ATLAS INSTITUTE FOR
VETERANS AND FAMILIES

RESEARCH REPORT

EXPERIENCES OF MORAL INJURY

IN CANADIAN PUBLIC SAFETY PERSONNEL

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ACKNOWLEDGEMENTS

The Atlas Institute for Veterans and Families is grateful to the 38 public safety personnel (PSP) who participated in this study.

This report would not be possible without the participation of PSP, who were forthright and candid in sharing their experiences. Those who participated in this study are deeply committed to their professions and motivated to do what they do because they want to help others, treat people with compassion and kindness, and make a difference with the utmost integrity.

The Atlas Institute also thanks the members of the Moral Injury in Public Safety Personnel Advisory Committee, which supported the research and knowledge mobilization activities for this project. This committee was composed of frontline public safety personnel, public safety leadership, psychologists, and researchers who co-developed the research and interview questions, supported PSP recruitment, and provided feedback on early observations and findings. The Atlas Institute also thanks the study co-Investigators and Collaborators who reviewed and provided feedback on this report.

The main offices of the Atlas Institute for Veterans and Families are located on the traditional and unceded territory of the Algonquin Anishnaabeg Peoples, on the land that is today called Ottawa, Ontario.

Suggested citation:

Rodrigues, S., Mercier, J.-M., Nannarone, M., McCall, A., Farrell, S., Sedge, P., Wilson, J., Nashef, K., Perkins, M., & Hosseiny, F. (2022). ***Experiences of Moral Injury in Canadian Public Safety Personnel***. Ottawa, ON: Atlas Institute for Veterans and Families.

ISBN: 978-1-7781985-0-2

The work of the Atlas Institute for Veterans and Families is made possible thanks to funding from Veterans Affairs Canada.

FOREWORD

by Brian McKenna, National Strategic Advisor, Veterans

The paramedic services across this country are a natural landing spot for a number of Veterans to move to after leaving the active service in the Canadian Armed Forces (CAF). For some, public service is part of who they are. Many CAF members will spend their entire adult lives in one uniform or another, moving from military service to other public sector and first responder roles.

The military runs a parallel version of a small city in numerous locations in Canada and around the globe. If a city has a trade, you can assume the military has an equivalent—or at least it has a trade that requires a similar skillset. That means that the military has doctors, nurses, dentists, pharmacy assistants, x-ray technicians, and paramedics.

Many Veterans, especially those with a Canadian Forces Health Services (CFHS) background, employment with Field Ambulance (FdAmb), or experience serving as tactical combat casualty care (TCCC), consider public safety roles as the next step in their careers. This may also be the case for many Reservists, who, while serving in the CAF, are paramedics. The Canadian Rangers can play a significant medical role in response to emergencies. Most Veterans do gravitate towards the sector that is similar to what they already have experience doing. Some leave the CAF seeking stability and to be closer to Family, but are still looking for opportunities to serve. Public safety roles require skills that are similar to what they develop in the CAF, and complement their military training and experience. For many, the transition is to civilianize the military approach, to learn the forms and functions of the new organization, and perhaps to focus on a different area of interest.

In some cases, these folks are the same people: Reservists carry out their civilian and military functions often in the same professional space. You'll see people who, in uniform and out, will be medical professionals. You'll also see folks who do the complete opposite trade in the Reserves, as compared to their civilian career. So a Reserve medic could be a civilian paramedic, or they could just as easily be a geography teacher. For Regular Force retirees, the paramedic services across this country are a natural next step for those looking to continue in medicine and public service.

In terms of capacity and ability, these folks are good to go and exceptionally proficient. But, their military experiences, both positive and negative, often come with them into those new civilian roles, such as those in public safety, and stay with them as they continue forward. These experiences may have been traumatic or distressing, and they may also have transgressed their morals, values and ethics. This can lead to

moral injury. And, not only can folks carry their military experiences of morally injurious events into their public safety role, they may also experience an entirely different set of potentially morally injurious events (PMIEs) in this new role. New research, including this report, is revealing that exposure to PMIEs is part of the experience of public safety personnel.

For me, moral injury is the most persistent injury. It's also the most clear and memorable, as it still feels like I took a hit I wasn't expecting, from exactly where I shouldn't have had to worry about being hit: my own organization and my own country. My traumatic memories have faded and lost some of their string, to the point where some of the details get blended in with other events, but moral injury gets worse over time for me. I think that's related to the fact I feel that the people involved must have known that they caused this pain, yet somehow seemed okay with that. I feel that they have long forgotten these events and their effects while, years later, I'm still here, wondering if others get it.

I wonder how good leaders, who know about moral and ethical violations, continue to function in these environments. Doesn't that make them bad leaders? I was taught that rules help, and that they are there to guide us to the right answer. How am I supposed to feel when it seems that obeying the rules is precisely the thing leading us to the wrong answer? Or when I see that others recognize the failure, but seem content with the result because they can claim we followed the rules? Are they inhuman? Am I?

Moral injury for me is that moment when, after coming out of a tough operational situation, someone who was not there tells me to change my report so it "reads better." Moral injury for me is pain, which is layered with disgust, when I consider that the situation could have been avoided if someone actually wanted to fix the issue, yet they chose not to. Trauma has faded, but these frustrations have not subsided.

The pain, disgust, and betrayal of moral injury was first recognized in military members and Veterans. Over time, though, it is coming to the fore that public safety personnel can also experience moral and ethical violations that can develop into moral injury. Public safety organizations are not the CAF, but, in both settings, the distance between the front line and its administration can feel like a chasm. Even though most public safety personnel will not have known military realities, they can still experience that unexpected hit from the work they love and the leaders and systems they trust. Understanding the experiences of public safety personnel when it comes to moral injury can benefit those on the front lines and the organizations they work for, it can help the CAF as well as Veteran communities as they grapple with this issue.

EXECUTIVE SUMMARY

Public safety personnel (PSP) play a vital role in protecting people and communities by responding to emergencies, crimes, and disasters. PSP include, but are not limited to, paramedics, firefighters, police officers, communications officials, border officials, and search and rescue personnel. The nature of their work means that PSP are uniquely and repeatedly exposed to situations that may be distressing and/or traumatic, and that may have serious, long-term mental health impacts, including depression, anxiety, PTSD, and many more.[1, 12, 13, 30, 31, 50, 51]

One type of situation that PSP may face and that may lead to adverse mental health outcomes is called a potentially morally injurious event (PMIE). PMIEs are situations that violate or challenge an individual's core beliefs, morals, values, or ethics.[36] Left unaddressed, PMIEs can lead to a distress response known as moral injury (MI). Though not a formal diagnosis, MI is characterized by intense feelings of shame, guilt, distrust of authority, spiritual or existential distress, or inner conflict.[25, 36] PMIEs and MI were first identified and articulated in research about the U.S. military and Veteran populations. Although evidence is growing to suggest that these phenomena manifest in health care and public safety contexts – and have been exacerbated by the COVID-19 pandemic – insight into these phenomena in the Canadian PSP context remains limited. Drawing on the results of semi-structured interviews with 38 paramedics, communications officials, and logistics technicians currently employed by a service in Ontario, this study aims to contribute to this literature by exploring the types of events that Canadian PSP consider potentially morally injurious or morally distressing, the impacts of these events on mental health and well-being, and the strategies or interventions PSP use to cope with these events and their impacts.

MAJOR FINDINGS

Potentially morally injurious events

PMIEs are part of the PSP experience. Events that PSP considered PMIEs fell into one of three main categories: those related to the nature of the work itself; those caused by the organizational climate or culture; and those that arose due to issues with the broader health care system. Events attributed to the nature of PSP work included treating people who had done harm, providing treatment PSP believe is harmful or futile, or being unable to provide treatment. It also included distress caused by witnessing others' actions or inaction, including carelessness, negligence, or disrespect or lack of compassion toward patients. PMIEs caused by the organizational climate or culture included instances in which PSP felt that their needs and concerns went unaddressed or unmet, that they were silenced or pressured to concede, that they faced unjust sanctions and discipline, or that they were subject to a toxic and hostile work environment. The broader health care system was also a source of PMIEs, as PSP experienced having limited control or autonomy over their work, bearing the consequences of a stressed system, and dealing with competing policies, priorities, and politics.

Impacts of PMIEs

Regardless of the category in which they arose, PMIEs left PSP feeling as though they cannot exercise judgement; broke the trust of PSP; and created inner conflict for PSP, which led to many negative consequences across all facets of their lives. When asked about the personal and professional impacts of having to face these events, PSP mentioned feeling anger and frustration; dealing with mental health problems, including depression and anxiety; having self-doubt or losing confidence in their abilities; experiencing reduced morale at work and strained relationships with colleagues and loved ones; and sensing a general erosion of their sense of self. Importantly, in addition to exposure to PMIEs, PSP are also repeatedly exposed to traumatic incidents and routine stress. Ultimately, the personal and professional consequences are the result of the accumulation of these events, sometimes with an eventual "final straw."

Coping with PMIEs

To cope with PMIEs, as well as work-related stress, PSP used a variety of coping strategies (e.g., exercise, spending time with friends and family, taking time off from work). Although PSP were aware of the importance and value of coping strategies, they experienced many barriers to exercising them, such as COVID-19-related restrictions, insufficient time to decompress between calls, inadequate health benefits, and a culture of stigma at work (e.g., taking time off indicates weakness). Notably, since the completion of this study, the organization has enhanced mental and physical health benefits.

Peer support

PSP sought support from peers, both informally, by reaching out to colleagues and superiors, and through the organization's formal peer support program. They cited consulting with peers for their ability to relate, listen, and validate; however, PSP did not directly tie support from peers to PMIEs, in that they did not discuss moral or ethical concerns with peers. PSP shared that their concerns about the formal peer support program – skepticism toward its degree of confidentiality, questions about the qualifications of peer supporters, and issues with access – contributed to their reluctance to use it.

Impact of PSP characteristics

Professional and personal characteristics also affected what PSP considered to be PMIEs, as well as how they interpreted PMIEs. In terms of professional characteristics, job function and tenure influenced the type of events described as PMIEs. For example, logistics personnel were uniquely troubled when their colleagues demonstrated poor work ethic and wasted time. In addition to specific roles, number of years on the job was also a factor in how PSP respond to PMIEs, as PSP with longer tenure were more likely to indicate that, regardless of policies or procedures, they follow what they believe is right.

Regarding personal characteristics, our findings reveal there is an interaction between sex and gender and PMIEs. PMIEs associated with work-related sexual harassment, sexual assault, and sex-based discrimination were more frequently mentioned by women. Women were also more likely to experience comments about their appearance or, particularly among paramedics, their ability to meet the physical demands of the job. As well, women were also more likely to indicate that calls to treat victims or perpetrators of violence were potentially morally injurious, leaving them feeling unable to help victims exit the relationship and/or disturbed by having to treat men who sustain injuries during the incident. Relatedly, our findings indicate that life experiences – such as parenting, adverse childhood experiences, and personal experience with disease or serious illness – informed their perception of the types of events described as PMIEs. Finally, this study also uncovered that an inverse relationship exists between lived experience and PMIEs, in that adverse on-the-job experiences have an impact on PSP's general view of the world, diminishing their faith in and perception of humanity as well as their tolerance for social problems.

Overall, this report reveals that PMIEs, which arise from myriad sources and contexts, are in fact part of the PSP experience. These events are morally or ethically problematic because they transgress the value that PSP place on fairness, helping others, integrity, the "golden rule," and the "do no harm" principle. It also demonstrates that PMIEs, alongside potentially traumatic experiences and routine stress, contribute to a loss of trust in leadership and the health care system, a sense of inner conflict that fosters self-doubt and erodes confidence in decision-making, and feelings of anger, frustration, helplessness, and resignation. Finally, this report illustrates that neither PMIEs nor MI form the content of supportive interactions between peers, but that PSP value the insights and support of their peers after difficult experiences, including through formal peer support.

