeil, 2010). Secondary traumatic stress presents as the emotional and behavioural fallouts of bearing witness or helping another person with their trauma and suffering; symptoms can include the full range of PTSD symptoms (Newell & MacNeil, 2010). Compassion fatigue is a combination of secondary traumatic stress with professional burnout and refers to an overall emotional and physical fatigue that results from dealing with organizational adversities at the same time as providing demanding, empathy-laden, high-pressure service labour (Newell & MacNeil, 2010). Given the potential for regularly encountering the affects of PPTE in self and others in healthcare and public safety workplaces, compassion fatigue, vicarious trauma needs to be flagged for policy designed to mitigate and address these issues through semi-continuous interventions as a matter of maintaining human service operations.

Pre-existing and other challenges

Akin to any human existence, people carry some degree of baseline suffering and pre-existing psychological issues which can entangle with PSP and HCW work-associated trauma, and these need to be addressed for mental and emotional health, well-being, and maintenance. Among firefighters for example, histories of childhood physical abuse, neglect, or sexual abuse has been linked more PTSD symptoms than their counterparts without such histories (Cramm et al., 2021). Workers who have loved ones going through terminal injuries, diseases, and death are at higher risk PTSD symptoms, as are those with more avoidant coping mechanisms and those who have not processed distressing memories (Cramm et al., 2021). The current study

participants opined that pre-existing issues can interact with work-associated trauma injuries and that mental health training and supports are needed.

Mental Health Supports and the Literature

This section explores peer-reviewed literature around mental health supports described by participants, following the order of the results chapter on the same subject, namely Chapter 4. While not an exhaustive review of literature for each type of support or frontline worker, this section provides some discussion points, integrating the current study results with extant literature.

Families of frontline workers

There is extant peer-reviewed literature about spouses, families, and loved ones as important sources of mental health support for frontline workers. When reaching out for help, PSP most often chose a spouse (74%), friends (62%), and non-leadership colleagues (45%; Ewles et al., 2021). Spouses of PSP and HCW provide various types of support, namely, instrumental support (e.g., finding a therapist, driving to appointments), informational support (e.g., learning and sharing mental health knowledge), emotional support (e.g., comfort, caring, closeness), self-esteem support (e.g., validation of worth and abilities), and 'safe haven support' (e.g., maintaining a nurturing home environment; Ewles et al., 2021). In a study with 5813 Canadian PSP, those who were single, separated, or divorced were statistically significantly more likely to report symptoms of a mental disorder than those who were married or common law (Ewles et al., 2021). Though this does not prove causation or the direction of effects, spouses are known to have a buffering effect for negative mental health symptoms, such as PTSD symptoms, as well as positive effects for coping after a crisis (Ewles et al., 2021).

There can be negatives for the non-PSP partner, such as vicarious traumatization and

heightened stress levels, especially for certain types of jobs, such as police officers tasked with investigating sex crimes against children (Ewles et al., 2021; Spencer et al., 2021). There is also the possibility that the partner can exacerbate PTSD symptoms if they, for example, minimize the workers' feelings, engage in victim-blaming, or keep fueling a hostile, high-conflict relationship (Ewles et al., 2021). The current study participants indicated that spouses may lack skills, energy, time, capacity, or motivation in providing support consistently, as found by Ewles et al. (2021), and this exacerbated during the COVID-19 pandemic, with particular strain on families with two frontline workers. Solutions like developing capacity in families and therapeutically treating families as holistic units require concerted policies and resources (Leroux et al., 2021). Public safety sectors have notable gaps where meaningful family initiatives are needed (Leroux et al., 2021). Study participants mentioned several organizations working to help Canadian PSP and their families; namely, Badge of Life Canada, Wounded Warriors Canada, and Boots on the Ground, each with aims of creating strong social support networks (Ewles et al., 2021). Tekin and colleagues (2022) flagged that while there are some studies with public safety and military populations demonstrating negative mental health impacts on family members, there are few studies with the families of HCW. Tekin and colleagues (2022) urged more attention be paid to parents, siblings, close friends, partners (including same sex partners), and children of HCW whom shoulder increased domestic and emotional burden due to their loved one's work, which goes largely unnoticed, unacknowledged, and underappreciated in society.

Professional help

The PSP and HCW participants in the current study reported barriers to finding meaningful professional help. There are many more types of therapy than participants were

reporting being aware of and several comments about problems with finding a good fit among patient, practitioner, and therapy. Table 4 outlines common types of psychological therapy, some issues each type is a good fit for, and the pathway into the therapy which can impact fittingness. The table provides a broad idea of selected examples, presented alphabetically (not ranked) by type, and is informed by innumerable sources amalgamated over time (e.g., Benas & Hart, 2017; Butler & McManus, 2014; CBC, 2022c; Chaulk & Podnar, 2021; Bisson & Andrew, 2007; Durvasula, 2022; Enns, 2018; Fernández Fillol et al., 2018; Haigh, 2024; Herman, 2023; McAleavey & Castonguay, 2015; Lin et al.; 2011; Menzies & Lavallée, 2014; Olds, 2022; Papazoglou, 2017; Van der Kolk , 2015; Vickers & Moyer, 2020; Zhang et al., 2021).

Table 4. Different types of psychotherapy

Type of therapy	Fittingness	Help with	Pathway in
Art therapy	To access supressed emotion To gain self-knowledge	Self-expression Trauma	Artmaking
Cognitive behaviour therapy (CBT) or Cognitive processing therapy	To break negative cycles of thought patterns and behaviour patterns	Cognitive distortions Negative behaviours	Thoughts Talking
Cognitive analytical therapy (CAT)	To challenge reoccurring patterns To increase self awareness, including letter writing techniques	Cognitive distortions Negative behaviours	Thoughts Talking
Dialectical behaviour therapy (DBT)	To increase tolerance for distress To regulate emotions	Borderline personality disorder Self-harm	Emotions Talking
Eye movement desensitization and reprocessing (EMDR)	To access and target trauma memories using semi-hypnotic eye movements to pre-occupy defenses	PTSD Trauma	Semi-hypnotic activity
Existential therapy	To address feelings around dying, purpose, freedom, human suffering	Existential struggles	Emotions Talking

Exposure therapy or Prolonged exposure therapy	To face incrementally longer periods of exposure to traumatic stress triggers and aversions To build tolerance of these	PTSD Trauma	Exposure activities
Gestalt therapy	To integrate conflicting parts of self, or of internalized others, including empty chair technique	Unresolved internal conflict Unresolved conflict with another person, who is still alive or passed away	Emotions Talking
Humanistic (including Rogerian person-centered) therapy	To provide safe space for self-exploration To discover one's own solutions To experience catharsis	Existential struggles	Emotions Talking
Internal family systems	To engage with different parts of one's personality To put in dialogue internalized conflicting voices	Family trauma Intergenerational trauma Borderline personality disorder	Consciousness Talking
Integrative or eclectic	To draw on all different therapeutic techniques	Trauma	All
Mindfulness-based stress reduction (MBSR)	To gain focus, awareness, insight To manage stress, anxiety, depression, pain	Stress Anxiety Depression Pain	Sensation Breath Thoughts
Mindfulness CBT	To gain self-awareness To challenge negative patterns	Stress Anxiety Depression Pain	Sensation Breath Thoughts
Music therapy	To facilitate functionality To gain self-awareness	Self-expression Trauma	Curating music for life events
Psychedelic assisted therapy (PAT)	To process trauma To process suppressed emotions To gain insight and self-knowledge	PTSD Trauma Pain Depression Anxiety	MDMA, ketamine, or psilocybin with therapy
Somatic experiencing therapy	To regulate disrupted stress responses (e.g., fight, flight, freeze)	Trauma, without directly discussing events	Sensations
Spiritual therapy	To connect with faith To draw hope and strength	Existential struggles Addictions	Prayer

	from higher power	Pain	
Systemic or family therapy	To change behaviour within relationship/family dynamics, including genogram family tree techniques	Family trauma Intergenerational trauma	Relationship dynamics
Psychodynamics (rooted in Freudian therapy)	To interpret dreams To explore unconscious processes and dynamics	Suppressed trauma	Talking
Traditional Indigenous counselling	To address spiritual, emotional, physical, and mental aspects of health in culturally safe context	Colonization Intergenerational trauma	Ceremony Teachings

The table listings are not exhaustive, and each type of therapy is increasing in the complexity of what it can offer as it is developed over time, in different places, and by different practitioners. The current study participants reported relatively less awareness of the various types of and approaches to psychotherapy than might be hoped, as well as difficulties in finding a good fit among patient, practitioner, and therapy. While participants were accessing online videos, self-help groups, educational opportunities, books, and mobile apps to support their mental health, many have not been formally researched. One of the most commonly accessible therapies for PSP and HCW in Canada currently is CBT which includes − as the BOS program did for the current study participants − psychoeducation toward changing the negative cognitions, beliefs, and behaviours that otherwise serve to maintain PTSD symptoms (Chaulk & Podnar, 2021). This type of therapy has been effective for treating PTSD in many clinical populations (Chaulk & Podnar, 2021). McAleavey and Castonguay (2015) noted that 98% of therapists draw on two or more types of therapy.

In their review of types of therapy and evidence-based practice, McAleavey and Castonguay (2015) observed common factors that help clients. They emphasized the therapeutic relationship between practitioner and client, their agreement on therapy goals, the practitioner's

empathy and presence, the client's optimism and favorable expectations of the process – all of which contribute to positive outcomes regardless of type of therapy (McAleavey & Castonguay, 2015). They concluded that these common factors account for 50% of the success of therapy while factors external to therapy account for 33% and type of therapy accounts for 17% (McAleavey & Castonguay, 2015). The current study agreed with the assertion that therapeutic relationships are very important to participants staying with a practitioner through a course of treatment; for participants, having a practitioner who is experienced with sector-specific needs is critical as well. The credibility of the practitioner and not having to explain the workplace context to the practitioner were important to participants.

The American Psychological Association policy statement regarding evidence-based therapy recognizes the importance of patient characteristics, including individual, social, and cultural contexts (Haigh, 2024; McAleavey & Castonguay, 2015). Psychotherapy generally focuses on the individual and does not put enough emphasis on what structural and systemic drivers of mental unwellness (Durvasula, 2022). The current study results included the need for more understanding of frontline workplace cultures to address mental health more comprehensively. Cramm and associates (2021) wrote that the type, frequency, and duration of therapy that firefighters can access through work varies tremendously but that mental healthcare can save lives and improve quality of life, thus increasing access should be an obvious decision for policymakers.

Group therapy

The current study agreed with the peer-reviewed literature that group psychotherapy has many potential benefits in supporting mental health. Contributing factors that can benefit those who engage in group therapy include receiving and sharing information; social learning and

imitating healthier behaviours; fostering altruism, a sense of community, and universality; and building positive relationships and group cohesion (Chaulk & Podnar, 2021). The lattermost are specifically and additionally beneficial for those living with PTSD symptoms who tend to engage in avoidant behaviours and have difficulty maintaining relationships, which can perpetuate social isolation (Chaulk & Podnar, 2021). Group processes help to reverse these patterns by providing templates for self-exploration and disclosure in psychologically safe and supportive learning environments (Chaulk & Podnar, 2021).

Existential and spiritual support

Most mainstream trauma and PTSD therapies do not include spiritual or religious issues, and there are gaps in the peer-reviewed literature around mental healthcare for existential struggles, sense of purpose, philosophy on life and death, and the roles of PSP and HCW within these, which the current study only began to unearth (Rogers, 2018). These are important gaps because trauma, suffering, religiousness, and spirituality are "closely intertwined in human experience" (Rogers, 2018, p. 6). Mental unwellness can destabilize PSP and HCW identity as the strong, resilient rescuer, and this in turn can shake their core beliefs around selfhood, locus of control, blame, shame, guilt, human suffering, justice, trust, and forgiveness (Rogers, 2018). Psychologists tend to be less religious than the general population, and faith-based aspects of care may need to be addressed for frontline workers seeking religious or spiritual coping strategies (Rogers, 2018).

Debriefing practices

The peer-reviewed literature agreed with participants that there are problems with current debriefing practices that require development. The benefits of debriefing are described as drawing on expertise from vetted and trained peer supporters, chaplains, and mental heath

professionals to help restore a sense of mental balance after a critical incident (Crisis Support Solutions, 2021). There are many cautions though, about the potential harms of debriefing. Psychological debriefings are typically the main element of a CISM procedure but "do not reduce adverse psychological or behavioral effects and may increase risk for certain individuals" (Morganstein et al., 2019, p. 174). If the debriefings mandatorily include everyone, they do not account for how PPTE may impact individuals by, for example, increasing intrusive thoughts and rumination, and generating misinformation and reinterpretations of the incident (Cramm et al., 2021). As participants in the current study expressed, debriefing immediately after a critical incident can bypass a worker's temporary adaptive amnesia, forcing them to confront the PPTE before they are ready; it can also displace the worker's usual means of support which may be more individually or culturally appropriate (Pasciak & Kelley, 2013). Further, in a study on male police officers and traditional gender norms, CISM "assumes a tightly-knit 'brotherhood of first responders' […who are] willing and able to share painful, posttraumatic emotions and memories […when in fact] men are acutely attuned to shaming responses from their peers" (Pasciak & Kelley, 2013, p. 139). Police officers fear peer rejection and scorn at the station and in the streets (with real risks on high-stakes assignments), and they tend not to trust mental health professionals who potentially have power over their job status and security (Pasciak & Kelley, 2013). Participants indicated distrust of coworkers which acts as a barrier to sharing in peer support or debriefing. These scholars suggested that psychologically safer alternatives include peer engagement that is non-ego threatening, as well as providing opportunities for stress reduction, psychoeducation, and advanced tactical training (Pasciak & Kelley, 2013).

The standard for Canadian nurses is set for both a 'hot debrief' directly after and a 'cold

debrief' once some time has passed after the incident to allow for different processing; however, debriefings are carried out atypically in most workplaces due to widespread system resource constraints and perceptions of scarcity (Archibald-Varley & Fung, 2024). The resourcing challenges may acutely impact nursing students, who would benefit from debriefing processes to help them develop skills to handle the emotional tolls involved in providing healthcare, the transition to home post-shift, and the reconciliation of PPTE (Archibald-Varley & Fung, 2024). Debriefings in nursing are established as important and desired learning resources that can benefit workers and patients, if implemented correctly (Archibald-Varley & Fung, 2024). Overall, best practices in debriefings still need to be worked out, and new positions should be created to facilitate the work of advancing post-PPTE interventions for the psychological well-being of workers, the education of learners, and the sustainability of the workforce (Archibald-Varley & Fung, 2024).

Employee assistance and accommodations

Employee assistance programs (EAPs) have proliferated over the last few decades though typically, they do not provide mental illness prevention, despite evidence that mental illness can impact employee productivity, interpersonal functioning, quality of work, and safety levels for self and others (Taubman et al., 2019). Participants in the current study raised concerns that EAP programs were too limited in number of allotted sessions and that they had had issues with inexperienced counsellors.

Participants were also concerned that disability accommodations were undignified and unsatisfactory. Employers are legally required to provide reasonable work accommodations for people living with mental health disabilities, but how this is carried out is often left up to managers who are not necessarily trained in the area (Bonaccio et al., 2020). While employing

organizations may cite costs as barriers to comprehensive EAP and disability accommodations, some studies have found these to improve coworkers' and managers' morale, positive attitudes, job satisfaction, commitment to employer, attendance, retention, and overall productivity (Bonaccio et al., 2020). Comprehensive accommodations policies help to promote a healthy workplace culture by demonstrating that the workers and their well-being are valued by the organization, rather signalling workers are discardable and disposable once they are injured or suffering (Bonaccio et al., 2020). The Canadian Human Rights Commission offers a series of webinars "to help employers think through complex accommodation cases" and how to tailor for specific industry needs (p. 148). In a study on the "impact of workplace mental health training on leader behaviors and employee resource utilization," Dimoff and Kelloway (2019) observed that few workers use EAP programs to their full potential, and they inquired about how a three-hour information session could change behaviour. Leaders who attended the session were more supportive of worker mental health issues and actively encouraged resource utilization, and in turn, these workers were more willing to seek help (Dimoff & Kelloway, 2019). Un and Pickering (2019) discussed how developing integrated care models with more services incentivized employers and insurers to include behavioral health benefits into health plans to improve access to services.

Supportive leadership

Morganstein and colleagues (2019) wrote that leaders have an integral role for mitigating harm in frontline workers' work-associated trauma and that confusion about what their role is needs to be addressed. Leaders can prevent prolonging impairments, isolation, and distress by responding with empathy, active listening, and practical supports (Morganstein et al., 2019). They recommended that first-line supervisors respond to PPTE involving just one

person, but that a senior leader needs to respond to PPTE involving multiple workers (Morganstein et al., 2019). Included in leadership's role are speaking directly to those involved, affirming normal responses to trauma, providing resources, having an open door policy, maintaining healthy relationships, creating space for informal peer support, discouraging negative gossip and scapegoating, modeling taking breaks for self-care (e.g., nutrition, hydration, sleep hygiene), acknowledging loss and grief, conveying hope and optimism, and seeking support themselves as leaders are often isolated within their positions (Morganstein et al., 2019). Participants in the current study identified the enormity of potential mental health benefits from authentically supportive leadership; if the above role descriptions were consistently implemented, then leadership could go a long way toward supporting worker mental health and well-being.

Morganstein and associates (2019) described the special qualities required for 'grief leadership,' including the recognition of losses to sense of safety at work and confidence to keep self and others safe, as well as meaning-making of tragedy. They listed the following supportive workplace interventions for stress that leaders can champion: psychological first aid, self-help, peer support, psychotherapies, pharmacotherapy, complementary and alternative medicines, and psychoeducation (Morganstein et al., 2019). These leadership approaches contrast with Gilmartin's (2021) description of police culture in which senior officers perpetuate cynicism in their officers by destabilizing and transferring lower ranking officers to ill-fitting and undesired assignments as punishment for long-held grudges, a pattern that can drastically impact mental health and well-being, along with job satisfaction and retention. Archibald-Varley and Fung (2024) discussed similar disturbing phenomena in healthcare. The policy implications for leadership, including who gets promotions into leadership or undesired job transfers, are many,

and policy needs to be driven by mental health knowledge rather than misuse of power.

Leaders occupy positions of relative power (compared to workers) to enact mental health training, interventions, and initiatives through wide-reaching policy changes and psychoeducation directives. Un and Pickering (2019) listed workplace mental health initiatives, such as DuPont's ICU "I see you," the "R U Ok" program, the Campaign to Change Direction, NAMI-NYC Metro's "I Will Listen," the Right Direction program, and the movement to spread mental health first aid courses as indicating an appropriate and much needed direction toward increased mental health literacy in frontline workers and organizations going forward (Un & Pickering, 2019).

Organizational Stressors, Mental Health Interactions, and the Literature

This section places results into dialogue with extant peer-reviewed literature of similar themes from Chapter 5. One central theme that emerged was the comparisons and interactions between operational stressors and organizational stressors. There are few qualitative studies on this topic, but one that stands out is that by Ricciardelli and Power (2020). Ricciardelli and Power (2020), for example, discussed how organizational stressors, such as understaffing, overtime, and shift work interact with operational stressors; further, they wrote that the paramilitary managerial structure of public safety and healthcare workplaces too often result in workers being bullied by managers, having little opportunity to participate in decision-making, feeling powerless and alienated, and losing their sense of self-worth.

Structural violence

Studies have found that in police work, organizational stressors can have a greater impact than critical incidents (e.g., operational stressors) on officers, perpetuating feelings of hopelessness (Ricciardelli & Power, 2020). In his seminal work on PTSD, Shay (1994)

described tactics used by military superiors to violate their subordinate soldiers' assumptions of humanity and justness, purposefully causing rage to incite battle-readiness. Gilmartin (2021) demonstrated that in the police force, higher-ups use punitive transfers to destabilize lower ranking officers' mental health. Gilmartin (2021) posited that the best protection against this type of powerlessness was for workers to ensure they were well-rounded and investing in other aspects of their life beyond their jobs – a strategy that empowers the worker but does not address the systemic issues.

Most public safety and healthcare workplaces, including corrections institutions, are paramilitarily structured organizations. Over half of federal correctional workers (all types) experience symptoms of mental health disorders; one third endure major depressive disorder symptoms, and one third PTSD (Ricciardelli et al., 2019). Issues such as overcrowding; direct, indirect, vicarious, and generalized violence; harassment from peers and bosses; inadequate methods of addressing grievances; lack of support from managers; understaffing; and back-to-back shifts (up to 20 hours) are examples of the pervasive organizational stressors that are impacting the mental health of corrections workers, who have higher rates of injury, stress, and mental health issues compared to all other government workers (Ricciardelli & Power, 2020). The current study further evidenced workers belief that mental health challenges are exacerbated by organizational policies and practices (Carleton et al., 2020; McKendy et al., 2023; Ricciardelli & Power, 2020).

Losses of empathy and emotion

Ricciardelli and Power (2020) also found correctional workers report struggling with the losses of empathy and of emotion, the normalization of violence, and the destabilization of sense of humanness. Shay (1994) wrote that to heal from PTSD, the 'other' or the 'enemy' – in

this case the prisoner – must be framed as a worthy opponent, both humanized and honoured as a human because otherwise the denigration perpetuated on 'the other' necessarily results in self-denigration. This line of thinking would indicate that the participants in the current study who were struggling with empathy and nonnormative displays of emotions were quite possibly on the right track for maintaining integrity of their own humanity, rather than having arrived at a more total alexithymia and suppression with its potentially harmful sequalae.

Emotional labour can require suppression of feelings, which can be associated with emotional exhaustion, low morale, and counter-aggressive behaviours (Bloom & Farragher, 2011). Clinical psychological evidence supports claims against suppression and desensitization (Barlow et al., 2018; Sauer-Zavala & Barlow, 2021). Cutting off from emotions cuts workers off from feelings that provide valuable information integral to their humanity (Faltas, 2020; Gregoire Trudeau, 2024; Sauer-Zavala & Barlow, 2021). The argument for prioritizing emotional health (including learning emotional regulation strategies) is predicated on the Unified Protocol, which is an evidence-based transdiagnostic treatment approach (Barlow et al., 2018; Sauer-Zavala & Barlow, 2021). The Unified Protocol treatment approach effectively targets aversion and avoidance reactions to emotions, which, left untreated, functions to perpetuate affective disorders in the long-term (Barlow et al., 2018; Sauer-Zavala & Barlow, 2021). In a survey of leading mental health experts and their visions of where Canada needs to set its intentions, Gregoire Trudeau highlighted the role of emotional health: "Feelings help us to take care of others. It is where our humanity is. It is where our humanness is. It is the bottom line" (Gregoire Trudeau, 2024, 5:37.) Gregoire Trudeau's (2024) collaborative study concluded that a lot more focus is needed on caring for mental health and developing emotional literacy in all levels of Canadian society, given that human beings are, at the core, feeling and sensing

beings (Gregoire Trudeau, 2024).

Cultures of stoicism and machoism

Describing workplace cultures of stoicism and machoism, correctional officers in the current study reported how they often must maintain the appearance of total emotional detachment and uncaring. Ricciardelli and Power (2020) pointed out that detachment and uncaring is emotional labour that can dampen and mute workers' responses to the violence they face, including deterring seeking psychological help for themselves. Detachment may help workers cope, but can facilitate systemic underreporting of violence, often due to fear of job loss with few other career opportunities or prospects (Ricciardelli & Power, 2020). The current study participants also reported feeling stuck in their jobs, despite having poor mental health result of their work conditions.

For comparable reasons, dominant firefighter culture discourages help-seeking behaviour in its members, especially help external to the organization, as a mechanism to maintain in-group norms, including hypermasculine values and attitudes (Cramm et al., 2021). Cramm and associates (2021) described organizational stressors of "a pernicious cycle of injuries leading to understaffing, resentment, cynicism, and guilt, all of which may serve as barriers to care seeking" (p. 281). This pattern was identified by participants in the current study as well, who, when asked about mental health, often wanted to discuss these types of organizational issues the most of all potential topics.

Lack of breaks, administrative burdens

In his institutional ethnography study with paramedic services in Calgary, Corman (2017) elucidated that any 'downtime' workers had was spent documenting events, training new recruits, reviewing protocols, contingency planning, and in a constant state of readiness, with no

real breaks for food, rest, or other measures for well-being, which was too often the case for participants as well. Corman (2017) highlighted how paramedics tended to enjoy the excitement and adrenaline of the 'good calls' where their skills were truly needed, but that it was the numerous organizational stressors (e.g., care protocols that assumed patients had no co-morbidities when they often do, unrelenting form-filling in a computer program that left no space for the patient's story or humanity) that "makes you want to kill yourself" (p. 47). Both the current study and Corman's (2017) ethnography found a serious lacking when it came to workers having basic markers such as consistent breaks, job control, or fulsome training.

Inadequate training and services

Paramedics do tremendous amounts of emotional labour (e.g., calming the patient, deescalating violence, responding to mental health emergencies, convincing people on the scene to cooperate), but receive no emotional labour training (Corman, 2017). Psychological distress often arises from the "social stuff […], unwritten things that we don't get trained for but it's 80% of our job" (Corman, 2017, p. 94-95). Participants in the current study felt that their social and emotional work was unacknowledged and undervalued by their organizations despite it being necessary to functioning well in these jobs and despite the toll it could take on their mental health. As per Barlow and Sauer-Zavala (2021), there are evidence-based emotion-focused interventions which have been proven helpful for mental health in the context of such stressors. Participants in this study emphasized the difficulty they have in accessing services and interventions to better understand and manage their emotional and mental health.

Need for leadership training

Participants in the current study wanted more of an authentic culture of support, compassion, and engagement from managers and leaders. Workers in contemporary Canada

value organizational leaders most for their demonstrated empathy, transparency, and fairness (Kuss, 2024). There are emotional intelligence trainings available specific to manager and leaders, as it is a learnable set of capacities which can help improve qualities of empathy, transparency, and fairness, as well as stress management, actively integrating multiple perspectives, and addressing competing needs (Kuss, 2024). These types of trainings are helpful to promote alongside mental health training, and they can serve promote a healthy and productive workplace culture that can counter the pervasive "predefensive emotional state and mindset" frequently found in frontlines' milieus (Faltas, 2020, p.73).

In a cross-sectional survey of Canadian HCW, higher mental health scores were found in workplaces where leadership was perceived to have carried out diligent infection control strategies during the COVID-19 pandemic (including suppling adequate personal protective equipment; Smith et al., 2021). Where workers have higher perceived safety and trust, they have lower mental distress, which in turn helps to cushion the impact of traumas more effectively (Morganstein et al., 2019). Ensuring durable, high-quality personal protective equipment is important, but this needs to be accompanied by both training and de-escalating workplace violence to support worker mental health (Morganstein et al., 2019). The current study added the need to ensure policies (e.g., personal protective equipment, time demands) do not operate in contradictory directions.

Training executive leaders in mental health, emotional regulation, and emotional intelligence may help with the kinds of policy development that are needed to keep pace with societal and technological changes, while improving the workplace culture to mitigate attrition, incentivize engagement, and support stability (Barlow & Sauer-Zavala, 2021; Faltas, 2020). Organizations can increase transparency and communication to bolster worker's sense of

fairness, trust, and morale (Faltas, 2020). These goals can also be achieved by aligning organizational values with day-to-day practices to build worker loyalty, commitment, and responsibility toward the organization (Faltas, 2020). Participants in the current study provided a practical proactive policy example; specifically, they advocated for regular psychological appointments as a matter of expected mental and emotional health maintenance to reduce the stigma against help-seeking and catch serious challenges early, which would be consistent with recommendations from Faltas (2020). Another example is that when the same workers – or entire units of workers − are consistently booking off work, leaders can inquire more closely about the challenges, offer supports, and, if necessary and supported by sufficient evidence, address abuses (Butler & McManus, 2014; Faltas, 2020).

Chronic understaffing

A manager in the current study reported a desire to have a standardized treatment plan and return-to-work timeline for his team, but the negative sequelae of PPTE can persist for a long time, can vary a lot by individual, and can require tailored solutions (Cramm et al., 2021). Chronic understaffing can also increase scrutiny on coworkers' absences, breeding resentment and stigma from colleagues (e.g., a portion of workers deprioritizing and forfeiting their own mental health and believing others should do the same), creating structural stigma responsibilities that need to be addressed at the level of the organization, not the individual worker (Ricciardelli et al., 2020). The same structural stigma can inhibit workers from seeking help, when organizations instead need to 'train people to come forward' when they experience mental health problems (Ricciardelli et al., 2020).

Job control

In the current study, participants described their lack of job control as a source of

anguish. Job control is understood as having some choices around how to work, including types of assignments, pace of work, social environment, technical media, autonomy from supervision, shift scheduling flexibility, and viable job transfer options (Raines, 2019; Seager, 2014). Higher job control is linked to more job satisfaction, motivation, performance, and health, as well as lower burnout (Raines, 2019). Participants advocated for more job control to help shift work be more manageable, to create caps on hours worked per week, to improve training and mentorship opportunities, and to ensure breaks for basic human needs. Coyne (2024) called 'not going to the bathroom' a 'chronic problem' for nurses who are simply too busy the entire time, even on 12-hour (or longer) shifts.

Barriers to sleep hygiene

There is peer-reviewed literature that suggests that adequate hours of sleep can prevent suicide in frontline workers while also reducing their errors at work (Aryal & Pereira, 2014; Dutheil et al., 2019; Temple, 2015). Canadian policymakers could learn from the European Working Time Directive which set limits on time worked per week for the health and safety of workers, as well as their patients (Temple, 2015). Those living in Canada have certain expectations of emergent and urgent response providers which "requires appropriate levels of medical and other staff, appropriate training, and sensible working hours," and their job performance is undermined by organizations that do not ensure their workers and trainees are "well rested and well guided" (Temple, 2015, p.1). The European Working Time Directive was legislated in the European Union in 1998 while in Canada there are no equivalent federal or provincial regulations to protect frontline workers from this type of exploitation (Temple, 2015). There was a case in Quebec in 2011 in which a labour arbitrator ruled that 24-hour shifts violate health and security of the person, as protected in *Section 7* of the *Canadian Charter of Rights*

and Freedoms, though little progress has been made to amend these types of ongoing normalized violations in any meaningful, widespread way in Canada (Temple, 2015).

Overtime and burnout

The Canadian Medical Association conducted a national survey that found 53% of physicians were experiencing burnout, often working long hours without any breaks, including days, evenings, and weekends; 73% reported being unfulfilled in their profession (Canadian Medical Association, 2022). Nurses similarly report regularly working exuberant amounts of overtime to the point of mental health crisis and burnout, in turn impacting quality of care (Jun et al., 2021). Nursing requires safer workloads and flexible hours. Participants in the current study agreed that forced overtime interacts negatively with mental health.

Violence against workers

Nurses need protection against violence, to be a sustainable service (Zink, 2024). In the province of Manitoba alone, there are five reported incidences of violence against nurses by patients each day (CBC, 2024). There are likely dozens more per day that go unreported, but the associated system is under-resourced and no longer has the capacity to follow-up on and act on each incident report, as was the expectation until recent rates overwhelmed the capacity (CBC, 2024). A new study on violence against paramedics is expected to detail pervasive sexual, physical, and verbal assaults by clients/patients in Canada (Williams, 2024). Participants in the current study concurred that dealing violence at work and associated challenges substantially compromised mental health.

Bullying, lateral violence, and conflict

Bullying, lateral violence, and conflict at work were important themes that emerged in the current study. Depending on the employing organization and the definition of bullying, as

many as 53% of workers have experienced workplace bullying and over 90% have had to deal with a 'toxic' person at work (Coyne, 2024; Friedman & Scherer, 2010). There are numerous definitions of workplace bullying, which can be considered an umbrella term that includes a wide range of behaviours, such as "blaming targets for errors, making unreasonable demands, criticizing targets' work ability, inconsistently applying made-up rules, threatening job loss, offering insults and put-downs, discounting targets' accomplishments, socially excluding targets, yelling and screaming, and stealing credit for targets' work," (Lee & Brotheridge, 2006, p. 4), as well as sexual harassment, racial harassment, emotional abuse, verbal abuse, victimization, sabotage, character assassination, indirect bullying, online bullying, mobbing, shunning, and ostracism (Coyne, 2024; Friedman & Scherer, 2010; Kelloway et al., 2006; Lee & Brotheridge, 2006; Spector et al., 2014). All of these manifestations can be systemic and normative in the organization, need to be tackled at the level of the organization, and can seriously undermine worker mental health and well-being (Coyne, 2024; Friedman & Scherer, 2010; Kelloway et al., 2006; Lee & Brotheridge, 2006; Spector et al., 2014). Bullying is also defined as a repetitive and systematic expression of toxic hierarchy (Lantos & Halpern, 2015). A climate of fear, ignorance, and silence perpetuates tolerance and reward for bullies who project their own inadequacies onto a targeted person to externally displace violence and aggression (Rigby, 2003). Participants in the current study asserted that burnout and mental distress result from regularly facing high levels of workplace aggression and that organizations need to develop more effective strategies to affect change.

Bullying is also rampant in healthcare workplaces, with high rates of physician-against-nurse and nurse-against nurse bullying feeding into high turnover rates (Archibald-Varley & Fung, 2024; Blackstock et al., 2015; Coyne, 2024). Preceptors are particularly influential when

new recruits and trainees are socialized into the workplace culture; for example in nursing, "what were once a compassionate, caring profession and nurse have become replaced in some instances with negativity, evil innuendos, and tactics of intimidation and humiliation" (Coyne, 2024, p. 212). The current study contributes evidence that the losses of fulsome and positive training, healthy preceptorships, and reliable partnerships during and since the COVID-19 pandemic have exacerbated this trend; the opposite momentum of improving and advancing transformation is needed (Archibald-Varley & Fung, 2024; Blackstock et al., 2015; Coyne, 2024).

Unaddressed bullying can result in high turn-over, chronic absenteeism, and even suicide and homicide (Lee & Brotheridge, 2006; Rigby, 2003). Most targets are unable to cope with the onslaught of negativity in their work life, potentiating counter-aggressive bullying whereby the prey displaces their anger onto other people, perpetuating toxic environments (Lee & Brotheridge, 2006; Raines, 2019). Workers living with chronic interpersonal turmoil experience disorder to their sense of identity, generating psychological destabilization and distress (Lee & Brotheridge, 2006). For the individual worker, there are strong links between bullying, emotional strain, and diminished health (Lee & Brotheridge, 2006). Victims often experience insomnia, anxiety, depression, PTSD, headaches, nausea, and vomiting (Lee & Brotheridge, 2006; Rigby, 2003). Workplaces that cultivate collaborative cultures and that evenly distribute power have less bullying and other forms of conflict (Coleman et al., 2013).

In workplaces with high levels of interpersonal violence, turn-over, and chronic absenteeism, there is likely little capacity for making progress toward the Truth and Reconciliation Calls to Action. Truth and Reconciliation work is important to PSP and HCW due to the disproportionate number of Indigenous people in Canadian prisons and emergency

service utilization, as directly related to the legacy of colonization, forced assimilation, the Indian Residential School System, and surrounding intergenerational traumas and sequalae (Banerji & Shah, 2017; Bombay et al., 2020; Truth and Reconciliation Commission of Canada, 2015; Weatherburn & Holmes, 2010). The term 'lateral violence' was used by participants in the current study. This term was coined through Indigenous global scholarship in response to the systematic and multitudinous abuses carried out by colonizers against Indigenous people that was then transmitted through Indigenous communities (Bombay et al., 2014, 2020; Clarkson et al., 2015; Truth and Reconciliation Commission of Canada, 2015). Lateral violence is also used in contexts of other marginalised or oppressed groups, sometimes to refer to as the phenomenon of psychological trauma moving through organizations or groups at relatively similar levels of social power within the structure. Consulting the Indigenous Nations of Canada can help inform efforts to improve public safety and healthcare organizations and services, supporting alignments and accordance with democratic, egalitarian, collaborative, and peace-building laws, protocols, and cultures to benefit workers and patients/clients alike (Allen et al., 2020; Carlson-Manathara & Rowe, 2021; Carlson, 2016; Truth and Reconciliation Commission of Canada., 2015).

Lantos and Halpern (2015) write that, societally, we need to analyze how we are all implicated in manifestations of dominance and subordination. Hierarchical structures in the workplace can perpetuate cycles of violence by constructing unequal distributions of power, and bullying is more common in competitive environments (Lee & Brotheridge, 2006; Raines, 2019). Further, the role and style of leadership is essential in tackling the systemic aspects of workplace bullying; for example, organizations with laissez-faire style of management have higher levels of bullying (Dussault & Frenette, 2015). On the other hand, a transformational

style of management, which is a more collaborative approach, reduces the prevalence of bullying (Dussault & Frenette, 2015; Hauge et al., 2010). Middle managers have their own pressures to implement top-down policies from that higher-up in the hierarchies, but they also have important roles in advocating for the workers they manage and have power over (Mukhopadhyah, 2024).

Participants in the current study commented on how peer relationships are very influential on mental health; peer-reviewed literature suggests strong peer relationships can be supportive for mental health but can also potentiate negative manifestations of 'emotional contagion' (e.g., widespread cynicism) that create obstacles for cultural changes (Cramm et al., 2021). Workers represent a large part of the opportunity for shifting organizational culture to better support mental health, as does effective directorship and management implementation.

Building in time for mental health training, therapy, mental health practices, physical fitness, regular breaks, team development, team cohesion, professional development, and personal development are also important for frontline organizations (Faltas, 2020; Gilmartin, 2021; Seager, 2014). In a scoping review of PTSD and firefighters, Cramm and associates (2021) concluded that "reducing occupational stressors, co-worker conflicts, and stressors […], as well as fostering respectful and effective communications across ranks and divisions […] and with the community served […], may all help to mitigate the impact of potentially psychologically traumatic event." (p. 278). These and similar assertions in the peer-reviewed literature (e.g., LaGree et al., 2023; Willett et al., 2023) resonate with what participants in the current study shared.

Moral distress and injury

There has been an increasing conversation around moral distress and moral injury in

frontline workplaces since and predating the COVID-19 pandemic, (Dean & Talbot, 2023; Coady et al., 2021; Cohen & Samp, 2023; DeBeer et al., 2023; Jinkerson, 2016; Jones, 2020; Kleinig, 2023; Papadopoulos, 2020; Smith-MacDonald et al., 2023; Wiinikka-Lydon, 2019; Williamson et al., 2021) including by participants in my current study. Policy makers, the media, and society at large all have important roles to play in moving forward from this pervasive pattern in Canadian frontline workplaces (Heber et al., 2023). Lotfi-Bejestani and colleagues (2023) found a statistically significant inverse relationship linking perceived organizational injustice with moral distress in nurses. Nurses are faced with frequent moral conflicts including "lack of autonomy, conflicts with physicians and institutional policies, deficient work infrastructure, weakened professional relationships, insufficient professional skills, and a lack of humanization" (Lotfi-Bejestani et al., 2023, p. 2). Moral conflicts lead to moral distress which is linked to demoralization, desensitization, and burnout (Lotfi-Bejestani et al., 2023). Participants in the current study described moral distress as pervasive in their workplaces, with a subset highlighting experiences of institutional betrayal and sanctuary trauma.

Environmental triggers

Survivors of frontline PPTE exposures may experience intense fear by simply walking into their place of work (Enns, 2018; Smith & Freyd, 2014). Within frontline hierarchal workplaces, social interactions are encoded with power dynamics which are maintained through dehumanizing tactics, such as "heightened levels of control, standardization, and surveillance of its members" which required "complete surrender" and compliance for membership (Bikos, 2023, p. 3). Survivors have endured 'a mortification of the self' and a 'grooming' into 'better' version of themself through training, obedience, conformity, and assimilation into the

organization, they were subsequently conferred a protected member's status and embedded with an identity of an elite class with special privileges in society (Bikos, 2023). After disclosing PTSD or moral injury (and especially when demonstrating whistle-blower behaviours), the member is then recategorized as 'weak' and 'other' by their former affiliates, their privileges stripped, and their formerly powerful identity undone, as they face the destabilizing effects of calling into question everything that they believed about serving the organization and society (Lentz et al., 2021). Within frontlines work culture, there is often a machoism, a cynicism, and a lack of empathy which serves the self-preservation response of the institution, thus perpetuating an adversarial climate that remains resistant to caring about an individual's distress, psychological injury, or mental health concern (Bell & Eski, 2016; Bikos, 2023; Bloom & Farragher, 2011; Luftman et al., 2017).

Intersectional Considerations and the Literature

This section explores extant peer-reviewed literature pertaining to the intersectional considerations that emerged as results in the corresponding chapter, namely Chapter 6, in a similar order, starting with gender.

Gendered role strain and conflict

'Social role theory' is concerned with the status of women in society including the role strain and role conflict that arise from managing competing demands (e.g., paid employment vs. unpaid caregiving work) and the struggle to meet societal expectations based on gender stereotypes that typically require more of women than of men (Eagly & Wood, 2012). Li, Lee, and Lai (2022) inquired about the workplace-related disadvantages that employed-and-caregiving women face compared to their men counterparts, assessing the competing demands of unpaid caregiving and paid employment, the gendered social expectations around division of

labour, the unique double-bind of the pressures placed on women, the family-to-work role conflict, and the specific focus on the mental health of women (as opposed to caregivers of any gender). Li, Lee, and Lai (2022) concluded that employed women were more likely to perform higher intensity caregiving, to experience more role conflict, to sacrifice opportunities, and to operate with fewer supports than men. All of these results represent statistically significant health and financial disadvantages for women, a pattern that tends to compound over time (Li et al., 2022). Women participants in the current study described these interrelated issues, and they added that there is further mental health strain as wives of frontline workers or as frontline workers themselves (i.e., already managing PTSD, burnout, compassion fatigue).

In a study comparing how women manage careers and caregiving in four countries over several years, Collins (2019) found that unrealistic moral, cultural, and financial pressures are pervasive. Where work-related policies are both pro-mothers and pro-equality, these pressures can be reduced (Collins, 2019). Where policies support more equitable fatherhood participation, fathers report more satisfaction with parenting, more engagement with their children, and stronger bonds with their children and spouses (Collins, 2019). Cultural recognition, along with momentary and public support, for the value of caregiving labour is needed; without these shifts, such labour will remain formally unvalued and feminized, and "women and mothers will continue to be disadvantaged, stigmatized, and stressed" (Collins, 2019, p. 265). The current results indicate sustainable PSP and HCW workplaces need more support for mothers in working, fathers in caregiving, and parent workers generally. The current results also align with Gilmartin's (2021) indicating men PSP require more family-centered activities and work-life balance to sustain emotional and mental health over a life trajectory.

Gendered bullying and harassment

Bullying and harassment were important themes that emerged in the current study. The peer-reviewed literature suggests that women and other minorities in men-dominated workplaces benefit from proactive anti-bullying policies and management, including consistent response to complaints (Hauge et al., 2010; Raines, 2019. Respectful workplace policies are important to have in place, but it is not enough to simply have a policy; these must be enacted and modelled by strong leaders (Raines, 2019). Conventional wisdom dictates that victims of bullying should speak up, directly challenge their bullies, and tell higher authorities (Lee & Brotheridge, 2006). Howatt (2017) questioned the assumption that the onus should on the victim; too often victims who complain to managers may be told to take it as a joke, that they should be able to handle it on their own, and that they are hypersensitive (Lutgen-Sandvik & Sypher, 2009).