INTRODUCTION

Public safety personnel (PSP) play a vital role in protecting people and communities across Canada. PSP save lives, maintain order, protect property and the environment, and frequently put themselves at risk to carry out their duties. In Canada, PSP is a broad term used to capture the various occupations that ensure the safety and security of people by responding to emergencies, crimes, and disasters. It includes, but is not limited to, paramedics, firefighters, police officers, communications officials, border officials, and search and rescue personnel.[12] The nature of their work means that PSP are uniquely and repeatedly exposed to situations that may be distressing and/or traumatic and that may have serious, long-term mental health impacts.[31, 50]

Recent research on PSP mental health has found that direct or indirect exposure to distressing experiences – including violent crimes, harm to children, conflict around do-not-resuscitate orders, relaying of bad news, and misuse of emergency services or ambulances, among others – puts PSP at increased risk of mental health problems, such as depression and anxiety, as well as of suicidal ideation.[1, 30, 51] At present, rates of post-traumatic stress disorder (PTSD) in PSP outpace those found in the general Canadian population.[13, 14] The chronic and critical incident stressors associated with public safety occupations have also been identified as significant predictors of stress, burnout, presenteeism, and absenteeism.[2, 8, 40, 53] Interest in understanding and addressing the impacts of trauma exposure on PSP is increasing across Canada, through research and with the development of national action plans, mental health apps, and tailored peer support programs.[48, 49, 58, 62]

Alongside exposure to traumatic situations, PSP may also face situations that violate or challenge their core beliefs, morals, values, and ethics, or that involve betrayal by a leader or trusted authority.[35, 54] Paramedics may be morally frustrated by situations that leave them "feeling disrespected, operating in a negative ethical climate, and acting against a patient's best interest."[35] Alongside this, betrayal by those in a

LIST OF ACRONYMS

2SLGBTQ+

two-spirit, lesbian, gay, bisexual, transgender, queer, and additional sexual orientations and gender identities

CPAP

continuous positive airway pressure

MI

moral injury

PMIE

potentially morally injurious event

PSP

public safety personnel

PTSD

post-traumatic stress disorder

leadership role may involve acts that expose PSP to corruption, which may also prompt a moral or ethical conflict that is difficult to reconcile.[10] These situations, called potentially morally injurious events (PMIEs), represent another category of experiences that may also have a significant impact on the mental health of PSP.

As with traumatic events, exposure to PMIEs is associated with higher risk of mental health problems, including depression, suicidality, problematic substance use, and PTSD.[6, 7, 11, 33, 37, 39, 44, 63] Additional reactions to PMIEs may include demoralization, re-experiencing the event, avoidance, and anger.[7, 19, 21, 24, 36, 54, 59] If left unaddressed, exposure to PMIEs may produce a psychological stress response characterized by intense feelings of shame and guilt, distrust of authority, and spiritual distress or inner conflict associated with the perceived transgression to one's morals, values, or ethics. This response is known as moral injury (MI) and is an adverse outcome in those who experience lasting distress following exposure to PMIEs.[25, 36]

Interest in the construct of MI has grown rapidly over the last decade as researchers and clinicians aim to better understand the distress associated with exposure to events that violate one's personal values or moral code. This interest emerged in, and has largely focused on, military and Veteran populations, who often face or witness events that they find difficult to make sense of or that lead to the violation of their core beliefs. MI emerged as a distinct construct as clinicians working with military and Veteran populations found that a diagnosis of PTSD did not sufficiently capture the impacts of PMIEs.[1, 54]

More recently, researchers and front-line personnel in public safety and health care settings have observed that MI applies in these contexts as well. Attention to the potential for MI in PSP and health care professionals has intensified in recent years, with studies and initiatives focusing on the nature and mental health impacts of PMIEs in law enforcement personnel and physicians, for example.[3, 10, 28, 61] Some researchers who have studied psychological harm in emergency services and physician populations, like their counterparts studying PTSD in military and Veteran contexts, have also noted that another construct is needed to capture experiences and outcomes that are not captured by the diagnosis of PTSD.[42] It has thus been proposed that, given the moral and ethical challenges that are inherent in their work, MI may offer a novel and applicable lens through which to understand and manage the psychological distress or harms that are associated with health care and public safety occupations.[42]

Notably, interest in MI in health care contexts has increased dramatically during the COVID-19 pandemic as health care professionals on the front lines of the pandemic raised awareness about the moral and ethical conflicts that they are facing.[34, 45, 57] Increasingly stressful circumstances at all organizational levels, as well as exposure to ethically and morally challenging situations (e.g., limited resources or allocation of scarce resources; aligning the duty to care with concerns over the welfare of their own families; breach of trust by leaders; poor team functioning, including poor communication or collaboration, incompetence, and inappropriate behaviour of colleagues; and balancing their own well-being with that of patients), may combine to contribute to moral injury.[34, 39, 45, 46, 47, 57]

Although PSP recognize and accept morally and ethically complex situations as inherent to their roles, such events may still be difficult for them to make sense of, and many may struggle to cope in the face of them. Research into PMIEs in PSP remains limited, but there has been considerable study of how PSP cope with and grow from stressful and traumatic experiences. For example, recent studies have found that PSP employ a range of coping strategies to deal with stressful experiences, including professional reflection; cognitive techniques, such as avoidance or distancing oneself from the event; humour; storytelling; and risky behaviour (e.g., substance use).[22, 23, 30, 40] In particular, there has been emphasis on how connections with peers are integral to coping. In turn, it is worth exploring not only the types and impacts of PMIEs in PSP but also the ways in which PSP cope in the faceof them, including through the use of peer support.[a]

a Peer support is a supportive relationship between individuals sharing common life experiences and/or characteristics, and can be provided in various settings, formats, and modes or interactions. For more detail, see: Deans, C. (2020). Benefits and employment and care for peer support staff in the Veteran community: A rapid narrative literature review. *Journal of Military & Veterans' Health, 28*(4); Dennis, C. L. (2003). Peer support within a health care context: A concept analysis. *International Journal of Nursing Studies, 40*(3), 321–332; Gartner, A., & Riessman, F. (1982). Self-help and mental health. *Hospital & Community Psychiatry, 3*3, 631–635; Sunderland, K., & Mishkin W. (2013). *Guidelines for the Practice and Training of Peer Support.* Mental Health Commission of Canada. Calgary: AB: Mental Health Commission of Canada.

This study contributes to this growing body of evidence on the sources, types, impacts, and coping strategies to manage PMIEs in PSP. Considering the limited research on PMIEs in PSP and the stated importance of recognizing that PSP contexts are distinct, this study focuses on a specific subset of PSP in Canada – paramedics, communications officials, and logistics technicians.

The objectives of this study were as follows:

1. Understand the types of events that PSP describe as morally distressing or potentially morally injurious, as well as the impact of these events on PSP mental health and well-being;
2. Identify whether and how peer support interventions do or might respond to PMIEs and their potential impacts and effects; and
3. Explore what conditions can best support the integration of PMIEs and MI into peer education and support for PSP.

In responding to these objectives, this report is divided into the following sections:

1. Overview of the framework and research methods that guided this study;
2. Presentation of main findings in relation to:
    i. Types of events PSP experience as PMIEs;
    ii. Ways that PSP interpret the meaning of these events;
    iii. Impact of these events, and public safety work in general, on PSP mental and physical health;
    iv. Ways that PSP cope, including the role of formal and informal peer support; and
    v. Relationship between personal (e.g., identity categories or life circumstances) and/or professional (e.g., job function or tenure) characteristics on PSP experiences of these events or their role;
3. Discussion of the overall meaning and significance of these findings in relation to MI and mental health in the Canadian PSP context; and
4. Conclusion, including directions for further research.

This study was conducted during the COVID-19 pandemic and, as noted, PSP were asked to describe their experiences of PMIEs both prior to and during the pandemic.[b]

While findings related to the experiences of PSP during COVID-19 are woven throughout this report, this study found that PSP are experiencing challenges and have struggled during the pandemic, in their work and home lives, but they did not indicate that they experience more or unique PMIEs during than before the pandemic. Consequently, the presence of types and impacts of PMIEs specifically related to the COVID-19 pandemic is modest.

b In this report, the phrase "during the COVID-19 pandemic" denotes the period between March 2020 and July 2021, when data collection was completed.

RESEARCH METHODS

To collect detailed descriptions of the experiences of PSP, we conducted semi-structured, one-on-one interviews with 38 PSP who work for a public safety organization in Ontario, Canada. PSP were eligible to participate in the study if they were currently or formerly employed by the organization as a paramedic, communications official, logistics technician, a supervisor, at least 18 years of age, and comfortable speaking English or French.[c, d]

Virtual interviews were conducted via Zoom between March and July 2021 with PSP who provided informed consent and completed an initial demographic questionnaire.[e]

In recognition of their time and contribution, PSP received a $50 gift card to a local retailer. All participants were currently employed by the organization. All names utilized in the report are pseudonyms, and the names of some organization-specific terms have been changed.

During the interview, PSP were asked to describe work events that transgressed their morals, values, or ethics; why these events were morally or ethically problematic; how they responded and reacted to these events; how these events have impacted them; and the role of peer support in managing the impact of events (see Appendix A). The interview also prompted PSP to consider if and how their life experiences or identity informed how they responded to or interpreted these events. PSP were also asked to describe how the COVID-19 pandemic has impacted their work in relation to morals, values, and/or ethics.

c Logistics technicians inspect, decontaminate, and supply all front-line vehicles. While this occupation is not named in the definition of PSP cited earlier, the study site indicated that those in this role impact and are impacted by the work of their colleagues on the front line, and often provide support to their colleagues in the field; as such, they were included in the study.

d Some PSP who are in supervisory positions simultaneously perform the duties of individual contributors alongside their supervisory responsibilities; for ease of reading, the category "leadership" denotes those individuals who identified themselves as fulfilling a leadership role in the organization, regardless of department or rank. In the event that experiences they shared occurred prior to their elevation to a position of leadership, this is made clear in the text.

e Several measures were put in place to help create an emotionally safe space for interviews. For example, all prospective participants received a letter of information ahead of the interview, which detailed topics of interest, as well as a debriefing form that included a list of local mental health resources. Interviewers created time for check-ins and breaks during the interview and offered participants the option to not have direct quotes from their interview used in reports or presentations on the findings. The team also supported each other, debriefing as needed.

Aiming to understand the perceptions and inner experiences of PSP, this study was guided by an interpretive phenomenological analysis (IPA). IPA is a type of thematic analysis in qualitative research in which the central objective is to uncover the lived experience of the participants and how they make sense of or interpret their experiences.[25, 36, 54] As the study's aims were to understand the types of events and experiences that PSP identify and interpret as potentially morally injurious, we in turn asked participants to describe what signified, to them, a transgression or violation of their morals, ethics, or values. In speaking with PSP and in analyzing the data, there was not always a clear delineation of whether the event violated a specific moral foundation, personal value, or ethical principle. Given the exploratory nature of this study, we have not endeavoured to align PSP's descriptions of events or their outcomes with any particular definition of moral injury. As the conceptualization of MI in PSP is nascent, and little is known about whether or how PMIEs or MI present in PSP, such an approach ensured that descriptions of events and impacts could be explored and analyzed without assessment of whether an experience is or is not "really" morally injurious. Consequently, we use PMIE to describe any event that a participant shared as having violated their morals, ethics, or values.

Once completed, the transcribed interviews were analyzed using qualitative data analysis software (QSR NVivo). This analysis consisted of an initial review of the content, the development of a codebook, an in-depth analysis and coding using the developed codebook, and a clustering of codes into broader themes. Quotes were then extracted from the transcripts and organized such that each theme had diverse, narrative evidence to support it.[f]

At that point, themes were reorganized, refined, condensed, or discarded, which produced a list of master themes.[g, h]

Throughout this project, PSP participated, alongside researchers and mental health professionals, in an advisory committee to develop the research and interview questions and to support PSP recruitment. Preliminary observations and analyses were presented to the committee as parts of the analysis were completed, and their reactions and feedback to these early observations supported the confirmation and elaboration of the themes generated by the analysis.

f In this report, we have opted to preserve participants' natural way of communicating their experiences and reflections, and as such we have not changed their grammar. We have omitted excessive instances of "like" and "you know" for readability and censored explicit language. Ellipses signify omissions of text for the sake of brevity or to protect a participant's identity.

g The study was approved by the Research Ethics Board at the University of Ottawa Institute of Mental Health Research (IMHR-REB #2020025) and relevant approvals were secured from the study site prior to recruitment and data collection.

h SR, MN, and JMM conducted the interviews, coded and analyzed data, and co-wrote this report. MN enrolled PSP into the study and scheduled interviews.

FINDINGS

PSP VALUES

To be able to understand what types of events might violate PSP morals, values, and ethics, and why, it was important to first identify the standards and beliefs that form their core beliefs. Although participants were differently inspired and took a variety of paths to get to their current position – some had prior relevant work experience, while others secured their role immediately following education and training – many participants shared similar values, which motivated their work. When asked about their core beliefs and what they value, professionally and personally, wanting to make a difference and helping others were most frequently mentioned. This reflection from Grant, a paramedic, is indicative of the altruistic sentiment shared by many PSP:

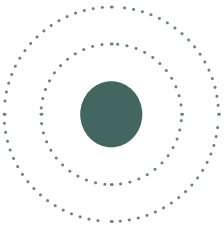
> **I think what I value most is being able to be present in someone's most dark or painful moment and [to] be able to make it even just a fraction better, either by talking to them and making them feel a little bit more comfortable or fully rectifying the situation, if it was like an allergic reaction or something and being able to completely fix it. I get all my gratification from being able to make it just even a sliver better. (Grant, paramedic)**

Other values commonly articulated included fairness, kindness, honesty, trust, and integrity. PSP were commonly guided by the "golden rule" – to treat others as they themselves would want to be treated. They shared that the beliefs and standards they hold for themselves and others have strengthened as they grow as people and as professionals, but that they have not fundamentally changed.

In addition, PSP valued that their role was rewarding, challenging, allowed them to connect with their community, provided variety, and was exciting. Notably, PSP who shared their experiences for this study are deeply committed to their profession and the community they serve and live in. Despite this commitment and positive feelings, due to their role, PSP face situations in which they see or have to do things that transgress these deeply held beliefs. The next section shares our findings on the types of events that PSP identified as PMIEs, and the settings and contexts in which these experiences occur.

TYPES OF PMIES

Events that violated the morals, values, or ethics held by PSP originated from what we are categorizing as **micro-**, **meso-,** and **macro-level** contexts.



At the **micro level**, PMIEs are related to moral or ethical conflicts or dilemmas that arise in the context of performing role-specific responsibilities and/or the situations to which PSP respond.

At the **meso level**, PMIEs that originated from the organizational culture or climate were those that related to the norms, behaviours, and attitudes that characterize the work environment and/or PSP experience within the work environment.

At the **macro level**, PMIEs attributed to systems issues or failures were those in which PSP were put in a position where they were caught between competing policies, priorities, or politics; a problem in or inadequacy of the broader health care system compromised PSP autonomy; or stress or strain on the health care or related systems (e.g., the social welfare system) that unfairly extended the scope and workload of PSP.

Key takeaways

PMIEs are part of the experience of PSP, occurring on the job because of something they did or did not do or something someone else did or did not do (i.e., an action or inaction), including:

- Having to treat people who have caused harm (e.g., abusers, impaired drivers), providing harmful or futile treatment, and being unable to do what's right (e.g., administer treatment during offload delay); and
- Negligence or carelessness (e.g., not administering treatment) or discriminatory attitudes (e.g., derogatory comments about patients).

PMIEs also occurred because of the organizational climate and culture when PSP experienced:

- Unmet needs (e.g., being denied breaks or time to decompress);
- Silencing (e.g., pressured to withdraw or not make formal complaints);
- Workplace toxicity (e.g., bullying and harassment); and
- Unjust discipline (e.g., sanctioned despite doing the right thing).

PMIEs attributed to systems issues or failures were those in which PSP were:

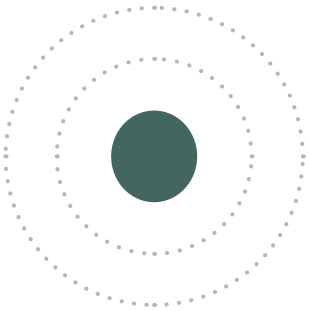
- Caught between competing policies, priorities, or politics;
- Unable to exercise autonomy due to a problem in or inadequacy of the broader health care system;
- Required to perform additional duties because of the demands on the health care or related systems (e.g., the social welfare system).

PMIEs occur as well for PSP because they come to work motivated to make a difference and help people, but they are doing so within an organization that has its own climate and culture and that is governed by, and accountable to, the broader health care system.

NATURE OF THE WORK

The first category of PMIEs that PSP mentioned occurred in relation to the nature of their work. PMIEs in this category were subsequently associated with the action or inaction of the participant themselves, or the action or inaction of a colleague or trusted authority. On the one hand, PMIEs associated with the (in)action of the participant themselves included events in which they were compelled to treat or help patients who, intentionally or unintentionally, caused harm to others and/or whose actions they found reprehensible; were compelled to provide treatment that, in their professional judgement, was harmful or futile; or were unable to provide treatment or do more to help a patient.

On the other hand, PMIEs associated with the (in)action of a colleague or trusted authority included events in which that colleague or trusted authority demonstrated carelessness or laziness; was negligent or neglectful; disrespected or displayed a lack of compassion toward someone; or exhibited discriminatory or harassing behaviours or attitudes toward the participant, other colleagues, or patients.



Micro-level PMIEs

PSP action or inaction

Treating people who have caused harm

PSP reported as morally distressing situations in which they have had to treat patients who have caused harm to others or whose actions they find reprehensible. An experience of this nature was shared by Eve, a paramedic, who described what it was like to have to help someone who had abused his wife:

> **When you pick up someone who beat his wife and you have to treat him as well, that sucks. Once again, it is part of my "moral compass." He is a patient, and I have to treat him. In my mind, am I saying: "You ****"? Yes. But he is a patient and I will treat him. (Eve, paramedic)**

Another paramedic, Pam, had a similar experience, when she was called to care for a convicted sex offender:

> **At the time, my daughter was probably three or four years old. And I'm having to deal with this guy that – you're just at odds with what you feel and what you have to do. That's difficult. (Pam, paramedic)**

Another example PSP shared was having to treat someone who was injured while driving while under the influence, especially when others were injured. For PSP, these types of events prompt a conflict between their moral code and their duty to provide care, which is difficult to reconcile. This conflict will be taken up in more detail in our discussion of how PSP make sense of PMIEs. In addition, some PSP reflected on the thoughts that these situations prompted, such as wanting the patient to "rot in hell," as Pam put it, or contemplating simply walking away in that critical moment. In these situations, duty to care prevails. Elisa, for example, indicated that she remembers to "follow my protocols and not voice my opinions," and focus on the patient's injuries rather than the actions that caused them.

Harmful or futile treatment

PSP also experienced a violation of their core beliefs in situations where established policies or standard operating guidelines compelled them to provide treatment that, in their professional judgement, was harmful or futile. For PSP, harmful or futile treatment included having to secure patients for transport to hospital when it was unnecessary or having to start resuscitation on patients they knew could not be revived.

Brenda, a paramedic, described a call to treat an elderly fall patient who had to be immobilized for transport to hospital even though his condition, in her judgement, did not necessitate it. She felt that she had no choice but to comply, and it caused the patient unnecessary suffering:

> **He had to be placed on a backboard, and the reason for this was that, again, paramedics are not given any leeway to make a clinical judgement on scene. [...] By the time we got [to the hospital], he was starting to get really agitated; he was very uncomfortable, he wanted out. [...] He was screaming in pain. [...] Now, he had back pain. He didn't before; now he does. And that's really difficult to deal with when you're called to, you know, help make a patient feel better and I made his whole situation worse. [...] That's one example where I found was morally wrong. (Brenda, paramedic)**

Another paramedic, Henry, described being called to help a different elderly patient who also needed to go to the hospital. Henry and his partner determined that the patient, given his fragility, should walk to the stretcher rather than be carried by them, but the stated procedure combined with the presence of a supervisor prevented them from doing things differently:

> **Book says to carry him, so we carried him to the stretcher. But in doing so, his skin was so fragile that we ripped the skin off his arm. And afterwards, we talked and [asked each other] "If the supervisor wasn't there, would you have made him walk [instead]?" [But] we followed the book and ended up hurting our patient. (Henry, paramedic)**

PSP were also distressed by situations in which, even though their professional judgement told them it was futile, they had to provide treatment and/or transport because the decision required the guidance of a physician at the base hospital:

> **Sometimes [the Ontario Base Hospital Group will] put restrictions, well we can't pronounce a patient who we've been working on for 45 minutes. Statistically, they're not going to come back, like, there's nothing [we can do]. But the doc[tor] says, "No, I want you to transport." (Howard, paramedic)**

For PSP in these situations, the risks or harm posed by a course of action outweighed its benefits. Further, the distress caused by seeing patients either put at risk, not helped, or actively harmed is exacerbated by their inability to exercise judgement and either refuse or modify treatments according to patient needs.

Unable to provide treatment

Another source of role-related PMIEs for PSP were situations in which they were unable to provide treatment or in which they were unable to do more to help a patient while on scene. They attributed these experiences to inflexible policies and procedures, the directives of authorities, or limits placed on their scope of work.

In some situations, PSP were prevented from continuing treatment on patients, even though it went against their assessment of the scene and their clinical judgement:

> I was given directions from a physician to stop resuscitation on someone. I didn't feel we should stop. I felt that there was still a chance. So, [that was a] morally difficult situation where I'm being told to do one thing and I don't feel it's the appropriate decision. (Jack, paramedic)

In other situations, as discussed by both Hugh and Howard, they could not provide treatment, which they noted was because it was either outside their scope of work or disallowed by policy:

> We have all IV fluid in the truck. We have intravenous lines that we can start. As a primary care paramedic, I can start a line with my partner being an advanced care paramedic. I'm competent at starting IVs; I've done hundreds. But as soon as they are not there, if I'm a dual primary care paramedic truck, well, tough ****: you can't start one. Even though you have all that equipment, all that training. (Hugh, paramedic)

> We have Tylenol in the truck, but we're not allowed to give it for fevers. So, things that could make an immediate benefit [...] to this patient, no, not allowed to do. It's super frustrating. (Howard, paramedic)

In rare cases, these PMIEs occurred because of policy changes initiated due to the ongoing COVID-19 pandemic. For example, paramedics shared that they were unable to treat non-COVID patients in their ambulance with continuous positive airway pressure (CPAP) therapy despite being trained and equipped to administer it:

> We had patients that had a lot of water in their lungs and would benefit from the CPAP tool. [...] And just because of the rules [during the pandemic] we couldn't do it on the way, so we kind of were watching them be uncomfortable, having trouble to breathe, trying to talk with them and trying to get them through this really crappy experience, knowing that once we get to the hospital, they'll use a tool that we have that we can't use. (Grant, paramedic)

These experiences of being unable to provide or continue treatment were distressing for PSP because broader forces like policy prevented them from acting in accordance with what they believed, in their judgement, was right. As Skylar, a paramedic, put it, helping people is an inherent quality in PSP:

> It's in our nature. [...] We had a passion for helping people and to providing medicine. So then to sit there and just not do anything when somebody's having a medical emergency just feels so wrong and against everything that got you into the job. (Skylar, paramedic)

As in situations where PSP are compelled to provide treatment that proves to be harmful or futile, being unable to provide treatment is also distressing because, as they are unable to help others, their ability to act in accordance with their values is compromised.