Gender and sanctuary trauma

Some organizations penalize the whistle-blower, perpetuating the normalization of violence and toxic environments in which sanctuary trauma can exacerbate other types of occupationally incurred traumas (Bloom & Farragher, 2011, 2013). The current study participants described these issues in relation to chronic mental health problems which indicates the need for institution-by-institution inquiries to addresses root causes beyond individual psychological labelling. In a broad collection of studies on the psychology of diversity, Jones and colleagues (2014) wrote that power imbalances across social roles and relationships are such that if the group that wants the change holds less social power, they can only make as much progress as their colleagues engage with. If the group with more social power withdraw from engagement, then the process shuts down, the status quo is reproduced, and the power

differential remains the same (Jones et al., 2014). This knowledge may be useful in further unpacking how gendered differences function to reinforce power differentials in frontlines workplaces.

The nursing literature has found that women operate under heightened moral societal expectations and stereotypes of an 'angelic force' (e.g., nurses, paramedics) despite working within hospital (and similar institutions') structures that are based on a military model and often come with unsavoury politics; further, women are socialized not to complain about their work conditions, and to expect to have to deal with violence, trauma, and harassment (Archibald-Varley & Fung, 2024). Men also face unrealistic gender roles, such as 'impossible masculinity,' and some scholars argue the need to help lower and working class white men in channelling their purpose in a shifting society (Galloway, 2024; Jones et al., 2014; Silvestri, 2017; Wester et al., 2010; Workman-Stark, 2015).

Masculinity and mental health

This group may perceive equity, diversity, and inclusion discourses as threatening to leave them behind in terms of socio-economic development, participation, and opportunity; angry expressions of dominating with hypermasculinity can become problematic if this force is not somehow brought along 'into the new world of fairness' (Galloway, 2024; Jones et al., 2014; Silvestri, 2017; Wester et al., 2010; Workman-Stark, 2015). Middle-aged and older men in the current study said they were more open to mental health education and treatment as they aged and as the culture changed to be less stigmatic which may be an important factor in addressing these issues in a widespread way; for example, older men with mental health training and experience acting as mentors to younger men may provide an opportunity for modelling different acceptable masculinities that are not necessarily currently being modelled in groups

consisting of only younger men.

As it is, men's gender role socialization typically creates barriers to mental healthcare in three main ways, namely that it operates to: 1) deny a mental health issue; 2) stigmatize getting professional help; and, 3) undermine treatment by needing to present a tough exterior to the therapist (McCreary, 2021; Seaton et al., 2017). Seeking mental health treatment is often perceived as feminine thus stigmatized and avoided, leading men to self-medicate with alcohol and other substances much more readily than use prescriptions pharmaceuticals tailored to their conditions (McCreary, 2021; Seaton et al., 2017). When men do go to a mental health professional, they can have a hard time talking about emotional and cognitive processes, often preferring action-oriented interventions that restores a sense of pride, strength, and being in control (McCreary, 2021; Seaton et al., 2017). Men-focused, masculinity-sensitive, and gender-sensitive interventions "that recognize the specific needs and realities of men based on the social construction of gender roles" are needed to promote mental health among men (Barker et al., 2007, p. 4; McCreary, 2021; Seaton et al., 2017).

Workplaces can be ideal settings for these types of interventions (Barker et al., 2007). Men in the current study, as well as women used to working in masculinity-dominated settings, tended to feel relieved by the occupationally specific group therapy model that provided them opportunity to use 'mental health language' safely with peers and be reciprocated rather than stigmatized. Practical applications like this in-group validation of shifting masculinity socialization represents an important opportunity for treatment, as well as the future of the frontline workplace.

Indigenous mental health

Regarding Indigenous participants, drawing on the Seven Sacred Teachings and other

culturally safe spiritual practices can be beneficial and even integral for mental health and well-being (Allen et al., 2020; Hatala & Roger, 2021; Roger & Hatala, 2018). Little has been written about the use of Indigenous spiritual practices in the context of group therapy for Indigenous and non-Indigenous frontline workers. The current study contributed connections between some western psychology practices to Indigenous holistic healing practices, such as drawing parallels between inviting one's Spirit home and the FDFR technique. The current study also made some connections between frontlines work in Indigenous and non-Indigenous small, rural, and remote communities (e.g., having relationships with 911 callers vs. more anonymity in urban centres). These populations are typically kept separate in the literature but could be important for knowledge- and relationship-building between cultures.

Participants shared stories of trauma and tragedy in frontlines work in Indigenous communities, the worst of which I chose not to include for several reasons: to veer on the side of caution for the readership in a violence- and trauma-informed approach, out of respect for those whose stories may have been told without sufficient context or cultural humility; and to avoid perpetuating an imbalanced and sensationalized deficit discourse of Indigenous people. Many Indigenous people have been harmed by the violence of the Indian Residential School System, an attempted genocide that tore families apart by forcing children into underfunded industrial institutions where many suffered all forms of abuse, including physical, sexual, psychological, cultural, and spiritual abuse (Truth and Reconciliation Commission of Canada, 2015).

In a scoping review of the effects of Indian Residential School attendance on health, Wilk and colleagues (2017) found linkages to mental distress, depression, addictions, suicidal behaviours, PTSD, cumulative stress, and Residential School Syndrome for survivors, their

children, and their grandchildren. Anishinaabe researcher Amy Bombay and her team (2014, 2020) have clearly evidenced the intergenerational effects of the Residential School System; when comparing First Nations adults who primarily dwell off-reserve, they found that the children survivors of this system experienced more childhood abuse and neglect than those with non-Residential School parents. People whose parents attended Indian Residential Schools are more likely to have had a childhood home in which someone used substances, spent time in prison, experienced mental disorders, and endured financial instability (Bombay et al., 2020). They are more likely to have lived in group homes or foster care during the Sixties Scoop era, indicative of another wave of repercussions of the devastation that the Residential Schools had on families (Bombay et al., 2020). The current manifestation 'the Millennial Scoop' in which as many as ten thousand infants are apprehended from Indigenous mothers by Child and Family Services each year in Manitoba alone (CBC, 2020; Hatharly & Froese, 2020; Puxley, 2015).

Frontlines workers are often the first point of contact in serving Indigenous people experiencing homelessness or poverty, and workers may slide into negative and racist cognitions, affecting who is seen as 'deserving services' (Archibald-Varley & Fung, 2024; McCallum & Perry, 2018; Corman, 2017; Kolahdooz et al., 2015; Menzies & Lavallée, 2014). Deeper analysis of the meta-relationships between frontline workers and Indigenous people is typically overlooked, as is occupational training to increase frontline worker awareness of the social determinants of health of Indigenous people (and Black people and People of Colour more broadly). Ongoing colonial violence and dispossession enacted on the bodies of Indigenous people compounds the impacts of generations of losses of family and home that go far beyond lacking shelter; 'Indigenous homelessness' through an Indigenous worldview includes tremendous "losses of relationships to land, water, place, family, kin, animals, cultures,

languages and identities" (Kenny et al., 2021, p. 1916). The re-imagining and rebuilding of 'home' thus requires Indigenous-led revitalization of cultures, knowledges, healing and healthcare, public safety and justice, and multilevel relationships (Kenny et al., 2021). Thus, there is a lot of work to be done in upstream societal development following Indigenous-led initiatives to help restore community health and well-being while also reducing demand, frequency, and severity of services provided by frontline workers, with implications for mental health.

Organizational theory, racial and gender inequities

In her book on organizational theory, racial and gender inequities, and workplace exploitation from the perspective of an Indian women, Mukhopadhyah (2024) interrogated why the onus for psychological injury recovery and self-management is set upon the individual's shoulders to bear and to absorb what are system failures, which is particularly pointed given that middle and upper classes have more access to health services and products offered by the multi-billion-dollar wellness industry. She pointed out that the beneficiaries of such systems are complicit to employee overwork and overextension to the point of widespread chronic stress and burnout in a variety of work cultures across North America (Mukhopadhyah, 2024). Mukhopadhyah (2024) wrote that burnout is a societal level problem; taking rest, as an individual, can be a form of resistance to the relentless drivers of exploitation. Similarly, speaking to work-related stress and socio-historical factors during the COVID-19 pandemic, Hersey (2022) wrote:

> My rest as a Black woman in America suffering from general exhaustion and racial trauma always was a political refusal and social justice uprising within my body. […] Rest pushes back and disrupts a system that views human bodies as a tool for production

and labor. It is a counter narrative. We know that we are not machines (p. 1).

The current study found that chronic staff shortages have perpetuated worker exhaustion and burnout, and the lack of time and resources for mental health maintenance and recovery work needs to be addressed at individual, organizational, and societal levels. Without prioritizing this type of reparative and restorative work, unresolved trauma in workers and unresolved trauma in service populations will likely continue to reproduce and collide, more so and inequitably so in marginalized and racialized populations.

Poverty, intersectionality, and policing

Too often under the radar, there is little research on the crosscutting impacts of poverty, class, income, and level of education regarding the differences these make in mental health of frontline workers, including in relation to other intersecting considerations. There are studies that compare job categories with incidences of PPTE or mental health issues (Carleton et al., 2020; Fjeldheim et al., 2014; Lai et al., 2020; Reichard & Jackson, 2010). Police and HCW seem to be more often studied than other public safety job categories, though there is also stigma against researching police and an absence of studies specific to Canada (Perrott, 2023). That police officers have proximity to guns and other weapons is an important nuance because access to means is decidedly linked to suicide completion (Milner et al., 2017). Further complicating, while police carry weapons to be able to respond to violence in the population, rates of violence and aggression have been shown to rise with proximity of weapons in the general population, known as ‘the weapons effect.’ (Jones et al., 2014; Seager, 2014, p. 163).

There is a history of social unrest in response to the inequitable violence enacted through the institution of police toward marginalized communities (Doyle et al., 2023; Perrott, 2023). Calls for reform have resounded through several waves of peak protestations, including in the

1960s civil rights movement, the more recent Black Lives Matter movement, and the National Inquiry into Missing and Murdered Indigenous Women and Girls (and Two-Spirit People) in which police have been implicated in systemic inadequate responses to calls for help from marginalized communities and the perpetuation of violence against racialized civilians, including murder in certain cases (Doyle et al., 2023; NIMMIWG, 2019; Perrott, 2023). Participants in the current study advised that systemic racism and its sequelae − played out in broad public relations as well as their day-to-day interactions with the public − takes a specific type of psychological toll on the associated individual. Racism needs to be addressed at multiple levels but too often goes unaddressed at the organizational level (Doyle et al., 2023; NIMMIWG, 2019; Truth and Reconciliation Commission of Canada, 2015).

Some institutions have tried to augment community-oriented policing, to involve civilians on decision-making boards, and to recruit women and minorities for more diversity, with similar processes in some healthcare services and other sectors (Fierlbeck, 2011; Howlett et al., 2009; Huey et al., 2023; Perrott, 2023). Women and minority workers are often perceived by communities to have more cultural competency, insight, empathy, trustworthiness, and skills for de-escalating violence (Perrott, 2023). There are fewer officer-involved shootings where there are more women police officers (Perrott, 2023). The largest barriers to increasing women's participation are behavioural (i.e., the rampant 'sexual harassment, hostility, and undermining' of women by an 'all boys club') and institutional (i.e., the disproportionate burden of caregiving labour and role conflict born by women; Langa et al., 2024; Perrott, 2023, p. 28-29). The main barriers that minority officers face include low approval from their communities, prejudice against police, societal racism, lack of religious accommodations at work, minority stress, and absence of critical mass; on the other hand, a primary motivation of these officers is the desire

to serve their communities and the public at large (Hassell & Brandl, 2009; Perrott, 2023; Yuan et al., 2011). Canada has reached equivalent or higher proportions of Indigenous police officers compared to the national Indigenous population, but still far fewer women and other minorities (Perrott, 2023). Toronto has the highest ethnic diversity of all Canadian cities at 24% visible minority police officers, while Halifax in the only Canadian city to reach parity between police and population ethnic diversity (Perrott, 2023). Similar knowledge specific to other public safety and healthcare job categories is unknown, nor is it known what are the overall health and social impacts of increasing participation and opportunities for women, Indigenous, Black, 2SLGBTQI+, and other minority people in these roles.

2SLGBTQI+ frontline workers

No participants self-identified as 2SLGBTQI+, but there was evidence of important intersectional considerations. There is peer-reviewed literature that demonstrates lesbian and gay people feel pressure to conform to mainstream cultures at their workplaces and that they use selective disclosure to stay safe (Colvin, 2009). Lesbian and gay police officers have reported attitudinal barriers (e.g., most frequently homophobic comments), as well as isolation at work (Colvin, 2009). In a study on workplace experiences of lesbian and bisexual female RCMP officers, Giwa and associates (2022) found the hypermasculine culture created barriers for queer women's full participation (e.g., unsafe to disclose their status, unsafe because of how women's bodies were objectified).

Among Canada's federal public service employees, Waite (2021) found that "gender diverse employees are 2.2 and 2.5 times more likely to experience discrimination and workplace harassment than their cisgender male coworkers" (p. 1833). Workplaces that reproduce homophobia and transphobia exacerbate minority stress and related mental health sequalae (e.g.,

depression, loss of confidence, substance use, attempted suicide; Waite, 2021). Sexual minority stressors that are underrecognized include identity concealment, rejection sensitivity, microaggressions, institutional ostracization, and chronic shame (often embedded into identity from an early age), and can predict PTSD symptoms (Cancela et al., 2024; Hoy-Ellis, 2023; Jones et al., 2014; McKinnon et al., 2024; Rivera, 2022). Important protective factors include community- and self-acceptance; social acceptance and support need to be embedded into organizational structure, strategic planning, and interpersonal relationships (Cancela et al., 2024; Hoy-Ellis, 2023; Jones et al., 2014; McKinnon et al., 2024; Rivera, 2022).

The *Canadian Human Rights Act* and the *Canadian Employment Equity Act* legally protect workers against discrimination based on sexual orientation, gender expression, and gender identity, though more is needed in terms of policies, programs, and initiatives to these ends (Waite, 2021). There is an International Emergency Medical Services and Firefighters Pride Alliance whose mission it is to support 2SLGBTQI+ public safety service providers across the world and eliminate homophobia and transphobia in the public safety sector (IEFPA, 2024). In the current study, cisgender- heterosexual-identifying participants revealed a range of tolerance for 2SLGBTQI+ people, with some direct examples of lack of understanding and empathy for 2SLGBTQI+ needs in the workplace and in therapeutic spaces.

Disability, age, and other intersectional considerations

In their work on the science, politics, and values in work disability policy, MacEachen and Ekberg (2019) examined return-to-work strategies, pressures, and financial incentives placed onto employers and workers in 13 countries. They concluded that while mental health was “the most common reason for sick leave in most countries” that it was also the most complex to discern or standardize regarding diagnoses, recovery times, and return-to work

accommodations (MacEachen & Ekberg, 2019).

More research is needed to identify best practices for disability accommodations, reintegration, and return-to-work policies specific to frontline workplaces, including using a critical disability theoretical lens.

Directions Forward for Frontline Worker Mental Health and the Literature

Canadian frontline workers are navigating increased pressure to cover growing cities and larger populations while also facing the thinning of education, training, and resources (Corman, 2017). Corman (2017) critiqued 'neoliberal business logic' and 'bureaucratic redesigns' in public safety systems that often do not work as intended because frontline workers are not considered. Corman (2017) expounded that what is predominantly counted as 'evidence' is an ideological and conceptual practice of power which can be self-perpetuating; for example, if only certain performance measurements are prioritized (e.g., chute times), then many other aspects of services fall to the wayside, unmeasured thus ignored. 'Core data elements' only capture snippets of how managerial technologies impact workplaces, and workers are rendered invisible in these severely limited institutional representations of what is happening in frontline workplaces (Corman 2017). The current study offered a more fulsome picture with several insights and recommendations from workers who are directly impacted by such policy, with a key recommendation that mental health knowledge drive policy decisions.

A major PSP stressor is lack of job control and flexibility, and individual mental health factors cannot be genuinely separated from their workplace contexts where key health concerns are associated with the structure the organization (Corman, 2017). Workers dealing with sudden changes in work schedules over which they had little-to-no control, for example, experience statistically significantly higher levels of workplace aggression (Morganstein et al., 2019).

Violence at work is now considered 'normal' since "we've all been assaulted on the job" (Corman, 2017, p. 78.) Morganstein and colleagues (2019) found that "optimizing human factors and reducing system vulnerabilities" can decrease workplace aggression, accidents, and violence, and there is a need for opportunities for workers to speak to those in power as the most affected by decision-makers' blunders. Increasing access to decision-making and job control for frontline workers most invested in daily workplace operations may reduce mental health vulnerabilities (Morganstein et al., 2019). The current study agreed with such assertions; frontline workers themselves repeatedly emphasized the roles and responsibilities of their employing institution's consolidated power in establishing workplace conditions, policies, and norms. Ricciardelli and Power (2020) called for a robust set of formal policies and procedures to support workers who experience any sort of trauma on duty and that these become are accessible, normative, and mandatory to reduce stigma in correctional services. These scholars urged for increased staffing, better work conditions, and an overall reduction of workplace violence. The current study results aligned with and extend these recommendations to other public safety and healthcare job categories as well.

There are uncertainties in the literature regarding the sustainability of work as we know it, particularly for frontline workers and others in high-stress positions. Shay (1994) questioned if any human was really built for continuous sirens or chronic states of emergency; he urged a reduction of or cap on PPTE and deaths witnessed per worker. His referent was a standard one-year tour of duty in the military, and he pointed out how PTSD rates skyrocketing for those who stayed in active warzones for longer than that amount of time (Shay, 1994). While reducing total PPTE exposures was important, he also urged keeping personnel together in their cohorts to eliminate the too often fatal consequences of trauma-then-isolation, including when returning

home (from war); the wounded make more sense to themselves, and adapt and heal more easily, when they remain together with their intensely bonded groups – or at least one other war buddy − who went through what they went through (Shay, 1991, 1994, 2002). The equivalents for PSP and HCW could include proactively developing team cohesion and maintaining groups for therapy, psychoeducation, and support on an ongoing basis, as recommended by the current study participants. The current study participants recommended making workplaces as psychologically safe as possible through trauma-informed leadership and organizational culture. Organizational behaviour experts highlighted two key markers of the highest performing teams, namely, team cohesion and psychological safety (Coyle, 2017). In calling for trauma-informed workplaces with strategies to reduce organizational stressors and support the humans working within them, Mukhopadhyah (2024) asked us to envision workplaces with "space to process, heal, and connect to the people around us and to our jobs" (p. 187).

Corman (2017) analyzed how while public safety and healthcare are often in unpredictable, streets-based work environments (e.g., fire, police, and paramedic services but also mobile health units, mobile crisis units, community health nurses, social workers), a small percentage of 911 calls are true emergencies. Most calls for help are considered 'nonessential' psychiatric or substance use calls, or non-emergencies (Corman, 2017). Frontline workers are often the first point of contact for people experiencing homelessness, substance use, and mental health issues (Corman, 2017).

The 'wicked problems' of public safety and healthcare reform includes absent consensus for goals and framing, such as how best to address numerous interconnected root causes of poverty, homelessness, mental disorders, addictions, family breakdown, and missing persons (Huey et al., 2023). Huey and colleagues (2023) wrote that "no significant *and* sustainable

policing reform can occur until we take steps to answer, 'What exactly *do* we want police to do?'" and until that time "police will continue to be seen as the most expedient – but not always the most effective – solution for far too many social problems" (p. 1). Diversifying the response system, advancing triage and matching response more specifically to the needs of the call, may help provide more nuanced solutions. Several recent initiatives are beginning to diversify and more finely tailor first responses to the 911 calls they are attending, for example by including social workers and mental health professionals and by dispatching smaller, more specialized teams when appropriate, which may ultimately broadly benefit communities (CBC, 2022a, 2022b).

Police officers generally do not have mental health and addictions training, but are often called to help people who have these types of needs; recent initiatives in mobile response units are being developed to bring mental health providers, peers, or social workers to the scene (CBC, 2022a). These mental health responders coordinate with police, and may be able to provide appropriate resources that an help during emergency situations (CBC, 2022a). They can also provide crisis case management and follow-up over the following months, which can help avoid repeating the same emergency situations (CBC, 2022a). Recent positive developments include mobile mental health teams who coordinate with PSP and respond to calls where someone is in crisis (as opposed to having committed a crime) with the examples of anything from a student's angry outburst in a school, a paranoid illusion in someone with schizophrenia, and an elderly person living with dementia (CBC, 2022b). Mobile clinics that treat people where they are at, such in homeless encampments or shelters, providing timely assessments, immediate test results, and accessible treatment are also important to diversifying and tailoring response (Mayes, 2024). PSP with modified scope of practice can also be an important part of

the changing landscape, necessitating more consideration. For example, paramedic services are starting to include options for palliative care at home (where most Canadians say they wish to die), rather than assuming every caller must be rushed to the hospital (Tarride, 2024).

This chapter revisited the themes and nuances presented in the results chapters (chapters 3 to 7) and placed them into dialogue with extant literature. As such, it provided discussion on the mental health challenges of frontline workers, as well as what supports their mental health. Following that was discussion on the interactions between workplace culture and organizational stressors with mental health and psychological injuries. A discussion on intersectional considerations in relation to frontline worker mental health was presented, as well as on directions forward in humanizing frontline systems and institutions.

Chapter 9: Conclusion

This chapter provides some discussion of the limitations and strengths of the study. This chapter also highlights some of the contributions to knowledge made by the current study. Areas for future research are outlined. A summary and concluding thoughts are provided.

Limitations and Strengths

Every study has strengths and limitations. For the current study, there were certain limitations to sample diversity, and future studies would do well to include people inhabiting more expressions of intersectionality, such as across job category (e.g., dispatchers, border patrol), sexual orientation and gender (e.g., queer, transgender people), ethnicity/race (e.g., Indigenous, Black, South Asian, East Asian people), and various disability statuses. The sample is also broad in some ways, and recommendations could become more customized in future studies if they focused more narrowly to a specific organization or even job sector. Likewise, less diversity in the sample could have provided more category-specific knowledge; more sample diversity could have more external validity and transferability to a larger variety of settings. As is, readers may find certain aspects (but not necessarily all aspects) transferable to other settings. Themes and subthemes were not quantified, measured, or ranked statistically, though saliency emerged qualitatively.