Others' actions or inaction

Carelessness and laziness

PSP experienced violations of their morals, values, and ethics when they witnessed others doing things that, to them, demonstrated carelessness, laziness, or negligence. In these situations, these individuals might be colleagues in their own organization, health care professionals in other organizations (e.g., hospitals), or trusted authorities who failed to show the requisite care or attention to a duty, a concern, or a patient.

For some PSP, carelessness was frequent and occurred when their colleagues took shortcuts with routine duties to complete them faster. This was particularly the case for logistics technicians like Frank and James, whose role requires checking equipment and preparing emergency vehicles for the road:

> As you're doing your job, [...] you're basically running a grocery list of items that you need to replenish [...]. If I see something that's missing in a cabinet that somebody else previously tagged, even though it wasn't used and it's not my fault that it wasn't set up properly, I'll actually pop [open] that tag, go in and put what's missing in the truck to make sure that there is ample [stock], because the diligence is on me. [...S]ome people have the mentality "not my tag; I'm not worried about it." So, they're knowingly allowing a truck to go out without something that they know is missing. [...] Just because somebody else made a mistake, patient care shouldn't suffer. [...] [To] me, that's an ethics issue, because if you're not willing to take that extra measure and fix a mistake that you see, and just because it's got somebody else's tag on it, ethically, you're walking away and turning a blind eye. (Frank, logistics technician)

> You know, we're there to support the medic, and yeah, it's kind of the same thing. Everything that you do – I mean, every time that a piece of equipment runs through your hands, me, I'm reminded that it could be used on my family member, it could be used on my daughter. [...] I guess, maybe there are some techs out there who don't really think that way, who'd want to cut corners. [...] When I see people cutting corners, I'm just like, "You don't know the ramifications of that. You know, for you, you just want to get to your break faster or you just want to accomplish your task faster, but you don't know what impact this is going to have on the end user – on the medic, on the patient. (James, logistics technician)

For these PSP, seeing their colleagues not approach their work with the same conscientiousness that they do was distressing, for they emphasized the importance of properly preparing equipment and outfitting vehicles for the road – and the potential consequences of not doing it properly. Personalizing the situation helped PSP gain insight into this possibility. As these participants note, experiences such as these are distressing because one person's choice to not be thorough may have serious consequences for patient care and well-being, as well as for the ability of their paramedic colleagues to properly do their job.

Negligence and neglect

While the above experiences are indicative of carelessness or laziness that might compromise patient care, several PSP were distressed when they witnessed direct acts of negligence or neglect. Julien, a paramedic, shared an experience in which his partner chose to not medicate a patient who was having abdominal pain:

> A patient was having abdominal pain, probably renal colic, he's having kidney stones, he's in pain and [my partner chose to not medicate]. You know, if that's what he wants to do, then it's up to him. And this guy was in pain. He was hurting. [...] So, by the end of the call, I told [my partner] "We should at least put him on the stretcher, at least let him lay down, you know? You know, why didn't you medicate? We should do something for him." And as much as I want to jump in and do something [...] it was his call, so I can suggest as much as I want but at the end of the day it's up to him. (Julien, paramedic)

One paramedic, Henry, described a situation in which he felt that his more senior partner's treatment decision was not the right one for their patient. In this situation, Henry's partner's decision led to an adverse outcome for the patient. Henry felt that he "was not strong enough" to challenge the decision.

> I knew there was a risk [...] but [...] my partner decided [...]. And he was a higher medical authority and I followed his lead, and it was an adverse outcome [for that patient]. So that was very, very hard on me. (Henry, paramedic)

Although Julien and Henry found these situations concerning, both when they occurred and when recounting them years later as part of this study, their deference to their partner hindered their ability to try to influence the situation and do things differently.

Some acts of negligence toward patients occurred during and because of the COVID-19 pandemic. These acts, as PSP experienced them, were usually committed by health care professionals in other organizations. Joan, a paramedic, for example, described witnessing and reporting negligence during one of the waves of COVID-19 while she was working in a long-term care (LTC) setting:

> I saw a lot of negligence. I had to fill [out] so many negligence reports! [...] I saw diabetic patients who had not received their insulin [in] two days, because [LTC] staff were afraid to go into a COVID room. You can't do that! I had to take care of people dying, which I had never done in my whole life! I also had to manage people's PPE breach mistakes, I had to [...] report people who were not doing their job. (Joan, paramedic)

Similar to PMIEs attributed to others' carelessness or laziness, PMIEs attributed to negligence and neglect are also distressing because of the potential or actual consequences these actions have on patients.

Disrespect or a lack of compassion toward others

Finally, another source of PMIEs associated with others' (in)actions were those in which their partner, a colleague, or a leader in the organization failed to treat others with respect or compassion.

In some cases, a colleague's dispassionate attitude was expressed directly to a patient. For example, Eve, a paramedic, was troubled by her partner's attitude toward an elderly patient whose condition, upon arrival, did not appear to be as serious as dispatch had led them to believe:

> We were sent for a lady who has a possibility of a stroke. [...] And me, when I introduce myself, I always say, "So why are we here today?" I don't listen to what dispatch tells me. [The patient said,] "Oh well, I have a pain behind my eye," and I'm like, "Okay." My partner cut me off and he said, "Well, we were told that you were having a stroke, we came lights and sirens..." He was like that [with her]. I turned around and I said, "Shut the **** up," and then I managed the situation. (Eve, paramedic)

The above-mentioned PMIEs occur on the job and are thus associated with the nature of PSP work itself as it pertains to paramedics, communications officials, and logistics technicians. However, as detailed below, these were not the only events that PSP experienced as potentially morally injurious.

ORGANIZATIONAL CULTURE AND CLIMATE

Another source of PMIEs were events associated with, or that arose because of, the organizational culture or climate. These PMIEs include situations where the health or well-being of the PSP was neglected; PSP were silenced or pressured to concede; PSP were affected by toxicity or hostility in the work environment; or PSP were subject to, in their view, unjust discipline or sanctions.

Meso-level PMIEs

Unmet needs or concerns

Several PSP described circumstances in which their health and well-being needs went unmet. Paramedics, for instance, identified times when they did not have lunch and bathroom breaks, both as a typical occurrence but especially during COVID-19 lockdowns, when pit stops at cafes or restaurants were not possible but requests to return to headquarters to use the facilities were denied because it would disrupt operations. Brenda, a paramedic, said that "a kindergartener has an easier time going to the bathroom than we do" when describing having to use the bathroom while on the road:

> **And during COVID, everything's shut down. So, like, a lot of our service is based on mobile deployment, so a lot of time we're spending is sitting at street corners. During COVID, a lot of facilities, a lot of businesses are closed, and you can't go use the bathroom. [...] So now, to use the bathroom, they have to call their supervisor and get special permission and get booked off or something in order to go use the bathroom. (Brenda, paramedic)**

Further, an insufficient amount of processing time between difficult calls was a frequently cited unmet need and source of distress. Another paramedic, Thea, for example, described feeling stressed when, after a difficult call she attended, she was denied the opportunity to take a break to decompress before her next call. As she described it:

> **[...] the supervisor came up [to me] and said, "We need you to get back out there, because the levels are low. Like, you guys are taking too long at the hospital. You have to go, it's time to go." And I thought, "I need a minute. I have a lot of paperwork, and I'm still kind of stressed." [He said,] "Well, we can talk about that later. We need you back on the road." (Thea, paramedic)**

Oliver, in leadership, discussed a similar phenomenon. He felt that because "operational needs supersede the person's personal needs," PSP are unable to take time between difficult calls to reset their "headspace":

> **So basically, if [communications] calls you, it's, like, "Okay, [...] we need coverage here. We need you to go here." It's, like, "Well, hang on a second. Like, we need a few minutes to, you know, get our headspace back." And then they jump right [to] "Well, are you refusing to do the call?" Like, it becomes an adversary instantly. So, you have no other option but to go to that call. Now you're dragging the last trauma into this one [...]. (Oliver, leadership)**

Silenced or pressured to concede

As well as describing how their needs or concerns went unmet, some PSP also described experiences in which their concerns or complaints were not taken seriously by trusted authorities. PSP described situations in which they were pressured by leadership to rescind their complaints or concerns. This was the case for Camila, a communications official, when she filed a complaint about a co-worker, and was troubled by the response she received from a member of leadership, who said,

> **"Don't worry, someone will talk to him. But [...] do not repeat this to anyone. This would reflect very badly on the Service, and maybe yourself." Reflecting on this, she said, "[at the time] I could not believe my ears. [...] And I don't believe in being made to feel like something bad could happen to you if you say the truth about an experience you've had."**

Audrey, in leadership, described a situation in which she was asked to provide expertise on a matter and was subsequently pressured into rescinding her suggestion because superiors did not agree with it. She stood her ground at first but was then subject to:

> **[...] constant day-to-day interactions with my boss trying to force me [to back down], saying, [...] "You're not listening to me. And you're so difficult to work with." It was just constant badgering and bullying from my boss in an attempt to force me to do something that I didn't agree with. (Audrey, leadership)**

Unjust discipline or sanctions

Another type of PMIE that participants mentioned related to times when they felt they were unjustly disciplined or sanctioned by leadership. In their view, the disciplinary response was unjust because they were confident in their decision-making and/or conduct.

Rick, a communications official, said that he has often received "half-trouble, half-kudos" following his decisions, which leaves him feeling like he's being told, as he put it, "Don't do that ever again, but that was fantastic."

Hugh, a paramedic, had similar experiences, and described the following, which he called a "morally questionable time":

> **We did follow what we thought was in our patient's best interest, and then our service came back and said, "You need to do something different." And they told us, "Yeah [...] we understand completely why you did that. However, it's wrong and you should do it this way." So, you know, you get told off the record, "Hey, you did everything right," and then you get told on the record that, "Remember to follow the policies and procedures." (Hugh, paramedic)**

The above examples indicate that PSP were especially frustrated by these disciplinary responses, because they were often accompanied by private praise. This phenomenon of private commendation and public reprimand was reported often and was, to several PSP, indicative of hypocrisy and disingenuousness.

Toxic or hostile environment

Finally, several PSP described PMIEs that arose from toxic or hostile aspects of the work environment. Some were troubled by the derogatory or offensive comments or behaviours that colleagues or leadership have made about other PSP in relation to gender, sexual orientation, and physical appearance.

One troubling example was described by Laura, a paramedic. She described a situation in which a superior did not believe her when she told him that she had her notebook in her breast pocket, and proceeded to touch her to confirm it was there:

> **So, they didn't believe me when I said, "Yes, I have my notebook, which is in my breast pocket." They physically touched into my breast pocket to make sure I had a notebook, you know, instead of just listening to what I had to say. (Laura, paramedic)**

She went on to describe losing trust in that superior as a result of being "disrespected and degraded":

> **It shouldn't have happened in the first place, really, because, obviously, for some reason, you're not trusting us, but that certainly makes me not want to trust you ever again. (Laura, paramedic)**

In other situations, derogatory comments were made about patients who are part of marginalized communities. One such example was mentioned by Anthony, a communications official, who described having "some co-workers that are a little too liberal in their comments with people's genders or, you know, their appearance and things like that."

James, for example, a logistics technician, was disturbed when a colleague in a leadership role made judgemental comments about a patient who was obese:

> **[There] was a member of quasi-management who got a little inappropriate about a bariatric call. And that made me a little bit uncomfortable. [...] You shouldn't be telling stories about it, but you especially shouldn't be sharing your personal judgement or giving graphic details about the physical nature of the patient.**
> **(James, logistics technician)**

Similarly, Oliver, in leadership, described gossip as being pervasive in the work environment. He describes the work environment as being "like a big high school and everybody squawks and starts rumours and talks bad about people." Being in leadership, he has had to advocate for direct reports, which, as we will discuss later, has made them the subject of gossip and demeaning remarks. He added that such an environment has made it difficult for him to confidently advocate for others without worrying about whether it might damage their reputation.