Strengths of the study included that there was a relatively large sample size for qualitative research, and this allowed for rich, fulsome results with discernible areas of consensus, as well as negative cases that provided nuance and exceptions. The breadth and complexity of the study can be understood as both a strength (e.g., more holistic and contextualized) and a limitation (e.g., more difficult to fully grasp, no easy answers). The study holds many discussion threads but is not exhaustive to any topic which are also all subject to

change over time. My background, experience, and positionality informed the study, and a different researcher could not have written an identical dissertation, though they would likely arrive at very similar themes and conclusions because these were derived so closely from the voices of participants.

Contributions of the Current study

The current study contributes in-depth data analysis from a large sample across frontline job categories in the Canadian sector. More specific contributions to knowledge of the current study are presented in the following table, namely, *Table 5. Contributions to knowledge*. These follow along with Chapter 8 where they are integrated into each discussion section that places results in dialogue with extant literature. They are categorized by research question and objective (aligning with each chapter of results), the contribution as unique in the literature to the best of my knowledge, and as building agreeance with other literature.

Table 5. Contributions to knowledge

Research question	Unique contributions to the literature	Building agreeance in the literature and applied to frontlines workers
Challenges	Need to further develop applied FDFR technique Eating disorders, self-harm, obsessive compulsive, and other behavioural challenges are underexamined in these populations Need workplace-wide address of alcohol and substance overreliance Need regular breaks for self-maintenance and psychological recovery built into job description Need more nuanced development on anticipatory training bordering	Need emotional survival skills training Need mental health training Need to advance mental healthcare for those in child abuse, rape, homicide, narcotics units Chronic sleep disturbances linked to suicide and mental health disorders Overtime linked to suicide and mental health disorders

	intrusive thoughts	Compassion fatigue, vicarious trauma, chronic stress, and burnout are prevalent
Supports	Health insurance policies inadequate Employee Assistance Program mental health help inadequate PSP, HCW have financial barriers to accessing help PSP, HCW have informational barriers to accessing help Checking on frontline workers on mental health leave important Existential therapy, spiritual care needed for PSP, HCW Create comprehensive and culturally safe supports around death and dying	Need PSP, HCW work-specific trauma therapy and therapist Group therapy with other PSP, HCW needed Dual frontline worker families additionally strained Frontline worker families additionally strained in pandemic context Need to advance nuanced processes for debriefing practices need development Need to develop work disability policies Need trauma-informed leadership and policy development
Interactions	Need to develop disability accommodations and job skill transferability Need to develop more authentic culture of support with peers and leadership Need to ensure policies are not contradictory, with particular focus on pandemic contexts Need mental health and emotional intelligence training throughout organization Need time for adequate fitness, self-care, self-therapy, decompressing, eating, sleeping, fulfilling basic	Cognitive distortions interact with institutional processes Mental health challenges can be exacerbated by organizational practices and policies Operational stressors are not perfectly separatable from organizational stressors Need to streamline excessive administrative burdens Need to acknowledge and value social and emotional labour often otherwise invisible in organizations

	human needs, etc. between and during shifts Need to reduce environmental triggers Need to disentangle peer support from reporting to employers	Need work time maximums per shift and per week Need to eliminate bullying and harassment at all levels Need to foster collaboration and teamwork, including through structural transformation Need protections for whistle-blowers Need to address moral distress, anguish, and injury Need to encourage mental health help-seeking Need to develop trauma-informed work-disability reintegration strategies Need to address structural factors at same type as individual level psychological injuries
Intersectionality	Additional strains on PSP, HCW who are also wives of PSP, HCW, with injuries, disabilities, children, and other caregiving roles Need more support for working PSP, HCW mothers, fathers in caregiving, and parenting workers Power of inclusion of Indigenous spirituality in mental health training and therapy Connections between FDFR technique and Indigenous spirituality Connections between small rural communities, Indigenous	Need to end bullying and harassment against women, minorities, and women minorities Need to support healthy masculinities, including communication, interventions, role modeling, and custom therapy types Need for community engagement to redefine policing and other frontline work Need to increase diversity in frontline sectors to improve the culture Need to illuminate invisibility of

	communities, lack of anonymity, and intensity of relationships for frontlines Connections to emergency services, the Truth and Reconciliation process, trauma transmission, rebuilding Indigenous sense of home and wellbeing Constructing worker exhaustion and exploitation as an intersectional issue	2SLGBTQI+ people Need to advance disability accommodations, reintegration, and return-to-work policies and processes
Theory of change	Multi-level theoretical model of change	Develop trauma-informed workplaces Humanize work conditions Mental health knowledge advancements need to drive policy Diversify and tailor emergency response teams to match with caller needs, including mental health crises

Directions for Future Research

The Institute for Mental Health Policy Research found that mental unwellness costs Canada 50 billion dollars per year; nationally, we need to invest in mental capital and optimal human health because these are critical resources (Gregoire Trudeau, 2024). We have some gaps in mental health research of frontline workers in Canada. Spiritual health and emotional health are not researched enough regarding their roles in mental health. There is a need to study preventative and proactive mental health training and initiatives to discern which are most valuable and reliable. Research is needed about how best to support frontline workers dealing with ethical, moral, empathy, and existential related challenges, which have historically been

overlooked and are important to all trauma-exposed populations. Further research is needed regarding emotional regulation, emotional intelligence, and affective science for frontline workers. Deepening the understanding of FDFR techniques, as well as the development of a greater selection of relevant self-management techniques may be helpful to frontline workers.

To better support these workers, more research is needed to evaluate the difference it makes to have on-demand psychological care, trauma-informed leadership, regular breaks, plentiful staffing, flexible schedules, sleep hygiene protocols, disability accommodations, work time limits, and other initiatives at work. While there is no clear, system-wide, evidence-based method as to how to best manage mental health work leave and reintegration – including the social aspects, these are key concerns for such high prevalence populations. More research is needed to advance debriefing practices specific to type of job, group size, and PPTE. People working in gang violence, child abuse, and other highly vulnerable specialty units need well-researched, tailored treatment programs. More research is needed on as trauma-informed organizational health and system transformation, as well as trauma-informed research methods (Waddell-Henowitch et al., 2024).

More qualitative research is needed with frontline workers beyond the "the hegemonic grip of simplistic and one-dimensional knowledge processes imbued with accounting logics that structure 'what counts' in healthcare broadly and EMS specifically" (Corman, 2017 p. 189). There is a need for research using multi-dimensional models of identity resisting the typically siloed identifiers to account for minority stressors, minority trauma, and insidious trauma exposures in multi-variant analysis (Jones et al., 2014; McKinnon et al., 2024). There is little research on the intersecting impacts of poverty, class, income, and level of education regarding

the differences these make in mental health of frontline workers, including in relation to other intersecting considerations.

Another important area would be to engage communities on their expectations and interactions with frontline workers, including urban, rural, and remote communities (including wildfires response). Research with Indigenous and other ethnic groups that experience racism when interacting with these sectors is needed to nurture dialogue, relationships, and vision going forward. Transformative research is needed to help reduce negative meta-perceptions, pluralistic ignorance, and intergroup anxiety, and to increase opportunities for positive contact and interaction, counter-stereotypic imaging, and perspective taking of those in minority groups (Jones et al. 2014). More research is needed on how best to support the mental health of frontline workers of sexual or racial minorities, as well as intersectionality research more generally, such as research with, by, and for Indigenous people in these sectors, similarly with Black, Filipino, Indian, Chinese, and other marginalized people in Canada. There is lots of room to more deeply understand the experiences of mental health of frontline workers living with disabilities and different abilities. There are few participatory or arts-based studies (e.g., digital storytelling, PhotoVoice) with frontline populations in Canada, nor studies using anti-oppressive methods that specifically address social hierarchies embedded within group dynamics that disproportionately affect marginalized, equity-deserving people.

Comparative, international, and cross-cultural studies could illuminate examples of excellence and facilitate learnings between nations, cultures, organizations, departments, units, and teams (e.g., participants specifically mentioned Britain, New Zealand, and Scandinavia). There is also a need to optimize research in terms of dissemination of results and knowledge translation activities. There are numerous areas of research and development to attend to, but

the current compilation provides a sense of scope from my perspective after my qualitative analyses. This concludes the chapter regarding directions forward for frontline workers; the chapter focused on key recommendations from participants, namely, increasing access to mental health training and therapy, and humanizing working conditions in human service delivery organizations.

Brief Summary and Concluding Thoughts

The current dissertation began with an introduction to the topic of the mental health of frontline workers in Canada including the study background, significance, purpose, and objectives. The grounded theory methodology (e.g., design, sampling, data generation, analysis, ethical procedures, academic rigour) was detailed. The challenges to frontline workers' mental health were discussed, including but not limited to emotional, cognitive, ethical, existential, and behavioural challenges, as well as psychological injuries. Various mental health supports were reported on, such as spouses, peers, mentors, professionals, self-management practices, spirituality, philosophy, debriefing practices, managers, leaders, and policies.

While psychological injuries are often kept separate from organizational issues in the peer-reviewed literature, the current study was designed to clarify some of their entanglements (e.g., issues with scheduling, overtime, attendance, attrition, accommodations). The misuse and abuse of power in hierarchal frontline organizations appears to be an important source of mental health challenges among workers (e.g., bullying, harassment, moral distress, moral injury, sanctuary trauma, institutional barriers to help-seeking). Intersectional analyses helped to build nuance and complexity into the current study through different sites of minority stressors, such as sexual orientation, gender, Indigeneity, class, and so on. The amalgamated lived experiences were integrated into a model of system transformation with multi-level recommendations.

The psychological suffering of frontline workers serves as a caution to the rest of us. There is precariousness in the struggle to maintain mental health in the face of modern disasters of global pandemics, systemic gender- and race-based violence, war, and environmental crises, and this is particularly acute in those tasked with responding to devastating emergencies on a regular basis while working within institutions encoded with structural violence and stigmatization. Addressing contemporary challenges requires us to rethink and rebuild more sustainable human service delivery systems and organizations; to communalize the responsibility for psychological trauma through upstream interventions, relationship-building, advancements in treatment and recovery, and shared rituals of reckoning and lamentation; and to renew mutual humanization with goals of long-term sustenance of societal and individual mental, moral, emotional, and otherwise holistic integrity and wellness.

The key directions arising from the frontline worker participants' collective lived experience are: 1) implement accessible, high-quality mental health training on an ongoing basis and at all levels of each organization; 2) ensure access to high-quality therapeutic interventions on an ongoing basis and at all levels of each organization; 3) develop community-minded workplace culture that prioritizes healthy relationships between frontline workers (of the same and different job categories) and with members of the public; 4) humanize working conditions and stabilize workforce sustainability; and, 5) ensure mental health knowledge drives policy decision-making.

References

Absolon, K. E. (2022). *Kaandossiwin: How we come to know: Indigenous research methodologies* (2nd Edition). Fernwood Publishing.

Adler, R., & Proctor, R. (2011). *Looking out, looking in* (13th Edition). Wadsworth Cengage Learning.

Adriaenssens, J., de Gucht, V., & Maes, S. (2012). The impact of traumatic events on emergency room nurses: Findings from a questionnaire survey. *International Journal of Nursing Studies*, *49*(11), 1411-1422. https://doi.org/10.1016/J.Ijnurstu.2012.07.003

Aiken, L. H., Sloane, D. M., Clarke, S., Poghosyan, L., Cho, E., You, L. M., Finlayson, M., Kanai-Pak, M., & Aungsuroch, Y. (2011). Importance of work environments on hospital outcomes in nine countries. *International Journal for Quality in Health Care*, *23*(4), 357-364. https://doi.org/10.1093/intqhc/mzr022

Allen, L., Hatala, A., Ijaz, S., Courchene, D., & Bushie, B. (2020). Indigenous-led health care partnerships in Canada. *Canadian Medical Association Journal, 192*(9), e208-e216. https://doi.org/10.1503/cmaj.190728

Allen, L. P., Kelly, C., & Hatala, A. R. (2024). Answering tough questions: Why is qualitative research essential for public health? *Australian and New Zealand Journal of Public Health*, *48*(3), 100157. https://doi.org/10.1016/j.anzjph.2024.100157

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), 7645/1-16. https://doi.org/10.3390/ijerph17207645

Angehrn, A., Fletcher, A. J., & Carleton, R. N. (2021). “Suck it up, buttercup”: Understanding and overcoming gender disparities in policing. *International Journal of Environmental Research and Public Health*, *18*(14), 7627. https://doi.org/10.3390/ijerph18147627

Angehrn, A., Teale Sapach, M. J. N., Ricciardelli, R., MacPhee, R. S., Anderson, G. S., & Carleton, R. N. (2020). Sleep quality and mental disorder symptoms among Canadian Public Safety Personnel. *International Journal of Environmental Research and Public Health*, *17*(8), 2708. https://doi.org/10.3390/ijerph17082708

Angehrn, A., Vig, K. D., Mason, J. E., Stelnicki, A. M., Shields, R. E., Asmundson, G. J. G., & Carleton, R. N. (2021). Sex differences in mental disorder symptoms among Canadian police officers: the mediating role of social support, stress, and sleep quality. *Cognitive Behaviour Therapy*, 1-18. https://doi.org/10.1080/16506073.2021.1877338

Aqil, A. R., Malik, M., Jacques, K. A., Lee, K., Parker, L. J., Kennedy, C. E., Mooney, G., & German, D. (2021). Engaging in anti-oppressive public health teaching: Challenges and recommendations. *Pedagogy in Health Promotion*, *7*(4), 344-353. https://doi.org/10.1177/23733799211045407

Archibald-Varley, A., & Fung, S. (2024). *The wisdom of nurses; Stories of grit from the frontlines*. Collins.

Arieli, D., Friedman, V. J., & Hirschfeld, M. J. (2012). Challenges on the path to cultural safety in nursing education. *International Nursing Review*, *59*(2), 187-193. https://doi.org/10.1111/j.1466-7657.2012.00982.x

Aryal, K. R., & Pereira, J. (2014). E learning in surgery. *Indian Journal of Surgery*, *76*(6), 487-493. https://doi.org/10.1007/s12262-014-1092-8

Bahji, A., Di Nota, P. M., Groll, D., Carleton, R. N., & Anderson, G. S. (2022). Psychological

interventions for post-traumatic stress injuries among public safety personnel: A systematic review and meta-analysis. *Systematic Reviews*, *11*(1), 1-16. https://doi.org/10.1186/s13643-022-02112-1

Barker, G., Ricardo, C., & Nascimento. M. (2007). *Engaging men and boys in changing gender-based inequity in health: Evidence from programme interventions.* World Health Organization. https://vawnet.org/material/engaging-men-and-boys-changing-gender-based-inequity-health-evidence-programme

Barlow, D. H., Farchione, T. J., Sauer-Zavala, S., Latin, H., & Murray, E. (2018). *Unified protocol for transdiagnostic treatment of emotional disorders: Therapist guide* (2nd Edition.). Oxford University Press.

Bastarache, M. (2020). *Broken dreams, broken lives: The devastating effects of sexual harassment on women in the RCMP; Final Report on the Implementation of the Merlo Davidson Settlement Agreement*. https://www.rcmp-grc.gc.ca/en/final-report-implementation-merlo-davidson-settlement-agreement

Bauer, G. R. (2014). Incorporating intersectionality theory into population health research methodology: Challenges and the potential to advance health equity. *Social Science and Medicine*, *110*, 10-17. https://doi.org/10.1016/j.socscimed.2014.03.022

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin*, *117*(3), 497-529. https://doi.org/10.1037/0033-2909.117.3.497

Beck, J. G., Majeed, R., Brown, T. A., Free, B. L., Bowen, M. E., Garrett, A. B., Farchione, T. J., & Brown, B. S. (2023). Understanding the role of COVID-19–related workplace stress and institutional betrayal on mental health in nurses: Some heroes wear scrubs. *Journal of*

Traumatic Stress, *36*(2), 421-432. https://doi.org/10.1002/jts.22920

Bell, S. & Eski, Y. (2016). 'Break a leg - It's all in the mind': Police officers' attitudes towards colleagues with mental health issues. *Policing: A Journal of Policy and Practice, 10*(2), 95-101. https://doi.org/10.1093/police/pav041

Benas, N. & Hart, M. (2017). *Mental health emergencies; A first responder's guide to recognizing and handling mental health crises.* Hatherleigh.

Bennett, A. (2022, January 10). *Moral injury on the front lines: Lessons from healthcare* [Video]. Ted. https://www.youtube.com/watch?v=2Zg9UnynMNM&list=TLPQMjMxMDIwMjP9Z-sifqkBTA&index=2

Bikos, L. J. (2023). "When they hand you your uniform, they forget to say, 'Hand me your soul'": Incidents and impacts of institutional betrayal in Canadian Police Services. *Social Problems*, *January*, 1-18. https://doi.org/10.1093/socpro/spac062

Biron, C., & Burke, R. J. (2014). *Creating healthy workplaces: Stress reduction, improved well-being, and organizational effectiveness.* Ashgate Publishing Ltd. https://doi.org/10.1093/occmed/kqu128

Bishopp, S. A., Piquero, N. L., Worrall, J. L., & Piquero, A. R. (2019). Negative affective responses to stress among urban police officers: A general strain theory approach. *Deviant Behavior*, *40*(6), 635-654. https://doi.org/https://doi.org/10.1080/01639625.2018.1436568

Bisson, J., & Andrew, M. (2007). Psychological treatment of posttraumatic stress disorder (PTSD). *Cochrane Database of Systematic Reviews*, 3, CD003388–CD003388. https://doi.org/10.1002/14651858.cd003388.pub3

Blackstock, S., Harlos, K., Macleod, M. L. P., & Hardy, C. L. (2015). The impact of

organisational factors on horizontal bullying and turnover intentions in the nursing workplace. *Journal of Nursing Management*, *23*(8), 1106-1114. https://doi.org/10.1111/jonm.12260

Bloom, S., & Farragher, B. (2011). *Destroying sanctuary: The crisis in human service delivery systems*. Oxford.

Bloom, S., & Farragher, B. (2013). *Restoring sanctuary: A new operating system for trauma-informed systems of care*. Oxford.

Bonaccio, S., Connelly, C. E., Gellatly, I. R., Jetha, A., & Martin Ginis, K. A. (2020). The participation of people with disabilities in the workplace across the employment cycle: Employer concerns and research evidence. *Journal of Business and Psychology*, *35*(2), 135-158. https://doi.org/10.1007/s10869-018-9602-5

Bombay, A., Matheson, K., & Anisman, H. (2014). The intergenerational effects of Indian Residential Schools: Implications for the concept of historical trauma. *Transcultural Psychiatry*, *51*(3), 320-338. https://doi.org/10.1177/1363461513503380

Bombay, A., McQuaid, R., Young, J., Sinha, V., Currie, V., Anisman, H., & Matheson, K. (2020). Familial attendance at Indian Residential School and subsequent involvement in the child welfare system among Indigenous adults born during the Sixties Scoop era. *First Peoples Child & Family Review,15*(1), 1-19. https://doi.org/10.7202/1068363ar

Bourassa Rabichuk, S. (2021). *Behind blue doors: Cisgender female police officers' experiences of psychological stress and mental health*. [Master's thesis, University of Manitoba]. MSpace. http://hdl.handle.net/1993/35811

Bouza, E., Arango, C., Moreno, C., Gracia, D., Martín, M., Pérez, V., Lázaro, L., Ferre, F., Salazar, G., Tejerina-Picado, F., Navío, M., Granda Revilla, J., Palomo, E., & Gil-Monte, P.

R. (2023). Impact of the COVID-19 pandemic on the mental health of the general population and health care workers. *Revista Española de Quimioterapia*, *36*(2), 125-143. https://doi.org/10.37201/req/018.2023

Brown, B. (2021). *The atlas of the heart; Mapping meaningful connection and the language of human experience*. Random House.

Brown, L., & Strega, S. (2015). *Research as resistance: Critical, Indigenous, and anti-oppressive approaches* (2nd Edition). Canadian Scholars' Press Inc.

Brown, T. B., & Kimball, T. (2013). Cutting to live: A phenomenology of self-harm. *Journal of Marital and Family Therapy*, *39*(2), 195–208. https://doi.org/10.1111/j.1752-0606.2011.00270.x

Bulut, N. S., & Akvardar, Y. (2021). Substance use disorders. *Forensic Psychiatry and Ethical Approaches in Legal Issues*, 111-131. https://doi.org/10.1007/978-3-030-04266-0

Burgard, S. A., & Lin, K. Y. (2013). Bad jobs, bad health? How work and working conditions contribute to health disparities. *The American Behavioral Scientist (Beverly Hills)*, *57*(8), 1105–1127. https://doi.org/10.1177/0002764213487347

Burke, R. J., & Mikkelsen, A. (2005). Gender issues in policing: Do they matter? *Women in Management Review*, *20*(2), 133-143. https://doi.org/10.1108/09649420510584463

Butler, G., & McManus, F. (2014). *Psychology, A very short introduction*. Oxford University Press.

Cambridge Dictionary. (2024, September 24). *Social justice warrior*. Cambridge University Press & Assessment. https://dictionary.cambridge.org/dictionary/english/social-justice-warrior

Canadian Medical Association. (2022, November 15). *Physician wellness: New 2021 National*

Physician Health Survey findings; Burnout, short-staffing and an overburdened system take their toll. CMA; Physician Wellness Hub. https://www.cma.ca/physician-wellness-hub/content/physician-wellness-new-2021-national-physician-health-survey-findings-burnout-short-staffing-and

Canadian Mental Health Association. (2023). *Operational stress injury*. CMHA Ontario. https://ontario.cmha.ca/provincial-policy/criminal-justice/operational-stress-injury/

Cancela, D., Stutterheim, S. E., & Uitdewilligen, S. (2024). The workplace experiences of transgender and gender diverse employees: A systematic literature review using the minority stress model. *Journal of Homosexuality, 1*, 1–29. https://doi.org/10.1080/00918369.2024.2304053

Carleton, R. N. (2024, November 19). The RCMP PTSD Longitudinal Study: Rationale, methods, and recent results. Department of Psychiatry Grand Rounds, University of Manitoba.

Carleton, R. N., Afifi, T. O., Taillieu, T., Turner, S., Mason, J. E., Ricciardelli, R., McCreary, D. R., Vaughan, A., Anderson, G. S., Krakauer, R., Donnelly, E. A., Camp, R. D. I. I., Groll, D., Cramm, H. A., MacPhee, R. S., & Griffiths, C. T. (2020). Assessing the relative impact of diverse stressors among public safety personnel. *International Journal of Environmental Research and Public Health*, *17*. https://doi.org/10.3390/ijerph17041234

Carleton, R. N., 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. (2018). Mental disorder symptoms among public safety personnel. *Canadian Journal of Psychiatry*, *63*, 54-64. https://doi.org/10.1177/0706743717723825

Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., LeBouthillier, D. M., Duranceau, S., 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. (2018). Suicidal ideation, plans, and attempts among public safety personnel in Canada. *Canadian Psychology/Psychologie Canadienne*, *59*, 220-231. https://doi.org/10.1037/cap0000136

Carleton, R. N., Korol, S., Mason, J. E., Hozempa, K., Anderson, G. S., Jones, N. A., Dobson, K. S., Szeto, A., & Bailey, S. (2018). A longitudinal assessment of the Road to Mental Readiness training among municipal police. *Cognitive Behaviour Therapy*, *47*(6), 508-528. https://doi.org/10.1080/16506073.2018.1475504

Carlson, E. (2016). Anti-colonial methodologies and practices for settler colonial studies. *Settler Colonial Studies*, *October,* 1-23. http://dx.doi.org/10.1080/2201473X.2016.1241213

Carlson-Manathara, E. & Rowe, G. (2021). *Living in Indigenous sovereignty.* Fernwood Publishing.

Carlson, J. A. (2010). Avoiding traps in member checking. *Qualitative Report*, *15*(5), 1102-1113. https://doi.org/10.46743/2160-3715/2010.1332

Cayoun, B. A. (2011). *Mindfulness-integrated CBT: Principles and practice*. Wiley-Blackwell.

Cayoun, B. A., Francis, S. E., & Shires, A. G. (2018). *The clinical handbook of mindfulness-integrated Cognitive Behavior Therapy: A step-by-step guide for therapists* Wiley.

CBC. (2014, September 12). *Inside Canada's prisons*. [Video]. CBC News Big Picture Special; Canadian Broadcasting Corporation. YouTube. https://www.youtube.com/watch?v=1GbMsNap0_0

CBC. (2020, October 1). *Number of Manitoba kids in CFS care down 4 per cent from last year Social Sharing*. News; Canadian Broadcasting Corporation. https://www.cbc.ca/news/canada/manitoba/cfs-child-welfare-system-manitoba-families-kids-in-care-drops-annual-report-1.5746315

CBC. (2021, April 19). *Facing a "she-cession," federal child care funding needed to support women in the workforce, says expert*. Cross country checkup; Canadian Broadcasting Corporation. https://www.cbc.ca/radio/checkup/facing-a-she-cession-federal-child-care-funding-needed-to-support-women-in-the-workforce-says-expert-1.5992470

CBC. (2022a, December 2). *A more effective way of dealing with people in crisis*. White coat black art with Dr. Brian Goldman; Canadian Broadcasting Corporation. https://www.cbc.ca/listen/live-radio/1-75-white-coat-black-art/clip/15952510-a-effective-dealing-people-crisis

CBC. (2022b, September 1). *Encore: Mental health dream team.* White coat black art with Dr. Brian Goldman; Canadian Broadcasting Corporation. https://www.cbc.ca/listen/live-radio/1-75-white-coat-black-art/clip/15934218-mental-health-dream-team?share=true

CBC. (2022c, December 9). *First responder psychedelics*. White coat black art with Dr. Brian Goldman; Canadian Broadcasting Corporation. https://www.cbc.ca/listen/live-radio/1-75-white-coat-black-art/clip/15954071-first-responder-psychedelics

CBC. (2024, March 1). *Nursing as occupational hazard*. White coat black art with Dr. Brian Goldman; Canadian Broadcasting Corporation. https://www.cbc.ca/listen/live-radio/1-75-white-coat-black-art/clip/16046345-nursing-occupational-hazard

Charmaz, K. (2014). *Constructing grounded theory* (2nd Edition). Sage Publications.

Charmaz, K. (2017). Constructivist grounded theory. *Journal of Positive Psychology*, *12*(3),

299–300. https://doi.org/10.1080/17439760.2016.1262612

Chaulk, S. J., & Podnar, D. J. (2021). Group cognitive processing therapy for PTSD: Preliminary outcomes, group cohesion, therapeutic alliance, and participant satisfaction in current and former members of the Canadian military and federal police force. In R. Ricciardelli, S. Bornstein, A. Hall, R. N. Carleton (Eds.), *Handbook of posttraumatic stress: Psychosocial, cultural, and biological perspectives*, pp. 429-456. Routledge. https://doi.org/10.4324/9781351134637-20

Cho, C. L., Corkett, J. K., & Steele, A. (2018). *Exploring the toxicity of lateral violence and microaggressions: Poison in the water cooler* (1st ed. 2018.). Springer International Publishing. https://doi.org/10.1007/978-3-319-74760-6

CIPHER. (2023). *Sharing mental health research and resources for Canadian healthcare workers, public safety personnel, their families and caregivers affected by the COVID-19 pandemic*. Canadian Institute of Pandemic Health Education and Response. https://cipher-iceisp.ca/

CIPSRT. (2023). *Canadian Institute of Public Safety Research and Training: Training opportunities; R2MR Level 1*. https://www.cipsrt-icrtsp.ca/en/training-opportunities/r2mr-frontline-training-program-level-1

Clarkson, A. F., Christian, W. M., Pearce, M. E., Jongbloed, K. A., Caron, N. R., Teegee, M. P., Moniruzzaman, A., Schechter, M. T., & Spittal, P. M. (2015). The Cedar Project: Negative health outcomes associated with involvement in the child welfare system among young Indigenous people who use injection and non-injection drugs in two Canadian cities. *Canadian Journal of Public Health*, *106*(5), e265–e270. https://doi.org/10.17269/cjph.106.5026

Clare, E. (2015). *Exile and pride: Disability, queerness, and liberation*. Duke University Press. https://doi.org/https://doi.org/10.1215/9780822374879

Clary, K. L., Lavi, T., Smith, D. C., & Saban, J. (2022). Exploring the utility of the emerging adulthood theory among military members and veterans with risky substance use. *Emerging Adulthood (Thousand Oaks, CA)*, *10*(3), 639-644. https://doi.org/10.1177/21676968211058517

Coady, A., Hawkins, L., Chartoff, R., Litz, B., & Frankfurt, S. (2021). Trauma, spirituality, and moral injury: Assessing and addressing moral injury in the context of PTSD treatment. *Current Treatment Options in Psychiatry*, *8*(4), 186-195. https://doi.org/10.1007/s40501-021-00252-0

Cohen, A. I., & Samp, J. A. (2023). Theorizing moral injury with reports of trauma. In A. I. Cohen & K. McClymond (Eds.), *Moral Injury and the Humanities; Interdisciplinary Perspectives* (pp. 50–67). Routledge. https://doi.org/10.4324/9781003281122-5

Coleman, P. T., Kugler, K. G., Mitchinson, A., & Foster, C. (2013). Navigating conflict and power at work: The effects of power and interdependence asymmetries on conflict in organizations. *Journal of Applied Social Psychology*, *43*(10), 1963-1983. https://doi.org/10.1111/jasp.12150

Collins, C. (2019). *Making motherhood work: How women manage careers and caregiving*. Princeton University Press.

Colvin, R. (2009). Shared perceptions among lesbian and gay police officers. *Police Quarterly*, *12*(1), 86–101. https://doi.org/10.1177/1098611108327308

Corman, M. K. (2017). *Paramedics on and off the streets; Emergency medical services in the age of technological governance*. University of Toronto Press.

Corthésy-Blondin, L., Genest, C., Dargis, L., Bardon, C., & Mishara, B. L. (2021). Reducing the impacts of exposure to potentially traumatic events on the mental health of public safety personnel: A rapid systematic scoping review. *Psychological Service, 19(Supplement 2), 80-94*. https://doi.org/10.1037/ser0000572

Cox, M., Norris, D., Cramm, H., Richmond, R., & Anderson, G. S. (2022). Public safety personnel family resilience: A narrative review. *International Journal of Environmental Research and Public Health*, *19*(9), 5524/1-29. https://doi.org/10.3390/ijerph19095224

Coyle, D. (2017). *The culture code: The secrets of highly successful groups*. Bantam Books.

Coyne, I. (2024). Chapter 46: Workplace bullying. In L. Matthews, L. Bianchi, & C. Ingram (Eds.), *Concise encyclopedia of corporate social responsibility*, (pp.249-253). Edward Elgar Publishing. https://doi.org/10.4337/9781800880344.ch46

Cramm, H., Tam-, L., Mahar, A., Rühland, L., & Carleton, R. N. (2021). Firefighters and post-traumatic stress disorder: A scoping review. In R. Ricciardelli, S. Bornstein, A. Hall, & R. N. Carleton (Eds.), *Handbook of post-traumatic stress: Psychosocial, cultural, and biological perspectives* (pp. 264-295). Routledge/Taylor & Francis Group. https://doi.org/10.4324/9781351134637-13

Crisis Support Solutions. (2021, October 21). *What is the difference between Critical Incident Stress Management (CISM) & peer support?* [Video]. Crisis Support Solutions. https://crisissupportsolutions.com/difference-between-cism-peer-support/

Cukier, A., & Viogel, L. (2021). Escalating violence against health workers prompts calls for action. *Canadian Medical Association Journal*, *193*(49), E1896. https://doi.org/10.1503/cmaj.1095980

D'Andrea, S. (2022). Implementing the work-life balance directive in times of COVID-19: New

prospects for post-pandemic workplaces in the European Union? *ERA-Forum*, *23*(1), 7-18. https://doi.org/10.1007/s12027-022-00703-y

David, E. J. R., Schroeder, T. M., & Fernandez, J. (2019). Internalized racism: A systematic review of the psychological literature on racism's most insidious consequence. *Journal of Social Issues*, *75*(4), 1057-1086. https://doi.org/10.1111/josi.12350

Dean, W., & Talbot, S. G. (Executive producer). (2023, May 18). *Moral injury is not black and white with Daniel Blumberg* (Season 6: Episode 8). [Audio podcast episode]. In *Moral Matters.* http://www.fixmoralinjury.org

DeBeer, B. B., Mignogna, J., Nance, M., Bahraini, N., Penzenik, M., & Brenner, L. A. (2023). COVID-19 and lifetime experiences of trauma, moral injury, and institutional betrayal among healthcare providers. *Journal of Occupational and Environmental Medicine, 65*(9):745-750. https://doi.org/10.1097/JOM.0000000000002891

DeJoy, D. M. (2005). Behavior change versus culture change: Divergent approaches to managing workplace safety. *Safety Science*, *43*(2), 105-129. https://doi.org/10.1016/j.ssci.2005.02.001

Denny-Brown, N. (2021). The impact of the COVID-19 pandemic on the long-term care workforce. *Health Services Research*, *56*(S2), 15-16. https://doi.org/10.1111/1475-6773.13733

Demaria, T., Barrett, M., & Ryan, D. (2006). Medical screenings as a trigger for PTSD in public safety workers. *Annals of the New York Academy of Sciences*, *1071*(1), 478-480. https://doi.org/10.1196/annals.1364.045

Di Nota, P. M., Anderson, G. S., Ricciardelli, R., Carleton, R. N., & Groll, D. (2020). Mental disorders, suicidal ideation, plans, and attempts among Canadian police. *Occupational*

Medicine, *70*(3), 183–190. https://doi.org/10.1093/occmed/kqaa026

Di Nota, P. M., Bahji, A., Groll, D., Carleton, R. N., & Anderson, G. S. (2021). Proactive psychological programs designed to mitigate post-traumatic stress injuries among at-risk workers: A systematic review and meta-analysis. *BMC Systematic Reviews*, *10*(1), 126/1-26. https://doi.org/10.1186/s13643-021-01677-7

Di Nota, P. M., Kasurak, E., Bahji, A., Groll, D., & Anderson, G. S. (2021). Coping among public safety personnel: A systematic review and meta–analysis. *Stress and Health*, *37*(4), 613-630. https://doi.org/10.1002/smi.3039

Dimoff, J. K., & Kelloway, E. K. (2019). With a little help from my boss: The impact of workplace mental health training on leader behaviors and employee resource utilization. *Journal of Occupational Health Psychology*, *24*(1), 4-19. https://doi.org/10.1037/ocp0000126

Dobson, K. S., Szeto, A., & Knaak, S. (2019). The working mind: A meta-analysis of a workplace mental health and stigma reduction program. *The Canadian Journal of Psychiatry*, *64*(Supplement 1) 39S-47S. https://doi.org/https://doi-org.uml.idm.oclc.org/10.1177/0706743719842559

Doyle, M., Tapson, K., Karagiannopoulos, V., & Lee, P. (2023). Impacts of organisational role and environmental factors on moral injury and trauma amongst police investigators in Internet Child Abuse Teams. *Police Journal*, *96*(1), 153-171. https://doi.org/10.1177/0032258X211043331

Dube, S. (2020, November 4). *Invisible workers: How the healthcare sector is failing its feminized and racialized labour force*. Community Foundations of Canada; Equity. https://communityfoundations.ca/invisible-workers-how-the-healthcare-sector-is-failing-

its-feminized-and-racialized-labour-force/

Durvasula, R. (2022). *The four types of dissociation* [Video]. MedCircle. https://new.medcircle.com/articles/4-types-of-dissociation/

Dussault, M., & Frenette, É. (2015). Supervisors' transformational leadership and bullying in the workplace. *Psychological Reports*, *117*(3), 724-733. https://doi.org/10.2466/01.PR0.117c30z2

Dutheil, F., Aubert, C., Pereira, B., Dambrun, M., Moustafa, F., Mermillod, M., Baker, J. S., Trousselard, M., Lesage, F. X., & Navel, V. (2019). Suicide among physicians and health-care workers: A systematic review and meta-analysis. *PLOS ONE*, *14*(12), 1-28. https://doi.org/10.1371/journal.pone.0226361

Edyburn, K. L., Bertone, A., Raines, T. C., Hinton, T., Twyford, J., & Dowdy, E. (2022). Integrating intersectionality, social determinants of health, and healing: A new training framework for school-based mental health. *School Psychology Review (52)*5, 563-585. https://doi.org/10.1080/2372966X.2021.2024767

Eisenberg, N. (2015). *Altruistic emotion, cognition, and behavior* (1st ed.). Psychology Press. https://doi.org/10.4324/9781315746135

Enns, V. (2018). *Counseling insights; Practical strategies for helping others with anxiety, trauma, grief, and more.* Achieve Publishing.

Ewles, G. B., Hausdorf, P. A., Beehr, T. A., & González-Morales, M. G. (2021). Severing the trauma-PTSD connection with public safety personnel: The role of personal social support networks. In R. Ricciardelli, S. Bornstein, A. Hall, R. N. Carleton (Eds.), *Handbook of post-traumatic stress: Psychosocial, cultural, and biological perspectives*, (pp. 403-428). Routledge. https://doi.org/10.4324/9781351134637-16

Faltas, I. (2020). *Emotional intelligence for law enforcement, education, management, and leadership*. Amazon Books.

Farber, S. K. (2013). *Hungry for ecstasy; Trauma, the brain, and the influence of the sixties*. Jason Aronson, imprint of Rowman & Littlefield Publishers.

Fierlbeck, K. (2011). *Health care in Canada; A citizen's guide to policy and politics*. University of Toronto Press.

Fernández Fillol, C., Serrano-Ibáñez, E. R., Ruiz-Párraga, G. T., Ramírez Maestre, C., Esteve Zarazaga, R., & López Martínez, A. E. (2018). Effective therapies for the treatment of complex posttraumatic stress disorder: A qualitative systematic review. *Salud Mental (México)*, 41(2), 81-90. https://doi.org/10.17711/SM.0185-3325.2018.013

Feuer, B. S. (2021). First responder peer support: An evidence-informed approach. *Journal of Police and Criminal Psychology*, *36*(3), 365-371. https://doi.org/10.1007/s11896-020-09420-z

Fikretoglu, D., Liu, A., Nazarov, A., & Blackler, K. (2019). A group randomized control trial to test the efficacy of the Road to Mental Readiness (R2MR) program among Canadian military recruits. *BMC Psychiatry*, *19*(1), 326. https://doi.org/10.1186/s12888-019-2287-0

Fjeldheim, C. B., Nothling, J., Pretorius, K., Basson, M., Ganasen, K., Heneke, R., Cloete, K. J., & Seedat, S. (2014). Trauma exposure, post-traumatic stress disorder and the effect of explanatory variables in paramedic trainees. *BMC Emergency Medicine*, *14*(11), 1-7. https://doi.org/10.1186/1471-227X-14-11

Ford-Jones, P. C., & Daly, T. (2020). Paramedicine and mental health: A qualitative analysis of limitations to education and practice in Ontario. *The Journal of Mental Health Training Education and Practice*, *15*(6), 331-345. https://doi.org/10.1108/JMHTEP-05-2020-0031

Friedman, H. H. (2023). Overcoming cognitive distortions: How to recognize and challenge the thinking traps that make you miserable. *ResearchGate Preprint*, *November,* 1-17. https://doi.org/10.13140/RG.2.2.31209.47208

Friedman, L., & Scherer, L. (2010). *Bullying; Critical essays*. Greenhaven Press.

Funk, L. M., Peters, S., & Roger, K. S. (2017). The emotional labor of personal grief in palliative care: Balancing caring and professional identities. *Qualitative Health Research*, *27*(14), 2211-2221. https://doi.org/10.1177/1049732317729139

Galloway, S. (2024, April 10). *Masculinity needs that 'big dick energy' with Scott Galloway.* The Current; Canadian Broadcasting Corporation. https://www.cbc.ca/listen/live-radio/1-63-the-current/clip/16055184-masculinity-needs-big-dick-energy-scott-galloway?subscribe=true

Garbarino, S., Cuomo, G., Chiorri, C., & Magnavita, N. (2013). Association of work-related stress with mental health problems in a special police force unit. *BMJ Open*, *3*(7). https://doi.org/10.1136/bmjopen-2013-002791

George, A. S., McConville, F. E., de Vries, S., Nigenda, G., Sarfraz, S., & McIsaac, M. (2020). Violence against female health workers is tip of iceberg of gender power imbalances. *BMJ; Women's Health and Gender Inequalities*, *371*, 3546. https://doi.org/10.1136/bmj.m3546

Giles, T., King, L., & De Lacey, S. (2013). The timing of the literature review in grounded theory research: An open mind versus an empty head. *Advances in Nursing Science*, *36*(2), E29-40. https://doi.org/10.1097/ANS.0b013e3182902035

Gilmartin, K. M. (2021). *Emotional survival for law enforcement; A guide for officers and their families* (2nd Edition). E-S Press.

Giwa, S., Colvin, R. A., Ricciardelli, R., & Warren, A. P. (2022). Workplace experiences of

lesbian and bisexual female police officers in the Royal Newfoundland Constabulary. *Women and Criminal Justice*, *32*(1–2), 93–110. https://doi.org/10.1080/08974454.2021.1962480

Gnerre, P., Montemurro, D., Rossi, A. P., Troise, C., Palermo, C., Amati, D., Rivetti, C., D'Arienzo, M., Romani, G., & Ragazzo, F. (2017). Lack of application of the European Work Time Directive: Effects on workload, work satisfaction and burnout among Italian physicians. *Italian Journal of Medicine*, *11*(2), 159-163. https://doi.org/10.4081/itjm.2017.714

Gómez-Durán, E. L., Martin-Fumadó, C., & Forero, C. G. (2020). Psychological impact of quarantine on healthcare workers. *Occupational and Environmental Medicine (London, England)*, *77*(10), 666-674. https://doi.org/10.1136/oemed-2020-106587

Gomez-Urquiza, J. L., Monsalve-Reyes, C. S., San Luis-Costas, C., Fernandez-Castillo, R., Aguayo-Estremera, R., & Canadas-de la Fuente, G. A. (2017). Risk factors and burnout levels in primary care nurses: A systematic review. *Aten Primaria*, *49*(2), 77–85. https://doi.org/10.1016/j.aprim.2016.05.004

Gouliquer, L., Poulin, C., & McWilliams, J. (2020). Othering of full-time and volunteer women firefighters in the Canadian fire services. *Qualitative Sociology Review*, *16*(3), 48-69. https://doi.org/10.18778/1733-8077.16.3.04

Government of Canada. (2024a, December 4*). Facts, stats and WAGE's impact: Gender-based violence.* Women and Gender Equality Canada: Gender-Based Violence. https://www.canada.ca/en/women-gender-equality/gender-based-violence/facts-stats.html#affected

Government of Canada. (2024b, September 16). *Suicide in Canada: Key statistics*. Public

Health Agency of Canada. https://www.canada.ca/en/public-health/services/suicide-prevention/suicide-canada.html

Government of Canada. (2023). *Initiatives; Research in priority areas*. Canadian Institutes of Health Research. https://cihr-irsc.gc.ca/e/50077.html

Government of Canada. (2022a). *Government of Canada invests in supporting those most at risk of post-traumatic stress disorder*. Public Health Agency of Canada. https://www.canada.ca/en/public-health/news/2022/06/backgrounder-government-of-canada-invests-in-supporting-those-most-at-risk-of-post-traumatic-stress-disorder.html

Government of Canada. (2022b). *Mental health inequalities by income in Canada*. Publications; Science, research, and data. https://www.canada.ca/en/public-health/services/publications/science-research-data/mental-health-inequalities-income-canada.html

Grahn-Wilder, M. (2018). *Gender and sexuality in stoic philosophy*. Springer International Publishing. https://doi.org/10.1007/978-3-319-53694-1

Gregoire Trudeau, S. (2024). *Closer together; Knowing ourselves, loving each other*. Random House Canada.