Some PSP suggested that harassment and bullying remained pervasive in the organization; others noted that the derogatory comments that, due to social progress, are no longer acceptable out in the open are now made behind closed doors and in trusted company.

SYSTEMIC ISSUES, SYSTEM FAILURES

Macro-level PMIEs

The third source of PMIEs was the broader health care system that, in their experience, routinely presented challenges for PSP and their patients. For PSP, these system-level issues and failures related to broader aspects of the system such as governance, regulations, service delivery/provision, and workforce distribution and health. In particular, PSP experienced distress in the face of a system that compromises or precludes worker autonomy; puts priorities, policies, and politics at odds with each other; and is chronically under pressure.

Limited control, compromised autonomy

PSP reported that the rules, guidelines, and policies that govern their work, including how they spend their time, frequently limit the degree of control and autonomy that they have. The perceived inflexibility of protocols and procedures make it difficult for PSP to exercise discretion and respond in accordance with what the situation in front of them demands, which may be more nuanced than represented in the associated documentation.

One manifestation of this challenge is in the handling of calls PSP deemed "non-emergencies," in that PSP do not have the authority to deprioritize such calls, refuse service, or educate the caller/the public about the appropriate use of emergency services.

> It's hard: the public is telling you what an emergency is, meanwhile we're the experts at emergencies. It's kinda backwards, and then we're not backed up to say, "This is not an emergency." (Shirley, paramedic)

PSP anticipate or see firsthand the consequences that inappropriate service use can have for people in "real" emergencies, but they are unable to do anything about it:

> Almost half our calls shouldn't be going to the hospital. And at least a quarter of those shouldn't even be calling 911. So now we're tied up on a bull**** call and that means there's no ambulances available in the city to attend to those actual, real calls. [... I want] the ability to say, "No, our services are better used somewhere else." And to me, that's the public, I'm mad at them for abusing the service and abusing our system and putting me in the position where I have to attend to them versus, you know, someone else. (Brenda, paramedic)

> Toothaches, like, no, you don't go to the hospital for a toothache; you call the emergency dentist and you go find them. Like, but we're not allowed to say those things. (Howard, paramedic)

These situations left some PSP feeling more like a "tool" than a professional:

> So, if they give you a Code 4 for that sore toe, well, then you go lights and sirens for that sore toe. You don't have a choice, right? You're just a pawn in the system. You're just a little tool, controlled by everybody else, whether you're controlled by dispatch, whether you're controlled by management, by the patient, by everybody. You're just a tool. That's all you are. You're a transport, you're a treatment, and that's it. (Julien, paramedic)

> There's so many situations [...] where we're just literally a taxi ride. (Brenda, paramedic)

Related to this are situations in which PSP experienced excessive scrutiny of their decision-making. PSP reported that they often must explain or justify their decision-making to superiors or other health care workers (e.g., at the hospital) – people not at the scene. This experience leaves them feeling undermined:

> **Here, constantly, you're always questioned. Base hospital's always [asking], "Well, [why did] you do this?" Or "You know, you're supposed to give nitro every 5 minutes but here you gave it 6 minutes. Can you explain why?" Like, come on! But this is every day, all the time. Our base hospital doesn't want us to be clinicians [...] they want us to be technicians." (Luke, paramedic)**

> **We can do the most delegated medical acts out of any other health care professional next to doctors and yet we are the most tested out of any health care professional, period. We are the most scrutinized and most micromanaged, and it just doesn't leave you the ability to do your job. And you're constantly at odds with everyone above you. (Brenda, paramedic)**

Brenda added that, in addition to decision-making, PSP time and movements were also carefully monitored:

> **They know when we're going pee. They know every second of our day, what we're doing. I feel like the bottom line of [our organization], the bottom line of the [government], is stopping the clock [...] because we have [...] mandates to meet. But we [...] need to have more autonomy to do our job. We need to be able to spend more time on scene if we need to or with our patient, and not, like, "Okay, well, what's the next thing, what's the next thing?" (Brenda, paramedic)**

Competing policies, priorities, and politics

In addition, PSP experience distress when aiming to provide effective patient care in the face of competing policies, priorities, and politics. PSP noted that the mandates, guidelines, and interests of various authorities, which regulate their occupations and to which they are accountable, are often in conflict with PSP values and each other. PSP shared that they often must choose one, and risk displeasing the others:

> **[...] we answer to so many different governing bodies. We answer to the [government], we answer to the base hospital, we answer to the service, we answer to our supervisor, we answer to the patient, we answer to dispatch. And so many times, those are all at odds with each other. So, we have to pick who to listen to, who to follow. And knowing that if this person finds out, they're going to be mad, but at least we're doing what this [other] person wants. (Brenda, paramedic)**

PSP also reported that the organization's commitment to treating patients like customers competes with PSP's commitment to uphold personal and professional standards. The emphasis on a customer service orientation toward patients not only distracts PSP from their primary objective, but it also impedes their ability to speak up if patients are belligerent or disrespectful:

> **[...] we're supposed to be patient care. Patient care means that they have an issue, I have knowledge and solutions, and I will give them that knowledge and solutions to make the best outcome. Like, telling them – you tell them they're a customer, [...] customer is always right. No, no, no, they're not. They gave us a training day years ago [and said] do everything you can to make the customer smile. I'm like, "That is not what we do." (Howard, paramedic)**

> I've had a few patients that are, like, "I don't want a China doctor to take care of me." I guess I've had to kind of bite my tongue on that one just because it is such a customer service thing and, in our profession, or at least our service, if there's a complaint against you, you're kind of at fault. [...] I think that's probably the other, like, moral thing, is a lot of us probably have to bite our tongue on some of the things that we hear from patients. (Ines, paramedic)

In addition, PSP reported that rules and regulations often mandate a permission-based structure that can delay patient treatment or transport. The need to secure permissions often competes with the urgency of the patient's needs, especially in rapidly evolving situations where every minute counts:

> I think it's ridiculous that we have to get permission to do certain things to save someone's life. We're basically trained to a level up here, but we're chopped and held on a leash down here. [...] I've taught doctors how to do resuscitations and then the very next day, I have to call that doc for permission to do the thing I taught him the day before. [And] when seconds matter [...] you don't even bother calling because it's just less time to just drive, and in which case, patient's not getting the best patient care because it's just easier and faster to drive than make a phone call. (Howard, paramedic)

PSP also frequently cited the problem of offload delay as something that postpones patient care. Offload delay occurs when patients arrive at hospital but cannot be transferred to hospital staff due to a shortage of emergency beds. While the patient awaits transfer, which can take hours, they remain on the ambulance stretcher and under the supervision of paramedics who must remain with the patient:

> [...] the service has this stance where they don't want you to treat your patient while you're waiting. Because that's just gonna make the offload delay longer [and] give the nurses a reason to keep you waiting [...]. But then the nurses haven't 100% taken over care, so the patient's basically just sitting on your stretcher in limbo with you. You're not supposed to do anything and sometimes it can be hours and hours and people can be very uncomfortable, especially the elderly, and it's a hard situation [...] specifically during the time I couldn't give morphine. [...] I'll still give them medication if they need it or whatever. I haven't yet had my hand slapped but I just know that it's something that I could get my hand slapped for. That's what really bugs me. (Shirley, paramedic)

Offload delay is a persistent issue, particularly for paramedics, who find themselves caught between their organization's priorities, the hospital's rules, and their commitment to help the patient. At the same time, the issue of offload delay is also indicative of a health care system facing resource constraints, another source of PMIEs for PSP.

Demands on the system

PSP experienced distress when the pervasive pressure on the health care system trickles down and impedes their work as well as the meaning and value that they derive from it. In their experience, this pressure is exacerbated by long-standing underfunding and under-resourcing of emergency and social services. PSP noted that they are often a stop-gap measure, which increases their workload and makes them responsible for duties for which they are untrained, but fulfill in the absence of sufficient services.

PSP reported that under-resourcing was a persistent issue in their own organization, which frequently put available PSP in a position of overwork. For instance, PSP frequently spoke about the distress that arises from the ongoing "no crew available" (NCA) problem, in which 911 calls come in, but there is no available ambulance to respond. NCA represents the pressure put on PSP to return to the road at the soonest possible moment (regardless of their mental or physical readiness), the pressure the system is always under, and the pressure put on working relationships between PSP:

> **[…] it's hard because we're at [NCA] all the time. So that's the [reason for being told], "Get back out there. Get back out there. Get back out there." That's still going on, you know. Like, 12 years later, it's still a thing. It hasn't been fixed no matter how many staff we throw at it, so clearly there's another issue there. (Brenda, paramedic)**

> **[…] we just have to follow the guidelines, the protocols in place, and that takes away from real emergency. And [NCAs in our city] happen quite often; there's no ambulance available. And then there's also the burnout aspect. Like, the paramedics, you feel them on their tone, they're tired, they're being forced to do overtime, you find them irritable […]. And even us, when we're pushed to always answer 911 that are not real emergency, we are pushed to a limit where we are being burned out and tired […]. (Sam, communications official)**

In addition, some PSP noted that chronic sickness and leave-taking among active staff also contributed to overwork. In communications, shift gaps leave a smaller complement of staff to field similar call volumes:

> **[…] we are suffering, since I've worked there, a chronic low staffing level. [Recently] one of the management that brought up the number that says 40% of you are chronically not there; could be short-time period for a day of sickness or long-term period, long-term leave. [… T]hat takes a toll as a workload issue, obviously, because the [government] gives a budget that says, "Hey, as [per] the number of calls, this is the number of employees that should manage this kind of call volume." But they don't consider the chronic of sickness that comes with the job. And so, we are always put in scenario where we're overworked, overtasked with duties. (Sam, communications official)**

Other PSP noted that overwork arose from pressure that regulators put on the organization to maximize every moment of PSP time:

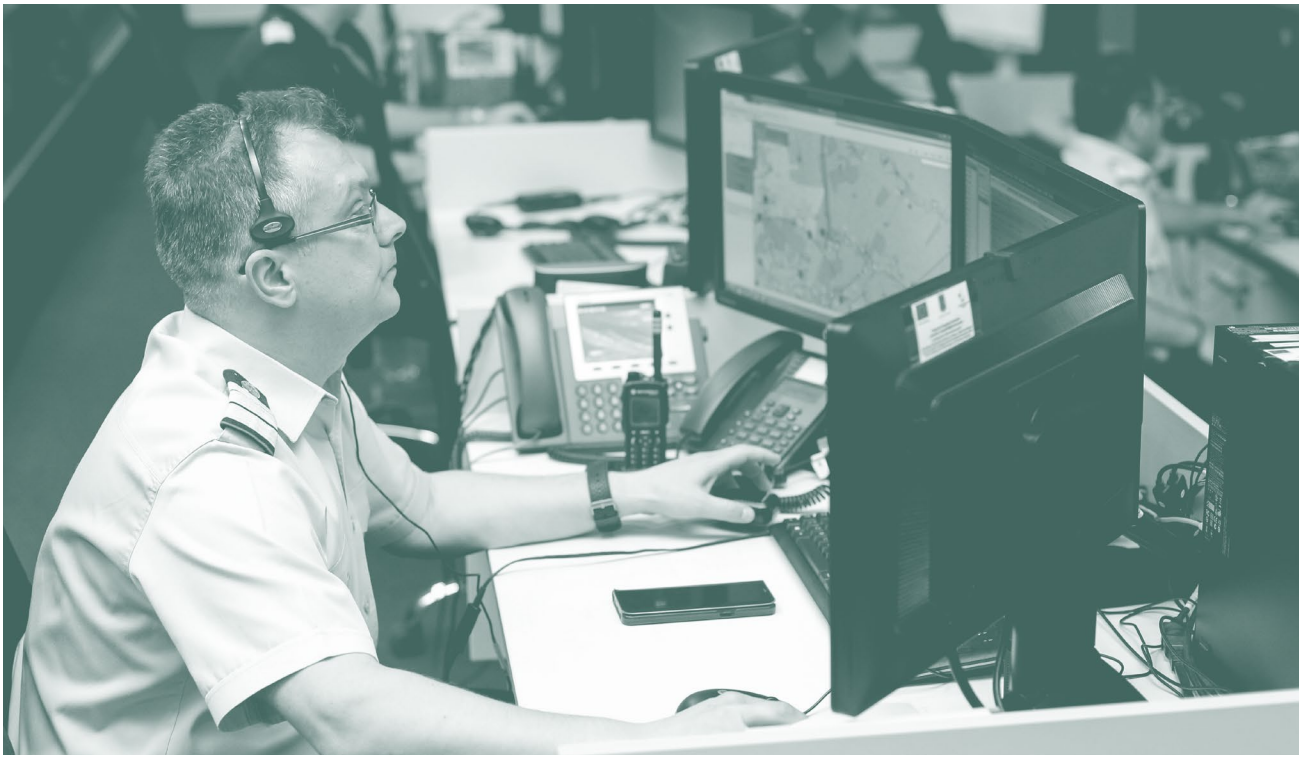
> **There's a political pressure there to have ambulances – and I say ambulances, because that's how they see us, not as humans – put back on the road as soon as possible. And it doesn't matter really what's happened; the goal is to finish a call and get back out there. […] It's a political pressure that we've been playing with for a very long time, that we're understaffed, that we are overused, that we're overworked. And that pressure comes down to our [superiors] to get us back on the road, and that's the goal. (Thea, paramedic)**