Grenier, S., Darte, K., Heber, A., & Richardson, D. (2007). The operational stress injury social support program: A peer support program in collaboration between the Canadian Forces and Veterans Affairs Canada. In C. R. Figley & W. P. Nash (Eds.), *Combat stress injury: Theory, Research, and Management* (pp. 261-293). Routledge, Taylor & Francis Group. https://doi.org/10.4324/9780203943694-16

Haigh, E. (2024, September 19). *Indigenous mental wellness and cognitive behaviour therapy; Navigating tensions and building common ground* [Grand Rounds Presentation]. Rady

Faculty of Health Sciences, Max Rady College of Medicine, Department of Clinical Health Psychology, Winnipeg, Manitoba. https://eventscalendar.umanitoba.ca/site/medicine/event/dept-of-clinical-health-psychology-grand-rounds--indigenous-mental-wellness-and-cognitive-behaviour-therapy-navigating-tensions-and-building-common-ground/

Hankivsky, O., Grace, D., Hunting, G., & Ferlatte, O. (2014). Why the theory and practice of intersectionality matter to health research and policy. In R. K. Dhamoon & O. Hankivsky [Eds.], *Health Inequities in Canada*. UBC Press.

Hassell, K. D., & Brandl, S. G. (2009). An examination of the workplace experiences of police patrol officers: The role of race, sex, and sexual orientation. *Police Quarterly*, *12*(4), 408–430. https://doi.org/10.1177/1098611109348473

Hatala, A. R., & Roger, K., (2021). *Spiritual, religious, and faith-based practices in chronicity: An exploration of mental wellness in global context*. Routledge. https://doi.org/10.4324/9781003043508

Hatharly, D., & Froese, I. (2020, June 23). *Manitoba promises "proactive, preventative supports" as birth alerts set to end July 1; Warnings from social agencies intended to flag "high risk" mothers have led to apprehensions in hospitals*. News; Canadian Broadcasting Corporation. https://www.cbc.ca/news/canada/manitoba/manitba-birth-alerts-end-july-1.5624239

Hauge, L. J., Skogstad, A., & Einarsen, S. (2010). The relative impact of workplace bullying as a social stressor at work. *Scandinavian Journal of Psychology*, *51*(5), 426-433. https://doi.org/10.1111/j.1467-9450.2010.00813.x

Havaei, F., Ma, A., Staempfli, S., & MacPhee, M. (2021). Nurses' workplace conditions

impacting their mental health during COVID-19: A cross-sectional survey study. *Healthcare Alabama*, *9*(1), 84-98. https://doi.org/10.3390/healthcare9010084

Hawker, D. M., Durkin, J., & Hawker, D. S. J. (2011). To debrief or not to debrief our heroes: That is the question. *Clinical Psychology and Psychotherapy*, *18*(6), 453–463. https://doi.org/10.1002/cpp.730

Heber, A., Testa, V., Groll, D., Ritchie, K., Tam-Seto, L., Mulligan, A., Sullo, E., Schick, A., Bose, E., Jabbari, Y., Lopes, J., & Carleton, R. N. (2023). Glossary of terms: A shared understanding of the common terms used to describe psychological trauma, version 3.0. *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy, and Practice, 43*(10-11), S1-S999. https://doi.org/10.24095/hpcdp.43.10/11.09

Heber, A., Testa, V., Smith-MacDonald, L., Brémault-Phillips, S., & Carleton, R. N. (2020). Rapid response to COVID-19: Addressing challenges and increasing the mental readiness of public safety personnel. *Public Health Agency of Canada; Health Promotion and Chronic Disease Prevention in Canada*: *Research, Policy, and Practice, 41*, 23-28. https://doi.org/10.24095/hpcdp.40.11/12.04

Herron, R. V., Ahmadu, M., Allan, J. A., Waddell, C. M., & Roger, K. (2020). “Talk about it:” changing masculinities and mental health in rural places? *Social Science & Medicine (1982)*, *258*, 113099-. https://doi.org/10.1016/j.socscimed.2020.113099

Herman, J. (2023). *Truth and repair: How trauma survivors envision justice*. Basic Books.

Hersey, T. (2022). *My rest as a Black woman; Rest is anything that connects your mind and body.* The Nap Ministry; National Museum of African American History and Culture. https://www.searchablemuseum.com/the-nap-ministry; https://doi.org/10.1093/ccc/tcad022

Hesse-Biber, S. N. (2017). *The practice of qualitative research: Engaging students in the*

research process (3rd Edition). Boston College.

Hirono, T. (2012). *The role of American Christian and Japanese Buddhist clergy in suicide prevention: A comparison of different religious and cultural approaches to counseling*. Edwin Mellen Press.

Hoben, M., Knopp-Sihota, J. A., Nesari, M., Chamberlain, S. A., Squires, J. E., Norton, P. G., Cummings, G. G., Stevens, B. J., & Estabrooks, C. A. (2017). Health of health care workers in Canadian nursing homes and pediatric hospitals: A cross-sectional study. *CMAJ Open*, *5*(4), E791-E799. https://doi.org/10.9778/cmajo.20170080

Hoy-Ellis, C. P. (2023). Minority stress and mental health: A review of the literature. *Journal of Homosexuality*, *70*(5), 806–830. https://doi.org/10.1080/00918369.2021.2004794

Hong, R. Y., & Cheung, M. W. L. (2015). The structure of cognitive vulnerabilities to depression and anxiety: Evidence for a common core etiologic process based on a meta-analytic review. *Clinical Psychological Science*, *3*(6), 892-912. https://doi.org/10.1177/2167702614553789

Horswill, S. C., & Carleton, R. N. (2021). Traumatic changes in human psyche: A brief history. In R. Ricciardelli, S. Bornstein, A. Hall., & R. N. Carleton (Eds.), *Handbook of post-traumatic stress: Psychosocial, cultural, and biological perspectives* (pp. 15-37). Routledge, Taylor & Francis Group. https://doi.org/10.4324/9781351134637-2

Howatt, B. (2017, December 15). *How to craft an effective respectful workplace policy*. The Globe and Mail. https://www.theglobeandmail.com/report-on-business/careers/leadership-lab/how-to-craft-an-effective-respectful-workplace-policy/article37326865/

Howlett, M., Ramesh, M., & Perl, A. (2009). *Studying public policy; Policy cycles and policy subsystems* (3rd Edition). Oxford University Press.

Huey, L., Ferguson, L., & Schulenberg, J. L. (2023). *The wicked problems of police reforms in Canada*. Routledge. https://doi.org/10.4324/9781003296447

IEFPA. (2024). *Welcome: In Adversis Animum – Courage Over Adversity*. International EMS and Firefighters Pride Alliance. https://www.iefpa.org/welcome/

INFO Clinical Debriefing. (2024). *INFO Debriefing Options; Resources and Documentation*. https://infodebriefing.com/infodebriefingresources/

Ioachim, G., Bolt, N., Redekop, M., Wakefiled, A., Shulhin, A., Dabhoya, J., Khoury, J. M. B., Belanger, K., Williams, S., Chomistek, T., Teckchandani, T. A., Price, J., Maguire, K. Q., & Carleton, R. N. (2024a). Evaluating the Before Operational Stress program: Comparing in-person and virtual delivery. *Frontiers*, 15. https://doi.org/10.3389/fpsyg.2024.1382614

Ioachim, G., Allen, L., & Redekop, M. (2024b). A qualitative evaluation of the Before Operational Stress program: A pan-Canadian study of mental health training for frontline public safety personnel and healthcare providers. [Manuscript submitted for publication]. CIPSRT, University of Regina.

Jinkerson, J. D. (2016). Defining and assessing moral injury: A syndrome perspective. *Traumatology*, *22*(2), 122-130. https://doi.org/10.1037/trm0000069

Jones, E. (2020). Moral injury in a context of trauma. *British Journal of Psychiatry*, *216*(3), 127-128. https://doi.org/10.1192/bjp.2020.46

Jones, J. M., Dovidio, J. F., & Vietze, D. L. (2014). *The psychology of diversity; Beyond prejudice and racism.* Wiley Blackwell.

Jun, J., Ojemeni, M. M., Kalamani, R., Tong, J., & Crecelius, M.L. (2021, July). Relationship between nurse burnout, patient and organizational outcomes: Systematic review. *International Journal of Nursing Studies*. 119, 103933.

http://doi:10.1016/j.ijnurstu.2021.103933.

Kafer, A. (2013). *Feminist, queer, crip*. Indiana University Press.

Kasper, J. (2012). *How cops die: Understanding and preventing duty-related death*. Charles C. Thomas Publisher, Limited.

Kaur, N., Ricciardelli, R., Fletcher, A., & Carleton, R. N. (2023). "You are safe. You are not alone:" Gender and Social Support Coping (SSC) in public safety personnel. *Journal of Gender Studies*, *32*(4), 343-358. https://doi.org/10.1080/09589236.2021.2011168

Kelloway, E. K., Barling, J., & Hurrell, J. (2006). *Handbook of workplace violence*. Sage Publications, Inc. https://doi.org/10.4135/9781412976947

Kenny, K. S., Krüsi, A., Barrington, C., Ranville, F., Green, S. L., Bingham, B., Abrahams, R., & Shannon, K. (2021). Health consequences of child removal among Indigenous and non-Indigenous sex workers: Examining trajectories, mechanisms and resiliencies. *Sociology of Health and Illness*, *43*(8), 1903-1920. https://doi.org/10.1111/1467-9566.13364

Kerr, J. H., Griffiths, A., & Cox, T. (1996). *Workplace health, employee fitness, and exercise.* Taylor & Francis. https://doi.org/10.1201/9781003062615

Kim, B., Lee, S. H., Kim, Y. W., Choi, T. K., Yook, K., Suh, S. Y., Cho, S. J., & Yook, K. H. (2010). Effectiveness of a mindfulness-based cognitive therapy program as an adjunct to pharmacotherapy in patients with panic disorder. *Journal of Anxiety Disorders*, *24*(6), 590-595. https://doi.10.1016/j.janxdis.2010.03.019

Kinew, W. (2015). *The reason you walk*. Viking.

King, T. L., Shieldsa, M., Shakespeare, T., Milnera, A., & Kavanagh, A. (2019). An intersectional approach to understandings of mental health inequalities among men with disability. *Social Science and Medicine - Population Health*, *9*(100464), 1-11.

https://doi.org/10.1016/j.ssmph.2019.100464

Kleinig, J. (2023). Moral injury in law enforcement. In A. I. Cohen & K. McClymond (Eds.), *Moral Injury and the Humanities; Interdisciplinary Perspectives*, 124-137. https://doi.org/10.4324/9781003281122-10

Kolahdooz, F., Nader, F., Yi, K. J., & Sharma, S. (2015). Understanding the social determinants of health among Indigenous Canadians: Priorities for health promotion policies and actions. *Global Health Action*, *8*(1), 1-16. https://doi.org/10.3402/gha.v8.27968

Kunugi, H. (2023). Depression and lifestyle: Focusing on nutrition, exercise, and their possible relevance to molecular mechanisms. *Psychiatry and Clinical Neurosciences*, *77*(8), 420-433. https://doi.org/10.1111/pcn.13551

Kuss, S. (2024, July 16 & 17). *The power of emotional intelligence; Workshop for graduate students.* [Workshop series]. Gradsteps Workshops, *University of Manitoba, Winnipeg*.

LaGree, D., Houston, B., Duffy, M., & Shin, H. (2023). The effect of respect: Respectful communication at work drives resiliency, engagement, and job satisfaction among early career employees. *International Journal of Business Communication*, 60(3), 844-864. https://doi.org/10.1177/23294884211016529

Lahav, Y., Cloitre, M., Hyland, P., Shevlin, M., Ben-Ezra, M., & Karatzias, T. (2025). Complex PTSD and identification with the aggressor among survivors of childhood abuse. *Child Abuse & Neglect*, *160*, 107196. https://doi.org/10.1016/j.chiabu.2024.107196

Lai, J., Ma, S., Wang, Y., Cai, Z., Hu, J., Wei, N., Wu, J., Du, H., Chen, T., Li, R., Tan, H., Kang, L., Yao, L., Huang, M., Wang, H., Wang, G., Liu, Z., & Hu, S. (2020). Factors associated with mental health outcomes among health care workers exposed to coronavirus disease. *JAMA Network Open*, *3*(3), 19-20.

https://doi.org/10.1001/jamanetworkopen.2020.3976

Langa, D., Sanders, C., & Gouweloos, J. (2024). *Gender, policing and inclusion: Opportunities for change*. Centre for Research on Security Practices, Wilfrid Laurier University. 1-16. https://researchcentres.wlu.ca/centre-for-research-on-security-practices/assets/reports/gender-policing-and-inclusion-opportunities-for-change.html

Lantos, J. D., & Halpern, J. (2015). Bullying, social hierarchies, poverty, and health outcomes. *Pediatrics*, *135*(March), S21-S23. https://doi.org/10.1542/peds.2014-3549B

Larijani, H. A., & Garmaroudi, G. (2018). Effectiveness of resiliency training in the mental health of the Red Crescent health care teams. *Romanian Journal for Multidimensional Education/Revista Romaneasca Pentru Educatie Multidimensionala*, *10*(1.SP),64-83. http://doi.org/10.18662/rrem/37

Lasater, I., & Stiles, J. (2019). *Collaborating in the workplace: A guide for building better Teams*. PuddleDancer Press.

Lee, R., & Brotheridge, C. (2006). When prey turns predatory: Workplace bullying as a predictor of counteraggression/bullying, coping, and well-being. *European Journal of Work and Organizational Psychology*, *15*(3), 352-377. https://doi.org/10.1080/13594320600636531

Lee-Tauler, S. Y., Grammer, J., Ekman, E., LaCroix, J., Ghahramanlou-Holloway, M., & Kearney, L. K. (2024). A qualitative study of special operations forces chaplaincy teams' relationship building for suicide prevention, intervention, and postvention. *Psychological Services*, *21*(4), 797-810. https://doi.org/10.1037/ser0000894

Lentz, L., Smith-MacDonald, L., Malloy, D. C., Anderson, G. S., Beshai, S., Ricciardelli, R., Brémault-Phillips, S., & Carleton, R. N. (2022). A qualitative analysis of the mental health

training and educational needs of firefighters, paramedics, and public safety communicators in Canada. *International Journal of Environmental Research and Public Health*, *19*(12), 6972/1-19. https://doi.org/10.3390/ijerph19126972

Lentz, L., 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*(March), 639781/1-15. https://doi.org/10.3389/fpsyg.2021.639781

Leroux, J., Richmond, R., Fitzpatrick, S., Kirkland, H., Norris, D., Mahar, A., MacDermid, J., Dekel, R., & Cramm, H. (2021). Experiences of families of public safety personnel: A systematic review protocol of qualitative evidence. *Systematic Reviews*, *10*(1), 258/1-6. https://doi.org/10.1186/s13643-021-01807-1

Levitt, H. M. (2021). *Essentials of critical-constructivist grounded theory research*. American Psychological Association.

Lewis, G. W. (2012). *Critical incident stress and trauma in the workplace: Recognition, response, recovery*. Routledge. https://doi.org/10.4324/9780203728437

Liamputtong, P. (2007). *Researching the vulnerable: A guide to sensitive research methods*. Sage Publications.

Liamputtong, P. (2017). *Research methods in health; Foundations for evidence-based practice* (3rd Edition). Oxford University Press.

Lin, S.-T., Yang, P., Lai, C.-Y., Su, Y. Y., Yeh, Y. C., Huang, M.-F., & Chen, C. C. (2011). Mental health implications of music: Insight from neuroscientific and clinical studies. *Harvard Review of Psychiatry*, 19(1), 34-46. https://doi.org/10.3109/10673229.2011.549769

Lotfi-Bejestani, S., Atashzadeh-Shoorideh, F., Ghafouri, R., Nasiri, M., Ohnishi, K., & Ghadirian, F. (2023). Is there any relationship between nurses' perceived organizational justice, moral sensitivity, moral courage, moral distress and burnout? *BMC Nursing*, *22*(1), 1–14. https://doi.org/10.1186/s12912-023-01536-x

Luftman, K., Aydelotte, J., Rix, K., Ali, S., Houck, K., Coopwood, T., Teixeira, P., Eastman, A., Eastridge, B., Brown, C., & Davis. M. (2017). PTSD in those who care for the injured. *International Journal of Care of the Injured, 48*(2), 293-296. http://doi.org/10.1016/j.injury.2016.11.001

Lutgen-Sandvik, P., & Sypher, B. D. (2009). *Destructive organizational communication: processes, consequences, and constructive ways of organizing*. Routledge. https://doi.org/10.4324/9780203928554

Lyall, V., Guy, J., Egert, S., Pokino, L. A., Rogers, L., & Askew, D. (2021). "They were willing to work with me and not pressure me": A qualitative investigation into the features of value of a smoking cessation in pregnancy program for Aboriginal and Torres Strait Islander women. *International Journal of Environmental Research and Public Health*, *18*(1), 1-15. https://doi.org/10.3390/ijerph18010049

Lv, Q., Zhou, W., Kong, Y., Chen, S., Xu, B., Zhu, F., Shen, X., & Qiu, Z. (2023). Influencing factors of sleep disorders and sleep quality in healthcare workers during the COVID-19 pandemic: A systematic review and meta-analysis. *Nursing Open*, *10*(9), 5887–5899. https://doi.org/10.1002/nop2.1871

MacEachen, E., & Ekberg, K. (2019). Science, politics, and values in work disability policy: A reflection on trends and the way forward. In *The Science and Politics of Work Disability Prevention* (1st ed., pp. 261–283). Routledge. https://doi.org/10.4324/9780429443398-16

MacLean, L. M., Meyer, M., & Estable, A. (2004). Improving accuracy of transcripts in qualitative research. *Qualitative Health Research*, *14*(1), 113-123. https://doi.org/10.1177/1049732303259804

Manstead, A. S. R. (2018). The psychology of social class: How socioeconomic status impacts thought, feelings, and behaviour. *British Journal of Social Psychology*, *57*(2), 267-291. https://doi.org/10.1111/bjso.12251

Margo, E., Christian, W. M., Patterson, K., Norris, K., Moniruzzaman, A., Craib, K. J. P., Schechter, M. T., & Spittal, P. M. (2008). The Cedar Project: Historical trauma, sexual abuse and HIV risk among young Aboriginal people who use injection and non-injection drugs in two Canadian cities. *Social Science and Medicine*, *66*(11), 2185-2194. https://doi.org/10.1016/j.socscimed.2008.03.034

Mata, Á. N. de S., Azevedo, K. P. M. de, Braga, L. P., Medeiros, G. C. B. S. de, Oliveira Segundo, V. H. de, Bezerra, I. N. M., Pimenta, I. D. S. F., Nicolás, I. M., & Piuvezam, G. (2021). Training in communication skills for self-efficacy of health professionals: A systematic review. *Human Resources for Health*, *19*(30), 1-9. https://doi.org/10.1186/s12960-021-00574-3

Mayes, A. (2024, July 25). Reconciliation in research. *Rady UM*, *Summer 2024*, 26-27. https://news.radyfhs.umanitoba.ca/reconciliation-in-research/

McAleavey, A. A., & Castonguay, L. (2015). The process of change in psychotherapy: Common and unique factors. In O. Gelo, A. Pritz, & B. Rieken (Eds.), *Psychotherapy research: Foundations, process, and outcome* (pp. 293-310). Springer. https://doi.org/10.1007/978-3-7091-1382-0_15

McCabe, R., Bergen, C., Lomas, M., Ryan, M., & Albert, R. (2023). Asking about self-harm

during risk assessment in psychosocial assessments in the emergency department: Questions that facilitate and deter disclosure of self-harm. *BJPsych Open*, *9*(3), e93-e93. https://doi.org/10.1192/bjo.2023.32

McCallum, M. J. L., & Perry, A. (2018). *Structures of indifference: An Indigenous life and death in a Canadian city*. University of Manitoba Press.

McCreary, D. R. (2021). Psychology of men and masculinities: Implications for men's experiences of post-traumatic stress disorder. In R. Ricciardelli, S. Bornstein, A. Hall, R. N. Carleton (Eds.), *Handbook of post-traumatic stress: Psychosocial, cultural, and biological perspectives*, pp. 177-197. Routledge. https://doi.org/10.4324/9781351134637-7

McKendy, L., Taillieu, T., Johnston, M. S., Ricciardelli, R., & Carleton, R. N. (2023). Understanding PTSD among correctional workers in Manitoba, Canada: Key considerations of social, professional, exposure, treatment, and work histories. *Mental Health Science, 1*, 136-146. https://doi.org/10.1002/mhs2.25

McKinnon, M. Joseph, A., Nicholson, A., Malain, & A., Schielke, H. (2024, December 9*). Let's talk about minority stress in the workplace* [Online symposium]. Healthcare Salute, Trauma and Recovery Research Unit, McMaster University. https://healthcaresalute-soinsdesantesalute.com/#

McElheran, M., Stelnicki, A., & Carleton, R. N. (2020). Before Operational Stress (BOS): A proposed program to support mental health and proactive psychological protection in public safety personnel [Registered Report Protocol]. *Frontiers in Psychology*, 3218/1-14.