Another feature of non-emergency calls that was potentially morally injurious to PSP was that they are an ineffective use of PSP expertise that cannot be ameliorated due to liability risks or gaps in other parts of the health care and social welfare systems (e.g., mental health and addictions services). PSP noted that they spend a significant amount of time on non-emergency calls that come to them even though, as they see it, the call does not warrant an ambulance, the service user either does not know or care about appropriate uses of 911, or they are seeking a human connection to reduce social isolation:

> [...] so often we get called for things we have nothing to do with. If somebody gets punched in the face during an assault, a domestic assault, and say they have a bruise on their face, I don't understand why that involves an ambulance in any way. It's not anything to do with my, you know, at this point, what, 7 years of schooling. It has nothing to do with my $100,000 worth of equipment in the back of the ambulance. I'm literally putting a seatbelt on a person and just driving them to the hospital. (Shirley, paramedic)

> [...] if the public would stop using us like Uber, we would be a little bit more rested to deal with the ones that really need it [...]. People nowadays, they, like, literally [say], "I'm lonely." Oh, okay. Well, that's nice. I'm 911. Like, don't call me for this, you know? (Pam, paramedic)

> [...] you can see the history of when's the last time they called, and you can see, like, there's calls day after day after day. And it's, like, you know that it's a frequent caller. There's also people that – obviously, I don't know if they live alone or they're rejected from society and it's, like, almost a way for them to reach out. And they call us because, obviously, paramedic[s] give their attention. [...] It's an abuse [of the system]. (Sam, communications official)



For PSP, these situations overwhelm the emergency services system and exhaust PSP bandwidth and compassion. In addition to so-called nuisance calls, PSP were troubled by calls to support people experiencing mental health crises and overdoses, as the nature of their needs are frequently beyond PSP scope of practice. Shirley, a paramedic, indicated that paramedics "have no training in mental health at all in school" beyond a few general sessions. Several felt that, because of this lack of detailed and specialized training, emergency services are not the appropriate response to mental health crises. Although troubling, PSP are more understanding toward these calls than "nuisance" calls because they know that options for people in a mental health crisis are limited. Gabriel, a paramedic, noted that as access to services and support in meeting material needs is so critical, what people experiencing mental health crises would likely benefit more from is "a social worker and a sandwich."

Other PSP elaborated upon how the current approach to mental health calls largely fails to get people the help that they need:

> **There's a few regulars of ours who are transgendered and who are often in crisis. [...] I can sympathize with these people who are in complete crisis who have no help or support and often end up in the revolving door of the system, which is go to the hospital, get booted out and then call us again the next day and do the same thing over and over again. [...] It's hard not to feel frustrated when – not at them but at the system. (Rick, communications official)**

> **We're not social workers. We're not therapists, we're not – that's not our job. My job is cardiac arrest, respiratory, cancer, pain control, stuff like that. That's my job and you get put in these situations where you literally have – you know, it's not your job but, you know, there's nobody else to call so this is what you're doing. (Shirley, paramedic)**

PSP also noted that the frequency of mental health calls initially increased with the onset of the COVID-19 pandemic, even though PSP ability to respond to them did not change:

> **I would definitely say, over the last year, we've started to see a significant increase in mental health calls, and 911 is not the appropriate resource for people in the community who are, you know, suffering more than they would outside of the pandemic. And it's just – it's overwhelming our system, right? There needs to be better community resources, even in a pandemic, for people, than calling 911. (Mariana, communications official)**

Although these persistent system pressures are distressing for PSP, many interpret these problems as largely out of their control. Many feel there is little they can do to effect change. In the next section, we explore how repeated exposure to these PMIEs produces feelings of helplessness and powerlessness, a sense of resignation, adverse professional outcomes, and a compromised sense of self.

MAKING SENSE OF PMIES

Key takeaways

PMIEs transgress the value that PSP place on helpfulness, integrity, fairness, helping others, and the "do no harm" principle:

- Anger, frustration, helplessness, and resignation were the most commonly experienced emotional reactions to PMIEs.
- Low morale and compromised performance were the most commonly expressed adverse professional outcomes experienced by PSP.
- Individual-level changes, such as an eroded sense of self and distrust in humanity, were experienced by a small subset of participants.

In addition to exploring the types of events that PSP identify as PMIEs, and the circumstances in which these events occurred, this study also considered how PSP interpret and make sense of these events. What morals, values, or ethical principles do these events violate, and why? What about these events is troubling, at the moral and ethical level? And how do PSP understand the moral and ethical implications of these events?

These events are distressing because they make it difficult for PSP to uphold their moral code or act in accordance with the values or ethical principles that guide them in their work. For PSP, PMIEs threaten or transgress the value that, as outlined earlier, PSP place on care, kindness, compassion, integrity, fairness, helping others, and the "do no harm" principle. PSP's interpretations of the moral and ethical implications of the event are attributable to one of three explanatory categories: PSP felt they had no choice; it broke the trust that PSP had in leadership or the organization as a whole; or it produced or intensified inner conflict.

PSP felt they had no choice

One interpretation PSP had for why these events were morally distressing was that, even though they knew an action or treatment was not appropriate or beneficial, they felt they had no choice but to do things "by the book" and comply. PSP often struggle to reconcile institutional decisions, operating guidelines, and health care policy with what they believe ought to be done in a situation. Further, PSP are often in a position in which they consequently bear witness to the adverse outcome that that compliance has for their patient, which compounds their distress.

For example, Brenda, the paramedic who was distressed by having to immobilize an elderly fall patient, reflected that:

> **This was one protocol that didn't allow for that leeway, and again, based on my clinical judgement, this was wrong. [...]This patient would have been better off if I hadn't have gone [there]. [...] My protocols made this patient worse. [...] I still have a lot of troubles with that [experience]. (Brenda, paramedic)**

Grant, another paramedic, in reflecting on a call in which he had to resuscitate a patient who was unlikely to recover, said even though the right thing to do would have been to terminate resuscitation, established protocol did not allow for it:

> **I felt not comfortable whatsoever because there was, like, there's no benefit. It was just best to kind of leave him be and let family have their wish and let him have his final wish but, unfortunately, we were just stuck between a rock and a hard place, and we just had to proceed. (Grant, paramedic)**

Trust is broken

Another explanation that PSP had for what was morally distressing or ethically concerning about the types of events that they shared is that events undermined the trust they place in leadership. PSP, like workers in other sectors, depend on the organization and its leadership for stability and consistency and they trust that leadership will protect them and uphold espoused values[55]. However, when PSP experience or are exposed to situations that contravene those expectations, or put them in harm's way, the trust they place in authority figures and/or the organization is broken.

Thea, a paramedic, lost trust in the organization after her request for workplace accommodation was questioned and ultimately denied by superiors. She wanted to appeal but she relented in the face of intimidation and bullying by leadership. The experience prompted a critical re-evaluation of her view of the organization:

> **You think that they're going to be a good parent and do the right thing, but they're not. The organization is not here for us, to support us. [...] Eventually, I had to drop it. At that point, I flipped from, "Oh, your supervisors know what's best, what's the right thing," to "**** you guys." [That experience] represented a big turning point of my morals and my view of an organization that says, "We're going to take care of you. We care about your mental health. We care about your well-being. We care about your health and safety. We care about you coming forward." Blah, blah, blah, blah. It's not true. [...] Even though they've done training and things are supposed to be changing, it's still quite a culture of bullying and harassment and fear. (Thea, paramedic)**

For Thea, this experience was a pivotal moment, which revealed a contradiction between the organization's portrayal of itself as supportive and the way it handles requests for support in reality.

Brenda, also a paramedic, reflected on the insufficient processing and break time that paramedics, in particular, have between calls. Many PSP, as articulated earlier, shared that time between calls was a persistent unmet need and an unresolved problem in their organization. Brenda was troubled knowing that, for leadership, the "bottom line" – namely, adhering to government-mandated performance metrics – supersedes PSP well-being. For her, this indicated that the organization has turned its back on PSP and it has produced a dehumanizing effect:

> **We don't matter. We're not human. That's how this profession has made me feel; disrespected, and that I don't matter. [...] They don't care about us because, if they did, they would change. They would change our system. But they don't, because what matters is their bottom line. (Brenda, paramedic)**

Inner conflict

As discussed earlier, PSP are frequently placed in situations in which their morals, values, and ethics are in conflict with established policies and procedures. For many, being caught between these two positions produced a persistent sense of inner conflict. In these circumstances, for example, PSP are put in a position in which they have to choose to adhere to a policy but put patient care or safety at risk, or adhere to their values and do what is in the best interest of the patient but risk professional consequences. For many, being caught between these two positions produced a persistent sense of inner conflict:

> **I am basically being forced to [decide]: do I want to potentially risk my income and risk my job [by doing] good patient care [and] maybe prevent somebody from getting killed or [...] dying because of a medical issue? That's the choice I get to make frequently. Like, that's not a good position to be in. (Howard, paramedic)**

For Jack, a paramedic, situations like these prompted him to question his compliance with policy. He wondered why he could not simply defy policy in order to provide optimal patient care:

> **Why can't I be one of the people that doesn't give a **** about policy and just did what was quote unquote right? And that's where that kind of second-guessing comes into play for myself. "Why didn't you just do it?" (Jack, paramedic)**

Many PSP struggle to reconcile institutional decisions and policies with what they believe ought to have been done, especially when there are consequences for patient care or safety. However, there are specific circumstances, as well as professional characteristics, that do make it possible for PSP to act in accordance with their values, and to exercise autonomy; these will be discussed later in this report.

IMPACTS OF PMIES

Key takeaways

Adverse mental and physical health outcomes were frequently reported by PSP.

Mental and physical health issues were attributed to the accumulation and combination of stressful situations, PMIEs, and traumatic calls.

Reported impacts included:

- Self-reported diagnoses of PTSD, anxiety disorder, and/or depression;
- Impacts on cognition and sleep; and
- Weakened personal and social relationships.

This study also explored the mental and physical health impacts that PSP associate with or experience as a result of PMIEs. Overall, we found that the nature of the work, in general, either alone or alongside a "breaking point" event, was the primary source of negative impacts on physical and mental health, more so than a single PMIE or traumatic experience.

PSP associated their experiences at work with a range of self-identified impacts. These include feelings of anger and frustration; a sense of helplessness and/or resignation; self-reported diagnoses of PTSD, anxiety, and/or depression; difficulties with memory and other cognitive functions (e.g., concentration, decision-making); feeling burned out; sleep disturbances; and weight loss.[i]

In addition, PSP also reported negative impacts on their performance at work and overall morale, as well as negative impacts on their lives outside of work, including their relationships.

Anger and frustration

Regarding the emotional responses that PSP have to specific events at work or their work in general, anger and frustration were the most predominantly cited emotional reactions. Many PSP mentioned that they experienced these emotions concurrently.

For example, as articulated earlier, PSP experienced distress because of repeated allocation to non-emergency and mental health calls. This continual exposure produced anger and frustration in many PSP:

> **By law, we have to take them [people experiencing a mental health crisis] to the hospital. [...] I know that, [but] it creates a lot of frustration, and [...] you know it's not the right place for them. (Joan, paramedic)**

i Participants were not directly asked to disclose if they did or did not have a mental health diagnosis; these disclosures arose organically during interviews.

PSP also felt angry and frustrated by events that occurred during the COVID-19 pandemic, particularly in instances in which their expertise was devalued. For some, these feelings arose because they were asked by the organization to perform duties they deemed asinine and an insult to their expertise:

> They just had me driving around in a stupid little car handing out freezies for 12 hours at a time. [...] I mean, that was frustrating. That was probably the most angry and most upset I've ever been in my job and that's where it actually followed me out of my work. (Isaac, paramedic)

For others, anger and frustration arose because their expertise was sought, but then undermined. Audrey, as noted earlier, was pressured by her superiors to withdraw her suggestion about the direction of a project. This experience sparked anger and frustration that, for her, was new and has persisted:

> I have never been as angry as I am in the last probably year and a half. It's not my personality at all. [...] This anger and frustration is something that is completely new to me, and I don't like it. It's not who I am at the core. [...] I don't want to be angry. I don't want to be frustrated. I don't want to be negative. And that's what I'm dealing with [...]. (Audrey, leadership)

Helplessness and resignation

In addition to anger and frustration, PSP also felt helpless or resigned in the face of these events. Oftentimes, events that produced a feeling of helplessness were those in which PSP lacked autonomy and/or authority, such as not being able to dispatch or reroute crews to the most serious call, or not being able to exercise clinical judgement while on scene.

> When you have a crew driving by a call that's really bad to a call that's less bad, but you're not allowed to redivert the ambulance, you feel a little sick, you know? [...] You feel helpless." (Rebecca, leadership)

> At one point, you just kind of throw up your hands like, "Whatever the ****. Like, okay." But you feel like you're doing things you shouldn't be doing but because it's written down and it's in black and white for our very multicoloured work world, sometimes it's helpless. Like, you can't do anything to change it. (Howard, paramedic)

For some PSP, exposure to these events made them aware – or reminded them – of their powerlessness in the organization or in the broader health care system.

> I have so little voice, so little power [...]. [On] that call, I [had] no solution. Like, there's nothing I can do! (Joan, paramedic)

> And you know that every minute counts when somebody's [vital signs absent], and you're like, "Why are we responding for this [non-emergency] call?" And there's no power for us or supervisor to say, "Okay, I'm going to take liberty to downgrade this call to bump this one out," [... That's] for liability reasons. [...] We have no power. [Put] protocol in place, and just follow it. And that's it; first come, first served. (Sam, communications official)

These events also produced a sense of resignation in PSP. Eroding the will they have for advocating for what's right, some PSP explicitly tied these events to moral injury:

> **[…] when you're talking about moral injury, I feel like, if anything, it's one of those, like, long-term erosions of, like, your willingness to stand up for things, absolutely. Especially in this kind of workplace […] you have to weigh the risks and the benefits for some of the decisions that you make, not only on yourself but on your colleagues and on the patients. And, after a while, I will admit, you just stop caring. (Anthony, communications official)**

> **Sometimes I'm just more tired and I just don't want to deal with all the fallout from fighting for one of these things. […] [I'm] apathetic. (Howard, paramedic)**

Mental and physical health impacts

PSP also shared that PMIEs, traumatic calls, and stress and/or instances of organizational or system-level betrayal produced noticeable mental health impacts, with some having been diagnosed with specific mental health conditions such as PTSD.

Several PSP described experiencing persistent and severe anxiety, resulting in panic attacks for some. For Brenda, a paramedic, a panic attack occurred following years of calls she named as morally distressing:

> **One day, I just – I couldn't do it and I had a panic attack trying to leave the house to go to work, and I just – I couldn't. I said [to myself], "You know what? You don't have to go," and I just broke down. (Brenda, paramedic)**

Similarly, Rick, a communications official, described a traumatic call that pushed his anxiety over the edge:

> **At one point, that one call just – [and] I've taken all sorts of traumatic, what would be objectively horrific traumatic calls – really kind of pushed it over. And I couldn't function. Had a full-blown anxiety, full-blown panic attack on the way into work one night and I just – that was it, I could not deal. (Rick, communications official)**

Some PSP described the work environment itself as being detrimental to mental health, rather than attributing their mental health problems to specific calls or types of calls. Camila, a communications official, described that she "developed severe anxiety from this job to the point where it felt like every day I was having a heart attack." For her, anxiety was tied to supervision practices; she said that constant scrutiny and surveillance on the job instilled a fear of wrongdoing that eroded her confidence in her abilities and decision-making.

Related to this, cognitive impacts were another commonly reported effect of repeated exposure to PMIEs, stress, or traumatic events. Sam, also a communications official, described the mental health impacts of being overtasked in part because of aforementioned short-staffing. He described the work environment as one in which staff get the message that they are to:

[…] just go in full sprint, full speed, and just follow what you've been trained. Because obviously, you are so – you have to work so fast with split-second decision where you're – like […] robotic; bang, bang, bang. Like, task after task after task. (Sam, communications official)

Sam described the impact that came with having to simultaneously take calls and dispatch. The cognitive demand this placed on him "[brought] a lot of mental health issues: burnout, fatigue, anxiety".

Pam, a paramedic, experienced problems remembering and attributed this to her work. She said: "I have a terrible memory, and I didn't use to have a terrible memory. It's getting worse and worse. […] And I 100% think that that's the job." She mentioned that aging is likely a factor but felt that forgetting was a "defence mechanism" she developed in response to "seeing unspeakable things."

Howard, a paramedic who was diagnosed with PTSD, also described cognitive impairment resulting from symptoms associated with PTSD. When trying to recall an event during the interview, he paused: "****, what was the other one that just popped in my head? Oh, I had a good one. I can't remember it now. Oh, I wish I could remember that one. My mind's **** thanks to the PTSD." Howard said that his PTSD is partly a result of recurrent situations in which he was unable to put patient care first, describing the job as a game of "liability reduction" wherein "patient care is not the front end. That's a secondary, third decision."

Performance and morale

The nature of PSP work in general also contributed to adverse professional outcomes, in terms of reduced morale, self-doubt or loss of confidence in their abilities, and impaired or strained relationships with colleagues.

For example, Thea, a paramedic, spoke about a time when her supervisor did not, as agreed, change her and her partner's status to "unavailable" to give them a break and a chance to debrief after a traumatic call. Consequently, they were dispatched out despite not being ready. She said that it had a negative impact on her performance:

> **Was I the best paramedic? No, not – we spoke afterwards, my partner and I. Neither of us remember major details of that. We were not in any sort of state of mind to be providing patient care at that time. (Thea, paramedic)**

Other PSP, particularly communications officials, described feeling overworked and overtasked to the point of impairment. As articulated earlier, Sam described the mental health impacts associated with overwork. He described how it compromises his presence on the call and his ability to perform at his best:

> **[…] we're overworked, overtasked with duties where I find my cognitive abilities are incapable to perform effectively, efficiently, and accurately. Sometimes, you come in that daze where you're just robotic […]. You don't connect with the caller, you cannot assist them. You cannot give the pre-arrival instruction, first-aid instruction. (Sam, communications official)**

For others, issues on the job lowered morale, because they contributed to mistrust of and resentment toward leadership. For example, Oliver, in leadership, described an experience in which his effort to get help for a direct report who was struggling was met with indifference to their situation and demeaning comments about the person. Reflecting on the organization's response, he said:

> **When I brought [it] up [to my superiors], I was vague about it, [but] the jokes started flying […]. And if that's your first input that you're going to give me, is some rude comments or remarks or that kind of thing, then you're probably not the best person for me to share this information with […]. That's pretty troubling. […] I'm trying to protect [that person] as well as the integrity of our profession, and my superiors, who are supposed to protect that person more than I am, have zero interest. So, what does that say about our organization? (Oliver, leadership)**

Social and personal life

PSP also discussed the ways that their profession impacts their lives outside of work. PSP reported bringing work complaints into their home lives, impaired relationships with loved ones, withdrawing from their social lives and/or community involvement, as well as financial impacts. PSP also shared being irritable at home and feeling like their parenting has suffered.

Thea, a paramedic, described that her interest in social activities and her commitment to the community waned:

> **I dropped a bunch of extra things that I had done, volunteer things that I had been active in. […] I will bail on plans with friends. And that has cost me friendships, because I've flaked too many times because I just – I couldn't deal. (Thea, paramedic)**

Additionally, Oliver, in leadership, has a diagnosis of PTSD. When speaking about the impact this has had on him, he shared that his diagnosis of PTSD has impacted his personal life in consequential ways.

> **I have the diagnosis of PTSD and subsequent depression. As a result of, I think, a lot of that, my wife left because […] she didn't want to be a part of it. So, if you ask what I lost, I lost everything. Everything that matters to me. (Oliver, leadership)**

Self-concept and worldview

Several PSP expressed that these events had an impact on their perception of themselves, or who they understand themselves to be as individuals. These PSP experienced an accumulation of events that, for some, reached a "final straw" that resulted in consequences associated with MI.

For example, Brenda described an illuminative experience she had during a guided meditation, which raised her awareness of how profoundly she has been impacted by her experiences:

> **I didn't like who I was becoming and what the system was turning me into. In order for me to live and function in that system, I had to break my morals, and I had to not care in order to survive. And I was terrified about who I was becoming […]. [With mediation, I realized] it was my soul that is broken and that is damaged. And my soul was just saying, "No more, I just can't do this job anymore," from the difficult stuff that I see and that I deal with. But I think I was just also broken by the system, and I was just done. (Brenda, paramedic)**

Pam, a paramedic, was similarly impacted by her work, sharing that:

> **My biggest complaint about [my] profession is the impact it has on me as a person. [...] I definitely feel shut off and I feel like I assume the worst in people, and I'm always looking for what's wrong in people. [...] For me, it's a moral problem [because] it's degraded aspects of me that are human, that connect with other people. (Pam, paramedic)**

These PSP expressed sentiments that indicate that repeated exposure to a combination of PMIEs and traumatic events has eroded their self-concept. In this way, they recognize the existential impact of the job, as they notice and experience changes to themselves as individuals, as well as erosion of their sense of self. Notably, several others indicated that while PMIEs or stressful experiences impact how they feel about themselves in the moment(s) following the event, these experiences do not change them in any long-term sense.

Lastly, on-the-job experiences have a noticeable impact on the worldview of PSP. The situations they encounter, especially those that occur repeatedly, impact their perception of humanity, their tolerance for social problems, and, for some, their patience with the marginalized people who tend to be disproportionately impacted by social problems.