McElheran, M., & Stelnicki, A. M. (2021). Functional disconnection and reconnection: An alternative strategy to stoicism in public safety personnel. *European Journal of Psychotraumatology*, *12*(1), 1869399/1-6. https://doi.org/10.1080/20008198.2020.1869399

Mealer, M. L., Burnham, E. L., Goode, C. J., Rothbaum, B., & Moss, M. (2009). The prevalence and impact of post-traumatic stress disorder and burnout syndrome in nurses. *Depression and Anxiety*, *26*(12), 1118-1126. https://doi.org/10.1002/da.20631

Menakem, R. (2017). *My grandmother's hands: Racialized trauma and the pathway to mending our hearts and bodies*. Central Recover Press.

Mental Health Commission of Canada. (2024). *Road to mental readiness; Reduce stigma and increase resiliency in police employees.* MHCC Resources. https://mentalhealthcommission.ca/resource/the-road-to-mental-readiness-r2mr-one-page-overview/https://doi.org/http://www.r2mr.ca/road-mental-readiness#CentralComponents

Menzies, P., & Lavallée, L. (2014). *Journey to healing: Aboriginal people with addiction and mental health issues; What health, social service and justice workers need to know*. Centre for Addictions and Mental Health.

Milligan-Saville, J. S., Tan, L., Gayed, A., Barnes, C., Madan, I., Dobson, M., Bryant, R. A., Christensen, H., Mykletun, A., & Harvey, S. B. (2017). Workplace mental health training for managers and its effect on sick leave in employees: A cluster randomised controlled trial. *The Lancet Psychiatry*, *4*(11), 850-858. http://doi.org/10.1016/S2215-0366(17)30372-3

Milner, A., Witt, K., Maheen, H., & LaMontagne, A. D. (2017). Access to means of suicide, occupation and the risk of suicide: A national study over 12 years of coronial data. *BMC Psychiatry*, *17*(1), 125-132. https://doi.org/10.1186/s12888-017-1288-0

Moagi, M. M., van Der Wath, A. E., Jiyane, P. M., & Rikhotso, R. S. (2021). Mental health challenges of lesbian, gay, bisexual and transgender people: An integrated literature review. *Health SA Gesondheid; Journal of Interdisciplinary Health Sciences*, *20*(26), 1487/1-12.

https://doi.org/10.4102/hsag.v26i0.1487

Morganstein, J. C., West, J. C., & Ursano, R. J. (2019). Work-associated trauma. In M. Riba, S. Parikh, & J. Greden (Eds.), *Mental health in the workplace*; *Integrating psychiatry and primary care* (pp. 161-180). Springer Nature. https://doi.org/10.1007/978-3-030-04266-0

Mortali, M. G., & Moutier, C. (2019). *Suicide prevention in the workplace*. In M. Riba, S. Parikh, & J. Greden (Eds.), *Mental health in the workplace; Integrating psychiatry and primary care* (pp. 145-159). Springer Nature. https://doi.org/10.1007/978-3-030-04266-0_10

Mukhopadhyah, S. (2024). *The myth of making it; A workplace reckoning*. Random House.

Murray, G., Judd, F., Jackson, H., Fraser, C., Komiti, A., Pattison, P., Wearing, A., & Robins, G. (2008). Big boys don't cry: An investigation of stoicism and its mental health outcomes. *Personality and Individual Differences*, *44*(6), 1369-1381. https://doi.org/10.1016/j.paid.2007.12.005

National Academies of Sciences, E., Dahlberg, M. L., & Higginbotham, E. (2021). *The impact of COVID-19 on the careers of women in academic sciences, engineering, and medicine.* The National Academies Press.

Newell, J. M., & MacNeil, G. A. (2010). Professional burnout, vicarious trauma, secondary traumatic stress, and compassion fatigue: A review of theoretical terms, risk factors, and preventive methods for clinicians and researchers. *Best Practices in Mental Health: An International Journal*, *6*(2), 57-68. http://doi.org/10.70256/607490pbruec

Nielsen, K., & Miraglia, M. (2017). What works for whom in which circumstances? On the need to move beyond the 'what works?' question in organizational intervention research. *Human Relations*, *70*(1), 40-62. https://doi.org/10.1177/0018726716670226

NIMMIWG. (2019). *Reclaiming power and place: The final report of the National Inquiry into Missing and Murdered Indigenous Women and Girls*. National Inquiry into Missing and Murdered Indigenous Women and Girls. https://www.mmiwg-ffada.ca/wp-content/uploads/2019/06/Final_Report_Vol_1a-1.pdf

Norman, M., & Ricciardelli, R. (2022). Operational and organisational stressors in community correctional work: Insights from probation and parole officers in Ontario, Canada. *Probation Journal*, *69*(1), 86-106. https://doi.org/10.1177/0264550520984253

Nyaga, D., & Torres, R. A. (Eds.). (2024). *Reimagining mental health and addiction under the Covid-19 pandemic, Volume 1: The Covid-19 pandemic, mental health, and ethnicity*. Springer Nature Switzerland. https://doi.org/10.1007/978-3-031-58367-4

Olds, T. (2022, January 18). *Internal Family Systems Therapy, Explained*. [Video Series]. YouTube. https://www.youtube.com/playlist?list=PLCJ2fBBavCJEoQPzbMIOuQ2luJDHrWPSL

Oliver, K. (2020). Whose new normal?: The ruse and the hope of "We're all in this together." *Philosophy Today (Celina)*, *64*(4), 901-905. https://doi.org/10.5840/philtoday20201124374

O'Reilly, M., & Kiyimba, N. (2015). *Advanced qualitative research: A guide to using theory*. Sage Publications.

Papazoglou, R. K. (2017). Examining the psychophysiological efficacy of CBT treatment for first responders diagnosed with PTSD: An understudied topic. *Sage Open*, 7(3). https://doi.org/10.1177/2158244017729407

Papadopoulos, R. K. (2020). The traumatising discourse of trauma and moral injury: Distress and renewal. In R. K. Papadopoulos (Ed.), *Moral injury and beyond: Understanding human anguish and healing traumatic wounds* (pp. 1-21). Routledge, Taylor & Francis

Group. https://doi.org/10.4324/9781315230573-1

Pasciak, A. R., & Kelley, T. M. (2013). Conformity to traditional gender norms by male police officers exposed to trauma: Implications for critical incident stress debriefing. *Applied Psychology in Criminal Justice*, *9*(2), 137-156.

Patel, H., Easterbrook, B., D'Alessandro-Lowe, A. M., Andrews, K., Ritchie, K., Hosseiny, F., Rodrigues, S., Malain, A., O'Connor, C., Schielke, H., McCabe, R. E., Nicholson, A. A., Lanius, R., & McKinnon, M. C. (2023). Associations between trauma and substance use among healthcare workers and public safety personnel during the SARS-CoV-2 (COVID-19) pandemic: The mediating roles of dissociation and emotion dysregulation. *European Journal of Psychotraumatology*, *14*(1), 2180706/1-14. https://doi.org/https://doi.org/10.1080/20008066.2023.2180706

Perrott, S. B. (2023). The recruitment of women and visible minorities into Canadian police forces: Should we expect further progress? *Police Journal*, *96*(1), 26-44. https://doi.org/10.1177/0032258X211032106

Ponniah, K., & Hollon, S. D. (2009). Empirically supported psychological treatments for adult acute stress disorder and post-traumatic stress disorder: A review. *Depression and Anxiety*, *26*(12), 1086–1109. http://doi.org/10.1002/da.20635

Poremski, D., Kuek, J. H. L., Yuan, Q., Li, Z., Yow, K. L., Eu, P. W., & Chua, H. C. (2022). The impact of peer support work on the mental health of peer support specialists. *BMC International Journal of Mental Health Systems*, *16*(1), 1-8. https://doi.org/http://dx.doi.org/10.1186/s13033-022-00561-8

Poulsen, A. A., Sharpley, C. F., Baumann, K. C., Henderson, J., & Poulsen, M. G. (2015). Evaluation of the effect of a 1-day interventional workshop on recovery from job stress for

radiation therapists and oncology nurses: A randomised trial. *Journal of Medical Imaging and Radiation Oncology*, *59*(4), 491-498. http://doi.org/10.1111/1754-9485.12322

Powell, T., & Yuma-Guerrero, P. (2016). Supporting community health workers after a disaster: Findings from a mixed-methods pilot evaluation study of a psychoeducational intervention. *Disaster Medicine and Public Health Preparedness*, *10*(5), 754-761. https://doi.org/http://doi.org/10.1017/dmp.2016.40

PSPNET. (2023). *Experiencing the ripple effects of PSP's unprocessed trauma*. PSPNET Families. https://www.pspnet.ca/en/resource/experiencing-the-ripple-effects-of-psps-unprocessed-trauma

Puxley, C. (2015, Septmeber 1). *CFS seizes a Manitoba newborn a day, First Nations advocate says*. News; Canadian Broadcasting Corporation. https://www.cbc.ca/news/canada/manitoba/cfs-seizes-a-manitoba-newborn-a-day-first-nations-advocate-says-1.3211451

Race, M., & Furnham, A. (2014). *Mental illness at work: A manager's guide to identifying, managing and preventing psychological problems in the workplace*. Palgrave Macmillan.

Raines, S. (2019). *Conflict management for manager: Resolving workplace, client, and policy disputes*. Rowman & Littlefield.

Reichard, A. A., & Jackson, L. L. (2010). Occupational injuries among emergency responders. *American Journal of Industrial Medicine*, *53*(1), 1-11. https://doi.org/10.1002/ajim.20772

Ricciardelli, R., Carleton, R. N., Cramm, H., & Groll, D. (2018). Qualitatively unpacking Canadian public safety personnel experiences of trauma and their wellbeing: Physical manifestations, psychological implications, and fatalistic attitudes. *Canadian Journal of Criminology and Criminal Justice*, *60*(4), 566-577. https://doi.org/10.3138/cjccj.2017-

0053.r2

Ricciardelli, R., Carleton, R. N., Mooney, T., & Cramm, H. (2020). “Playing the system”: Structural factors potentiating mental health stigma, challenging awareness, and creating barriers to care for Canadian public safety personnel. *Health*, *24*(3), 259-278. https://doi.org/10.1177/1363459318800167

Ricciardelli, R., & McKendy, L. (2020). Gender and prison work: The experience of female provincial correctional officers in Canada. *The Prison Journal*, *100*(5), 617-639. https://doi.org/https://doi.org/10.1177/0032885520956394

Ricciardelli, R., & Power, N. G. (2020). How “conditions of confinement” impact “conditions of employment”: The work-related well-being of provincial correctional officers in Atlantic Canada. *Violence and Victims*, *35*(1), 88–107. https://doi.org/10.1891/0886-6708.VV-D-18-00081

Ricciardelli, R., Taillieu, T., Carleton, R. N., Afifi, T. O., Mitchell, M. M., Barnim, N., Bahji, A., & Groll, D. (2019). Correctional work, wellbeing, and mental health disorders. *International Corrections and Prisons Association; Advancing Corrections Journal, 8*(4), 53-69. https://www.researchgate.net/publication/337801434_Correctional_Work_Well-being_and_Mental_Disorders

Rice, C., Chandler, E., Rinaldi, J., Changfoot, N., Liddiard, K., Mykitiuk, R., & Mündel, I. (2017). Imagining disability futurities. *Hypatia*, *32*(2), 213-229. https://doi.org/10.1111/hypa.12321

Richards, N. K., Suarez, E. B., & Arocha, J. F. (2021). Law enforcement officers’ barriers to seeking mental health services: A scoping review. *Journal of Police and Criminal Psychology*, *36*(3), 351-359. https://doi.org/10.1007/s11896-021-09454-x

Richardson, J. D., Darte, K., Grenier, S., English, A., & Sharpe, J. (2008). Operational stress injury social support: A Canadian innovation in professional peer support. MacDonald Franklin OSI Research Centre. *Canadian Military Journal*, *9*, 57-64. https://ir.lib.uwo.ca/osircpub/34

Rigby, K. (2003). Consequences of bullying in schools. *Canadian Journal of Psychiatry*, *48*(9), 583–590. http://doi.org/10.1177/070674370304800904

Rivera, A. (2022). *The intersectional other*. Lexington Books/Fortress Academic.

Roberts, R., Wong, A., Jenkins, S., Neher, A., Sutton, C., O'Meara, P., Frost, M., Bamberry, L., & Dwivedi, A. (2021). Mental health and well-being impacts of COVID-19 on rural paramedics, police, community nurses and child protection workers. *The Australian Journal of Rural Health*, *29*(5), 753-767. https://doi.org/10.1111/ajr.12804

Rodrigues, N. P., Cohen, L. L., McQuarrie, S. C., & Reed-Knight, B. (2018). Burnout in nurses working with youth with chronic pain: A pilot intervention. *Journal Pediatric Psychology*, *43*(4), 382-391. http://doi.org/10.1093/jpepsy/jsx132

Roger, K. S., & Hatala, A. (2018). Religion, spirituality & chronic illness: A scoping review and implications for health care practitioners. *Journal of Religion & Spirituality in Social Work*, *37*(1), 24-44. https://doi.org/10.1080/15426432.2017.1386151

Rogers, G. (2018). The intersection of religion/spirituality and trauma. *Trauma, Meaning, and Spirituality: Translating Research into Clinical Practice*, *27*(5), 574-575. https://doi.org/10.1080/10926771.2018.1429512

Romosiou, V., Brouzos, A., & Vassilopoulos, S. P. (2019). An integrative group intervention for the enhancement of emotional intelligence, empathy, resilience and stress management among police officers. *Police Practice and Research*, *20*(5), 460-478.

https://doi.org/10.1080/15614263.2018.1537847

Röttger, S., Theobald, D. A., Abendroth, J., & Jacobsen, T. (2021). The effectiveness of combat tactical breathing as compared with prolonged exhalation. *Applied Psychophysiology and Biofeedback*, *46*(1), 19-28. https://doi.org/10.1007/s10484-020-09485-w

Saldana, J., & Omasta, M. (2022). Analytic synthesis: Understanding, interpreting, and theorizing. In J. Saldana & M. Omasta (Eds.), *Qualitative research: Analyzing life* (2nd Edition) (pp. 245-283). Sage Publications. https://edge.sagepub.com/saldanaomasta2e

Salmona, M., Lieber, E., & Kaczynski, D. (2019). *Qualitative and mixed methods data analysis using Dedoose: A practical approach for research across the social sciences*. Sage Publications.

Sauer-Zavala, S., & Barlow, D. H. (2021). *Neuroticism: A new framework for emotional disorders and their treatment.* Guilford Publications.

Seager, P. (2014). *Social psychology; A complete introduction*. The McGraw-Hill Companies, Inc.

Seaton, C. L., Bottorff, J. L., Jones-Bricker, M., Oliffe, J. L., DeLeenheer, D., & Medhurst, K. (2017). Men's mental health promotion interventions: A scoping review. *American Journal of Men's Health*, *11*(6), 1823-1837. https://doi.org/10.1177/1557988317728353

Shay, J. (1991). Learning about combat stress from Homer's Iliad. *Journal of Traumatic Stress*, *4*(4), 561-579. https://doi.org/10.1007/BF00974590

Shay, J. (1994). *Achilles in Vietnam; Combat trauma and the undoing of character*. Scribner.

Shay, J. (2002). *Odysseus in America: Combat trauma and the trials of homecoming.* Scribner.

Shuler, S. (2001). Talking community at 911: The centrality of communication in coping with emotional labour. In G. J. Shepherd & E. W. Rothenbuhler (Eds.), *Communication and*

Community (pp. 53-57). Lawrence Erlbaum Associates Publishers.

Silvestri, M. (2017). Police culture and gender: Revisiting the 'cult of masculinity.' *Policing*, *11*(3), 289-300. http://doi.org/10.1093/police/paw052

Singh, A. (2019). *The racial healing handbook; Practical activities to help you challenge privilege, confront systemic racism, and engage in collective healing*. New Harbinger Publications.

Smith, C. P. & Freyd, J. (2014). Institutional betrayal. *The American Psychologist, 69*(6), 575-87. http://doi.org/10.1037/a0037564

Smith, P. M., Oudyk, J., Potter, G., & Mustard, C. (2021). The association between the perceived adequacy of workplace infection control procedures and personal protective equipment with mental health symptoms: A cross-sectional survey of Canadian health-care workers during the COVID-19 pandemic. *Canadian Journal of Psychiatry*, *66*(1), 17-24. https://doi.org/10.1177/0706743720961729

Smith-MacDonald, L., Lentz, L., & Brémault-Philips, S. (2023). *Moral injury: What is it and why should I care?* Canadian Institute of Public Safety Research and Treatment. https://www.cipsrt-icrtsp.ca/en/crrp/moral-injury-what-is-it-and-why-should-i-care

Smith-MacDonald, L., Lentz, L., Malloy, D., Brémault-Phillips, S., & Carleton, R. N. (2021). Meat in a seat: A grounded theory study exploring moral injury in Canadian public safety communicators, firefighters, and paramedics. *International Journal of Environmental Research and Public Health*, *18*(22). https://doi.org/https://doi.org/10.3390/ijerph182212145

Smith-MacDonald, L., Pike, A. C., & Bermault-Phillips, S. (2022). Exploration of trauma-oriented retreats: Quantitative changes in mental health measures for Canadian military

members, veterans and Royal Canadian Mounted Police with post-traumatic stress disorder and moral injury. *Trauma Care*, *2*(2), 114-130. http://doi.org/10.3390/traumacare2020010

Smith-MacDonald, L., VanderLaan, A., Kaneva, Z., Voth, M., Pike, A., Jones, C., & Bremault-Phillips, S. (2022). "Putting down and letting go": An exploration of a community-based trauma-oriented retreat program for military personnel, Veterans, and RCMP. *Trauma Care*, *2*(2), 95-113. https://doi.org/https://doi.org/10.3390/traumacare2020009

Smits, J. A. J. (2022). *Clinical guide to exposure therapy: Beyond phobias*. Springer International Publishing.

Søvold, L. E., Naslund, J. A., Kousoulis, A. A., Saxena, S., Qoronfleh, M. W., Grobler, C., & Münter, L. (2021). Prioritizing the mental health and well-being of healthcare workers: An urgent global public health priority. *Frontiers in Public Health*, *9*(May), 1-33. https://doi.org/https://doi.org/10.3389/fpubh.2021.679397

Spector, P. E., Zhou, Z. E., & Che, X. X. (2014). Nurse exposure to physical and nonphysical violence, bullying, and sexual harassment: A quantitative review. *International Journal of Nursing Studies*, *51*(1), 72-84. https://doi.org/10.1016/j.ijnurstu.2013.01.010

Spencer, D., Dodge, A., Ricciardelli, R., & Ballucci, D. (2021). Emotional labour, police, and the investigation of sex crimes perpetrated against children: Post-traumatic stress and the toll of dirty work. In R. Ricciardelli, S. Bornstein, A. Hall, R. N. Carleton (Eds.), *Handbook of post-traumatic stress: Psychosocial, cultural, and biological perspectives*, pp.247-263. https://doi.org/10.4324/9781351134637-10

Statistics Canada. (2021, February 2). *Mental health among health care workers in Canada during the COVID-19 pandemic*. The Daily. https://doi.org/https://www150.statcan.gc.ca/n1/daily-quotidien/210202/dq210202a-

eng.pdf

Stelkia, K. (2023). Structural racism as an ecosystem: An exploratory study on how structural racism influences chronic disease and health and wellbeing of First Nations in Canada. *International Journal of Environmental Research and Public Health*, *20*(10), 5851. https://doi.org/10.3390/ijerph20105851

Stelnicki, A. M., Jamshidi, L., Ricciardelli, R., & Carleton, R. N. (2021). Exposures to potentially psychologically traumatic events among nurses in Canada. *Canadian Journal of Nursing Research*, *53*(3), 277-291. https://doi.org/10.1177/0844562120961988

Stelnicki, A. M., Jamshidi, L., Fletcher, A. J., & Carleton, R. N. (2021). Evaluation of Before Operational Stress: A program to support mental health and proactive psychological protection in public safety personnel. *Frontiers in Psychology*, *12*(August), 1-16. https://doi.org/10.3389/fpsyg.2021.511755

Stephens, J. E., Hittner, E. F., Haase, C. M., Samson, A. C., Dukes, D., & Walle, E. A. (2022). Emotion regulation in couples across the life span. In Daniel Dukes, Andrea C. Samson, & Eric A. Walle (Eds), *The Oxford handbook of emotional development* (pp. 323-338). Oxford University Press. https://doi.org/10.1093/oxfordhb/9780198855903.013.4

Stollberger, J., Las Heras, M., Rofcanin, Y., & Eby, L. T. (2022). Sharing is caring: The role of compassionate love for sharing coworker work-family support at home to promote partners' creativity at work. *Journal of Applied Psychology*, *107*(10), 1824-1842. https://doi.org/10.1037/apl0000985

Strawser, M. G. (2022). *Higher education implications for teaching and learning during COVID-19.* Lexington Books.

Sukhera, J., Kulkarni, C., & Taylor, T. (2021). Structural distress: Experiences of moral distress

related to structural stigma during the COVID-19 pandemic. *Perspectives on Medical Education*, *10*(4), 222-229. https://doi: 10.1007/s40037-021-00663-y

Szeto, A., Dobson, K. S., & Knaak, S. (2019). The Road to Mental Readiness for first responders: A meta-analysis of program outcomes. *Canadian Journal of Psychiatry*, *64*(1_suppl), 18S-29S. https://doi.org/10.1177/0706743719842562

Tarride, J.-E. (2024, August 5). *Paramedics treating patients' palliative needs at home benefits everyone.* The Conversation Canada. https://theconversation.com/paramedics-treating-patients-palliative-needs-at-home-benefits-everyone-236013

Taubman, D. S., Velyvis, V., & Parikh, S. V. (2019). Assessment and treatment of mood and anxiety disorders in the workplace. In M. Riba, S. Parikh, & J. Greden (Eds.), *Mental health in the workplace*; *Integrating psychiatry and primary care* (pp. 111-129). Springer Nature. https://doi.org/10.1007/978-3-030-04266-0_8

Tekin, S., Glover, N., Greene, T., Lamb, D., Murphy, D., & Billings, J. (2022). Experiences and views of frontline healthcare workers' family members in the UK during the COVID-19 pandemic: A qualitative study. *European Journal of Psychotraumatology*, *13*(1), 1-12. https://doi.org/10.1080/20008198.2022.2057166

Temple, J. (2015). Resident duty hours around the globe: Where are we now? *BMC Medical Education*, *14*(1), 1–5. https://doi.org/10.1186/1472-6920-14-S1-S8

Thompson, L., & Dobson, K. (2023, March 19-20). *Canadian Association of Long-term Care* [Conference presentation]. Collaboration Conference: Canadian Institute of Pandemic Health Education and Research (CIPHER), Ottawa. https://www.cipher-iceisp.ca

Truth and Reconciliation Commission of Canada. (2015). *Honouring the truth, reconciling for the future; Summary of the final report of the Truth and Reconciliation Commission of*

Canada. National Centre for Truth and Reconciliation. https://nctr.ca/records/reports/

Tsouvelas, G., Kalaitzaki, A., Tamiolaki, A., Rovithis, M., & Konstantakopoulos, G. (2022). Secondary traumatic stress and dissociative coping strategies in nurses during the COVID-19 pandemic: The protective role of resilience. *Archives of Psychiatric Nursing*, *41*(March), 264-270. https://doi.org/10.1016/j.apnu.2022.08.010

Tungohan, E. (2020, May 1). *Filipino healthcare workers during COVID-19 and the importance of race-based analysis; Filipino workers on the frontlines during COVID-19 globally and in Canada*. Broadbent Institute. https://www.broadbentinstitute.ca/filipino_healthcare_workers_during_covid19_and_the_importance_of_race_based_analysis

Un, H., & Pickering, L. (2019). Corporate strategies: Employer and insurer's perspective. In M. Riba, S. Parikh, & J. Greden (Eds.), *Mental health in the workplace*; *Integrating psychiatry and primary care* (pp. 181-190). Springer Nature. https://doi.org/10.1007/978-3-030-04266-0

Van der Kolk, B. (2015). *The body keeps the score: Brain, mind, and body in the healing of trauma*. Penguin Books.

Vickers, P., & Moyer, R. (2020). Healing complex trauma 1: A unity of minds, hearts, and culture. *Journal of Indigenous Wellbeing*, *5*(1), 3–15.

Violanti, J. M., Fekedulegn, D., Hartley, T. A., Charles, L. E., Andrew, M. E., Ma, C. C., & Burchfiel, C. M. (2016). Highly rated and most frequent stressors among police officers: Gender differences. *American Journal of Criminal Justice*, *41*(4), 645-662. https://doi.org/https://doi.org/10.1007/s12103-016-9342-x

Waddell-Henowitch, C., McPhail, D., Kelly, C., & Ferris, S. (2024). Method matters:

Integrating trauma-informed principles into psychiatric and mental health nursing research. *Issues in Mental Health Nursing*, 45(9), 917-926. https://doi.org/10.1080/01612840.2024.2367756

Wagamese, R. (2008). *One Native life*. Douglas & McIntyre.

Wagamese, R. (2016). *Embers; One Ojibway's meditations*. Douglas & McIntyre.

Waite, S. (2021). Should I stay or should I go? Employment discrimination and workplace harassment against transgender and other minority employees in Canada's federal public service. *Journal of Homosexuality*, *68*(11), 1833-1859. https://doi.org/10.1080/00918369.2020.1712140

Wang, K., Varma, D. S., & Prosperi, M. (2018). A systematic review of the effectiveness of mobile apps for monitoring and management of mental health symptoms or disorders. *Journal of Psychiatric Research*, *107*, 73-78. https://doi.org/10.1016/j.jpsychires.2018.10.006

Werson, A. D., Meiser-Stedman, R., & Laidlaw, K. (2022). A meta-analysis of CBT efficacy for depression comparing adults and older adults. *Journal of Affective Disorders*, *319*, 189-201. https://doi.org/10.1016/j.jad.2022.09.020

Wester, S. R., Arndt, D., Sedivy, S. K., Arndt, L., & Levant, R. F. (2010). Male police officers and stigma associated with counseling: The role of anticipated risks, anticipated benefits and gender role conflict. *Psychology of Men & Masculinity*, *11*(4), 286-302. https://doi.org/10.1037/a0019108

Whitehead, P. R. (2014). The lived experience of physicians dealing with patient death. *BMJ Supportive and Palliative Care*, *4*(3), 271-276. https://doi.org/10.1136/bmjspcare-2012-000326

Wiinikka-Lydon, J. (2019). Mapping moral injury: Comparing discourses of moral harm. *Journal of Medicine and Philosophy (United Kingdom)*, *44*(2), 175-191. https://doi.org/10.1093/jmp/jhy042

Wild, J., El-Salahi, S., Degli Esposti, M., & Thew, G. R. (2020). Evaluating the effectiveness of a group-based resilience intervention versus psychoeducation for emergency responders in England: A randomised controlled trial. *PLOS ONE*, *15*(11), e0241704. https://doi.org/10.1371/journal.pone.0241704

Wild, J., Greenberg, N., Moulds, M. L., Sharp, M. L., Fear, N., Harvey, S., Wessely, S., & Bryant, R. A. (2020). Pre-incident training to build resilience in first responders: Recommendations on what to and what not to do. *Psychiatry*, *83*(2), 128-142. https://doi.org/10.1080/00332747.2020.1750215

Wilk, P., Maltby, A., & Cooke, M. (2017). Residential Schools and the effects on Indigenous health and well-being in Canada; A scoping review. *Public Health Reviews*, *38*(1), 8-8. https://doi.org/10.1186/s40985-017-0055-6

Willett, J. F., LaGree, D., Shin, H., Houston, J. B., & Duffy, M. (2023). The role of leader communication in fostering respectful workplace culture and increasing employee engagement and well-being. *International Journal of Business Communication*, *August*. https://doi.org/10.1177/23294884231195614

Williams, A. (2012). Emotion work in paramedic practice: The implications for nurse educators. *Nurse Education Today*, *32*(4), 368–372. https://doi.org/10.1016/j.nedt.2011.05.008

Williams, N. (2024, December 23). *Paramedics in peril: New study to give Canada-wide picture of violence on the job*. News; Canadian Broadcasting Corporation. https://www.cbc.ca/news/canada/ottawa/canada-study-violence-against-paramedics-

1.7405361

Williamson, V., Murphy, D., Phelps, A., Forbes, D., & Greenberg, N. (2021). Moral injury: The effect on mental health and implications for treatment. *Lancet Psychiatry*, *8*(6), 453-455. https://doi.org/10.1016/s2215-0366(21)00113-9

Woodgate, R. L., Zurba, M., Tennent, P., Cochrane, C., Payne, M., & Mignone, J. (2017). "People try and label me as someone I'm not": The social ecology of Indigenous people living with HIV, stigma, and discrimination in Manitoba, Canada. *Social Science & Medicine (1982)*, *194*, 17-24. https://doi.org/10.1016/j.socscimed.2017.10.002

Workman-Stark, A. (2015). From exclusion to inclusion: A proposed approach to addressing the culture of masculinity within policing. *Equality, Diversity and Inclusion an International Journal, 34*(8), 764-775. https://doi.org/10.1108/EDI-01-2015-0006

Wright, R. (2017). *Why Buddhism is true; The science and philosophy of meditation and enlightenment*. Simon & Schuster.

Yuan, C., Wang, Z., Inslicht, S. S., McCaslin, S. E., Metzler, T. J., Henn-Haase, C., Apfel, B. A., Tong, H., Neylan, T. C., Fang, Y., & Marmar, C. R. (2011). Protective factors for post-traumatic stress disorder symptoms in a prospective study of police officers. *Psychiatry Research*, *188*(1), 45-50. https://doi.org/10.1016/j.psychres.2010.10.034

Xue, Y., Lopes, J., Ritchie, K., D'Alessandro, A. M., Banfield, L., McCabe, R. E., Heber, A., Lanius, R. A., & McKinnon, M. C. (2022). Potential circumstances associated with moral injury and moral distress in healthcare workers and public safety personnel across the globe during COVID-19: A scoping review. *Frontiers in Psychiatry*, *13*(June), 1-18. https://doi.org/https://doi.org/10.3389/fpsyt.2022.863232

Zink, M., Pischke, F., Wendsche, J. & Melzer. M. (2024). Managing the work stress of inpatient

nurses during the COVID-19 pandemic: A systematic review of organizational interventions. *BMC Nursing 23*(691), 1-18. https://doi.org/10.1186/s12912-024-02358-1

Zhang, D., Lee, E. K. P., Mak, E. C. W., Ho, C. Y., & Wong, S. Y. S. (2021). Mindfulness-based interventions: An overall review. *British Medical Bulletin*, 138(1), 41-57. https://doi.org/10.1093/bmb/ldab005

Zhang, M.M., Ma, Y., Du, L.T., Wang, K., Li, Z., Zhu, W., Sun, Y.H., Lu, L., Bao, Y.P., & Li, S.X. (2022). Sleep disorders and non-sleep circadian disorders predict depression: A systematic review and meta-analysis of longitudinal studies. *Neuroscience and Biobehavioral Reviews*, *134*, 104532-104532. https://doi.org/10.1016/j.neubiorev.2022.104532

Appendix 1: Interview Guide, Checklist, and Script

☐Send Recruitment Letter.

☐Once participant replies, send Response Email with more info and to schedule, with Consent Form attached.

☐Day of interview: Open Prompt doc and Consent form doc on desktop for screen sharing as needed

Introduction

"Thank you for agreeing to the interview. My name is Lindsay Allen, and I am an independent researcher working for the University of Regina. I am seeking feedback from people who went through the BOS program. Before we start, I want to touch base about your consent to participate in the interview. Have you gone over the consent form? Do you have any questions about any aspect of it? Let's change your Zoom name now. Do a right click anywhere on the screen, then press Rename. You can use code # 020." (or Mac or cell phone: go to Participants, My name, More, Rename. I can do this for participant alternatively.)

☐Record code # on Master List starting at 001.

☐Change name to 'Interviewer".

☐Start recording.

"To reiterate a little about the process, your participation in the interview is kept completely confidential. Participating does not impact your employment or your status with the BOS program in any way because none of the parties – like Wayfound, BOS clinicians, your employers – none of them know who participates in the study or not. All the data will be anonymized. If you accidently mention any specific individual or organization, don't worry

because we carefully go through and delete anything identifiable, including any mention of details or contextual information that could be indirectly identifying. We delete the video files of the interview but keep the audio transcription files, so that we have the text to work with. Participation is entirely voluntary and optional. Feel free to decline any questions, take breaks, or stop at anytime. Do you have any questions for me before we start?"

Interview Questions

1. There are different modes that the program is being delivered – did you do the program in-person sessions, virtually with other people over zoom, or the online digital modules?
2. How long ago did you complete the sessions/modules?
3. (If in-person or virtual): Did you miss any sessions and do make-ups with the online digital module(s)? How did missing sessions impact your experience?
4. (If online modules): How long did it take you to complete the online modules? (e.g., some people do it over 8 weeks while others do it over 3 days). How did the pacing impact your experience?
5. What were your main reasons for taking the program?
6. Have you had any previous comparable training? Were there tensions between the two? Complementary? Overlap? Please describe.
7. What has been the most helpful aspect of the BOS program for you?
8. What has been the least helpful aspect of the BOS program for you?
9. Is there anything you would add to, change, or remove from the BOS program? Feel free to comment on any specific aspect of the program. (1. In their own words. 2. Use prompt sheet for recall of BOS components).
10. I know this may sound similar to the previous questions, but have you found there to be benefits to *implementing the skills and knowledge* you learned in the BOS program in

real life? Please describe.

11. Have you found there to be challenges to implementing the skills and knowledge you learned in the BOS program in real life? Please describe.
12. Has anything gotten better for you as a result of participating in the BOS program? Can you tell me more about that?
13. Has anything gotten worse for you as a result of participating in the BOS program? Please describe. (possible responses: Thank you for sharing this. Do you see any solutions to that situation? Are there any additional supports that would be helpful – as part of the program, or in your organization, or otherwise? Have you found opportunities to debrief the program with others? Some find it helpful to have peer and professional support outside of their own organization.)
14. How do you feel as thought this program has impacted your awareness of trauma (be it personal or in others)? How have you dealt with this increased awareness? Is it affecting your patterns of behaviour? Is there anything that could be done by the BOS program to help with this?
15. Can you please comment on how the program facilitation: a) overall? b) in making content accessible? c) (If in-person or virtual) of group dynamics?
16. (If in-person or virtual): How was the group portion of the program? What are your thoughts and feelings on the group dynamics? How did this affect the program for you? Were your bosses and/or your coworkers in the sessions with you? How did this impact your experience?
17. We are interested in your experiences of getting enrolled in, participating in, and staying with the program to completion. Without naming any names or identifying specific

organizations, can you speak to how supportive were people at your work of you undergoing this training, say in: a) your organization as a whole? b) bosses? c) colleagues? How did this impact your attendance and participation in the program? Did this change over the course of the training period?

18. Please share your reflections on how well the BOS program attended to diversity among its participants: a) in its content? b) in its delivery? c) group dynamics? (Diversity can be interpreted in any way you like – we are interested in what you experienced or observed in regards to any kinds of differences such as job category, rank, income, education level, age, years of service, sex, gender, ethnicity, religion, disability status, sexual orientation, parental status, marital status, income level, education level, and so on).
19. I'd like to ask about some demographics so I can account for diversity in who I am interviewing:

Type of program delivery (e.g., digital, virtual, in-person)	
Job Category (e.g., firefighter, police officer, nurse)	
Age	
(I don't assume and allow people to self-define. / Do you identify as a man/woman?) Sex and gender identity	

20. How well did the BOS program attend to the specific type of work you do (within the broader category of 'frontline worker')?

21. Thinking along the lines of diversity, were there elements of the BOS program that you found allowed space to address any concerns you may have specific to any aspects of your identity? (or others in your group?) Can you talk more about that?
22. (If long-term involvement:) What would be your vision or recommendations for organizations across Canada regarding mental health wellness, improvement, literacy, training?
23. Do you have any further comments or suggestions for improving the program's components and/or its delivery?

"Thank you for all you have shared.

Sometimes things come up for interviewees after we have had this conversation. I will forward you some resources after this in case you are interested. Also, I will send you a copy of the transcript. If you decide that you are not comfortable with something you said or want something deleted, then you can email me about it. I can remove parts. After about two weeks, it will become more difficult to remove individuals' contributions form the whole of the data set, so it'd be great if you want to delete something that you do not wait too long to let me know. Thank you once again for your participation! Your feedback is highly valuable for helping to improve the program to better support mental health for other front-line workers and, in turn, members of the public who rely on your vital services. Best wishes to you now and into the future!"

☐ Download audio & transcript files from Zoom, Move to TDrive.

☐ Update final sample spreadsheet.

☐ Delete video files from Zoom and downloads.

☐ Send Thank you Email with Resource List and Clean transcript as attachments.

Appendix 2: Consent Form

Title: Expansion and Evaluation of the Before Operational Stress Program

Researcher Contact Information:

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Invitation to Participate: We are inviting you to participate in the current research study based on your enrollment in the BOS Program. A team of researchers from the Canadian Institute for Public Safety Research and Treatment (CIPSRT) at the University of Regina are conducting the investigation. Participation is not a requirement of your continuation in the BOS program and declining to participate will not impact your ability to seek psychological support from Wayfound Mental Health Group or another psychologist of your choice. No Wayfound Mental Health Group personnel or BOS clinicians are part of the research team and will not know your participation status.

Your participation is voluntary. If you decide to participate, you will be asked to verbally acknowledge your agreement to take part in this study, which the researchers will document, or

to return an electronic version of the consent form to <BOSinterviewer@uregina.ca>. If you do decide to take part in this study, you are still free to withdraw at any time and without giving any reasons for your decision.

Please take time to read the following information carefully. You may ask as many questions as you need.

Purpose of the Study: Individuals who choose a career in public safety often report experiencing a great deal of stress over their careers and often report challenges for themselves and/or their colleagues with respect to mental health and associated stigma. Training programs such as BOS include education on stress and the stress response, skill building to teach stress management, and recommendations for increasing personal resources for stress. Additional modules are tailored to enhance communication and interpersonal skills in your work and personal lives. A pilot study was launched in October 2018 and is continuing to evaluate the BOS program. Initial results indicate that there were small but statistically significant improvements in experience of PTSD symptoms, quality of life, social support, and mental-health stigma at 4 month follow-up (Stelnicki et al., 2021). A larger sample size is required in order to support further evaluation of the program.

We are seeking feedback from people who participated in the BOS in order to find out what, if anything, you liked and/or disliked about the program with regard to both content and delivery, as well as any other suggestions or feedback that you may have.

Procedures: You are being asked to take part in a 30 – 60 minute interview regarding your experience with the BOS program. The entire session will be conducted over Zoom and will be recorded (both audio and video). The audio recording of the meeting will be transcribed for data analysis purposes.

Potential Risks: There are no anticipated risks if you decide to participate in this study. If there are details about your experience participating in the BOS program that you are not comfortable sharing, you are under no obligation to do so.

Potential Benefits: Although there will be no personal benefit to you if you participate, your feedback will help us to assess the effectiveness and impact of the BOS program, including what worked well and what may need to be changed in the future to address the specific needs of public safety personnel. This may benefit other public safety personnel by supporting their mental health and, in turn, members of the public who rely on public safety personnel for vital services.

Confidentiality: An audio recording of your interview will be provided to a transcription service, via encrypted transmission, and securely stored on a Canadian server; transcripts of the recordings will be provided back to the researchers in the same manner. A privacy agreement will be in place and they will be bound by the same privacy legislation and confidentiality requirements as the researchers.

You will not be identified by name on interview transcripts. Instead, quotes will be labelled using a pseudonym or non-identifying number. The transcripts will be edited so that if you mention any identifying information (e.g., the name of someone else, the name of a particular agency), those details will be removed. Participants will not have the opportunity to review or approve the use of de-identified quotations; however, the researchers will make every effort to ensure that you will not be identifiable in any quotes used in presentations, publications, or reports of the findings, including being mindful of details or contextual information that could be indirectly identifying.

For added privacy, you may opt to change your display name in Zoom to a pseudonym if you are not comfortable with your real name being displayed. Instructions for how to do this within your Zoom profile are available at https://support.zoom.us/hc/en-us/articles/201363203-Customizing-your-profile. You can also change the display name from within the meeting itself by clicking on "Participants," then hovering over your name and clicking "More," then "Rename." Please note that if you opt to change your display name from within the meeting itself, your real profile name will still be displayed initially, up until such time as you make this change.

Anonymity: Interview participation is anonymous. Anonymous means that your identity will be kept private.

If you have participated in other research studies evaluating the BOS program, you may also be asked for your unique identifier to link this data in lieu of personal information (e.g., names).

The unique identifier will be created using a) second letter of your first name, b) last letter of your last name, c) last digit of your postal code, d) first letter of your birth month, e) first digit of your age, and f) last digit of your phone number.

Results from the current study will only be presented in aggregate form to further protect the anonymity of participants. As such, your responses cannot be used to evaluate you personally. Summaries of the anonymous, aggregated responses will be made available at https://www.cipsrt-icrtsp.ca/en/research/current-projects to all interested parties. The results will also be submitted for peer-reviewed publication and the data may be used for related secondary analyses in the future as part of additional research efforts to support mental health of public safety personnel.

Storage of Data: All data for the study, including the consent form/records of informed consent, will be stored electronically. Data will be stored securely for a period of no less than seven (7) years after data collection stops and the study has been completed. Once the data is no longer needed, electronic copies will be deleted using methods that ensure that the data is non-recoverable.

All data will be stored on secure University of Regina servers and will be accessible only to members of the research team and their supervisees (e.g., Research Assistants) on a need-to-know basis. Any transfer of de-identified data among members of the study team will be done using files encrypted with password protection, via institutional (work) email addresses.

Zoom servers are located outside of Canada and Zoom stores users' names and usage data outside of Canada. The interview will be recorded so that the data may be transcribed for analysis. The session will be recorded to the password-protected work computer of one of the researchers, *not* on a Cloud server. Although video will be enabled for the meeting so that participants and the researcher can see one another face-to-face, video files will be immediately deleted following the session; only the audio portion will be retained for transcription purposes. You may also choose to keep your video turned off if you wish.

Right to Withdraw: Your participation in this research is voluntary. You may withdraw from the study at any time during the interview without consequences. You do not have to provide a reason. If you would like to withdraw after your interview has concluded, please let us know within two weeks from the date of your interview; in which case your data will be removed from the study.

Understanding: This research study was approved by the University of Regina Research Ethics Board (2022-033) on (03-17-2022). If a participant has any questions or concerns about their rights or treatment as a participant, they may contact the Chair of the Ethics Board at 1 (306) 585-4775 (out of town participants may call collect) or by e-mail at research.ethics@uregina.ca. Participants also understand that in the event they require assistance related in any way to this study, they can contact any member of the research team and will thereafter be provided, or guided to a provider, for the assistance they require.

CONSENT TO PARTICIPATE

- I have read the information in this consent form.
- I understand the purpose and procedures and the possible risks and benefits of the study.
- I was given sufficient time to think about whether or not I would like to participate.
- I had the opportunity to ask questions and have received satisfactory answers.
- I am free to withdraw from this study at any time for any reason and I understand that I may stop taking part in this study without penalty.
- I have been informed there is no guarantee that this study will provide any benefits to me.
- I understand that by signing this document (or giving my consent verbally or electronically), I do not waive any of my legal rights.
- I have been informed that I will receive a signed and dated copy of this consent form for my records.
- In understand that this interview will be audio recorded for transcription purposes.

My signature below indicates that I agree to participate in this study:

Participant:

Printed Name	Signature	Date

Researcher:

Printed Name	Signature	Date

OR

I hereby give my verbal consent to participate in this study, as documented by

_____, _____, on

_____.

Research Team Member's Name	Role	Date