Some PSP noted that their patience for repeat callers, particularly people who use drugs, wears thin:

> **You start to get compassion fatigue. [...] We can be pretty intolerant [of some callers] because we're sick of [being repeatedly called to help them], right? "You overdosed again? What the **** are you calling me for? Like, go die." (Camila, communications official)**

> **You can very, very realistically have a choking child die and you have a good chunk of the service on [a call involving] some sort of opioid [...] amphetamines, cocaine, cough syrup and booze. [...] And then you have the safe injection sites calling us all the time because someone overdosed and then by the time you get there, they're running away. [...] I try to look at it logically. Like, we have limited resources. We have people who have made certain decisions. They're at a certain point that they're being very resource-intensive, and the cost-benefit ratio to the rest of the health care system isn't as beneficial. (Howard, paramedic)**

PSP who shared these sentiments clarified that they are an expression of frustration with being called repeatedly and not their feelings about people who, as articulated earlier, they know are in need. These reduced feelings of sensitivity and empathy, as well as reduced interest in helping people from marginalized communities, may be attributable to compassion fatigue due to repeated exposure and frequent inability to solve these problems.

COPING WITH PMIEs

Key takeaways

PSP adopted a range of techniques and strategies to cope with the combination of stress, PMIEs, and traumatic calls:

- Maintaining a strong work-life balance helped PSP decompress and recharge.
- Rational thinking steered focus away from unhelpful emotional reactions.
- Humour, specifically dark or black humour, enabled PSP to see the lighter side of challenging situations.
- Dissociating or compartmentalizing helped PSP avoid getting too emotionally invested in difficult or stressful experiences.

PSP experienced a range of barriers to engaging in their coping strategies, such as inadequate health benefits, insufficient break time, stigma, and COVID-19 restrictions.

COPING STRATEGIES

PSP described engaging in a variety of supports and strategies to help them cope with potentially traumatic calls and stress. These strategies varied from participant to participant. PSP described the importance of taking time to decompress and recharge from work, spending time with and seeking support from loved ones, and engaging in activities that bring them a sense of enjoyment. Others described the importance of putting emotions aside to think through events rationally or turning to religion or spirituality to support coping. Many shared that they had a mental health professional in place. Further, several PSP described strategies such as compartmentalization or dissociation, substance use, and the occasional or more frequent indulgence in food or alcohol.

We interpreted these strategies as they were described by PSP (positively, negatively, or undifferentiated) and without attempting to categorize them as adaptive or maladaptive. Finally, some PSP specifically described making healthy choices or life changes as having a positive impact on their mental health and well-being. However, it is important to note that PSP do not describe these strategies as being specific to managing PMIEs, but rather in more general terms to help them manage work-related stress.

Maintaining a strong work-life balance

Many PSP described that taking time away from work, either after a difficult call or in general, is critical to staying engaged in the job and maintaining work-life balance. Taking time off helped PSP process events, decompress, and recharge:

> **Sometimes, with the nature of the call, I just need to go home and I need to absorb it for a couple hours – or a couple days – before I start talking about it, because I'm still absorbing the shock of what has just happened. (Ines, paramedic)**

> **The longest I've taken off, I think it was a month, a month and a half because I wasn't okay. But I always take time off in the hopes that I'll be able to come back to work. (Joan, paramedic)**

For PSP, spending time with friends and family helps them cope both with general work-related stress and with PMIEs. Christina, a paramedic, described being back with family after work, combined with self-care, as a way to reconnect to life outside of work:

> **As soon as I get home, I have that shower and I'm back with my family, back with my friends, back in my normal life and I've washed the day away. I know that's kind of cheesy, but it works for me. (Christina, paramedic)**

Relatedly, PSP reported that disconnecting mentally from work was an important coping strategy:

> **I think having, like, a healthy work-life balance has always been really helpful for me. Some people are [...] so in it. I love my job but it's not my life by any means. So, when I'm in my work – like, when I'm at work, I'm at work, but when I'm not at work, I really try not to be at work. (Christina, paramedic)**

Finally, some PSP shared that activities undertaken to support work-life balance reminded them of the meaning in their lives. Joan, a paramedic, found that going to the park helped her reframe difficult events and put them into perspective:

> **I'm going to read in a park [...]. I go there to see that life continues. Because there's nothing more [...] pure, from the point of view that a child [...] you know, when they play, they laugh, they're super happy, and it helps me to [...] make the transition. (Joan, paramedic)**

Humour

Another way of coping with difficult events described by PSP was to introduce levity into the situation through humour. Though there are self-imposed limits and lines drawn on what can and cannot be joked about, the use of "dark" or "black" humour was considered as a sort of therapy by some:

> **You have to joke about it. [...] You still have to see the light side of anything. [...] There's a dark, sick humour that comes out, and I think that's where the therapy is. [...] there's still a limit [...]. I'm not going to joke in front of the family, and I'm not going to mock him as a person, but sometimes you just have to joke about just the situation that they're laying in. (Julien, paramedic)**

> **Sometimes when we deal with difficult calls, the way we cope with it as a culture [is] black humour, right? [...] Obviously, we're going to make some jokes to alleviate the stress. [...] And sometimes we call ourself out, "Oh, maybe that's not okay," but we all get it, right? It's the culture; we're all together at the same place. (Sam, communications official)**

Considered as part of the culture, the use of humour by PSP helps to reduce the potential negative impact of difficult situations they face because of their role. It also serves as an indirect way to share emotional responses to events.

Religion or spirituality

While infrequent, some PSP described religion or spirituality as helpful when coping in the face of challenging situations at work. Gabriel, a paramedic, shared that, "if I do what is right according to my own morals, what I also think agrees with my religious beliefs, then it's clear to me which master I serve."

Similarly, Anthony, a communications official, relies on his spirituality to put difficult events into perspective, and to come to terms with an experience. He said that "spirituality [shows me] the bigger picture, so to speak."

Rational thinking

PSP described the importance of taking a step back from the emotional register of a difficult situation to think through the event rationally. Those who adopted this strategy shared that consciously taking a step back from the situation helped them focus on rational thoughts instead of emotional reactions.

> **But at the same time, I kind of take a step back and I say, "Okay. What's in my control? What isn't in my control? Well, this isn't in my control anymore. What's in my control? Well, I can get this person to the hospital a bit quicker. I can give, you know, the hospital a heads-up that I'm coming with it so that they can maybe be ready for me so they can get [prepared] quicker." [...] My initial [reaction] is usually anger and grumpy, but I'll try and always take a step back and be, like, "Hold on. What's in my control here?" (Ines, paramedic)**

> **[I know] the policy is there for a reason. I just didn't get it in the moment, and it made me angry. So, I gave myself some time to distance myself and then go back and figure it out. [...] I actually go to various different kind of leadership types, if it's a policy issue, to understand it. [But] I try to really distance myself from anything before seeking out the answers, because I know I'm not going to get productive results if I go angry. (Jack, paramedic)**

PSP who engaged in this strategy felt that it was helpful for their mental health, prompting self-reflection and awareness about how they react to the situations they face.

Compartmentalizing, dissociating, or internalizing

Several PSP described mentally disconnecting from a call or event as a way of protecting themselves from the mental health impacts of the job. Mariana, a communications official, noted the importance of depersonalizing callers and making them "just a phone call." She went on to describe that:

> **I have to think like that, and I've learned to really just compartmentalize it and [think], "That was 911-A. The next guy is 911-B." [...] I've just kind of trained my brain, I think, in a way to just [...] completely disconnect from it. Like, I don't want to know what their first names are, I don't want to know what their last names are. I don't want to know what they do for a living. I don't want to know about their lives, because then it makes them more of a person and less of a call, right? (Mariana, communications official)**

Some PSP described managing difficult situations by simply ignoring them. Julien spoke about the need to stay productive to keep his mind off events that may be troubling if he dwelled on them:

> **It may not be the best way and it may not work for others, but I just, I don't want to deal with it. You know, if I get home and I'm stressed, I'm going to cut the grass. I'm going to go play with the dog. I'm going to do – just give me something to do. Take my mind off it and I'm good. I don't want to talk about it. (Julien, paramedic)**

Like Julien, Angela, also a paramedic, said, "I don't cope with those situations. I just – I've just learned to ignore them, I guess. I brush them off."

Substance use

Some PSP reported self-medicating with drugs, alcohol, or food as ways of coping with stress or difficult situations. Several PSP, including Pam, Oliver, and Julien, described using drugs and/or alcohol to avoid or numb their feelings:

> I find I smoke a lot of weed, and I'm sure that that is related to what I do. Because I'm not smoking it to party. It's more like I'm just self-medicating so I can feel numb at the end of the day. (Pam, paramedic)

> I've never been a big drinker because my father was a borderline alcoholic, and I, I mean, I started drinking a lot [...] it wasn't to take away anything; it was just to not feel anything. (Oliver, leadership)

> I joke that I just went to alcohol. And I did. It was part of my life then. It was disgusting. Like, I was drinking a lot. And then, you realize this is stupid, you know? It'll numb it out for the night, but you wake up the next morning and you're still back to where you started. (Julien, paramedic)

Others, like Thea, also a paramedic, said that they "eat [their] feelings." In some cases, this type of self-care involves treating oneself after a difficult call. Some mentioned getting "ice cream or chocolate right after it [to] give that little boost," while for Joan, a paramedic, "No matter what time it is, [...] I'll go and get myself a chilled latte!"

Healthy habits and choices

Many PSP described adopting healthy diet and exercise habits and making healthy choices as critical to coping with the stress and difficult situations that they encounter at work. Camila, a communications official, for example, discussed how important it is to her to maintain a healthy lifestyle:

> [...] learning to say no is one way actually, and prioritize physical fitness is huge. We're very careful with what we eat. We eat a vegetable-based diet. [...] [A] whole foods diet is super important. (Camila, communications official)

While many PSP have been engaging in these types of methods to help them maintain their mental health and well-being, others have made changes to their lifestyles in recognition of unhealthy habits. For instance, Shirley and Sam described the following changes:

> I noticed in December, for instance, like every night I had off, I was drinking, and I was like "Okay, now's a good time to do dry January." So that was awesome, I stopped drinking completely in January [...]. Whereas it was getting to be almost, you know, every day off, almost a bottle of wine. It just kept going up and up and up how much I was drinking. (Shirley, paramedic)

> [...] a long time ago, I used cannabis to alleviate the stress, and I believe[d] it actually helped me sleep better. But after years and years of doing that, I [actually] realized my sleep is ****, so maybe that's not helping. And [my partner and I] made a compromise together [...], "You know what? Let's just stop use cannabis as a way to alleviate my stress. (Sam, communications official)

BARRIERS TO COPING

Even though PSP identified and used a range of coping strategies, they also reported that they faced several barriers that made it difficult to engage in or maintain them.

COVID-19 pandemic

COVID-19 lockdowns and restrictions meant that PSP were unable to engage in many of the activities that they typically engage in to cope with stress such as travelling, spending time with friends or co-workers, playing team sports, going to movies, or going to the gym.

Ines, a paramedic, remarked, "I don't get to travel anymore, [...] that's how I reset a lot of the time, is I take a vacation and I go somewhere."

Grant described the impact of pandemic restrictions on coping, and the frustration that arose as a result:

> **Because, apart from calling people, you can't go to a barbecue. You can't go hang out with people. You can't go to the movies. You can't go to the gym. [...] So where are we supposed to power up again, right? Like, so that's been kind of my biggest frustration with the pandemic. (Grant, paramedic)**

Camila, a communications official, shared a similar sentiment, describing that "[...] if it wasn't for COVID, [I like] to have a rich social life. I think making connections with people, that's very difficult right now. Very difficult."

Inadequate time to decompress between calls

One of the biggest barriers to being able to cope adequately was the fact that PSP often experience barriers to taking a lunch break or are not allowed to take breaks between calls to decompress and process a distressing call or situation. Pam, a paramedic, described a phenomenon of back-to-back calls and cites the organization as not caring about the toll this takes:

> **And then, of course, the call's over. Clean up the stretcher. Go back on the next call. So there's not any time built in to just process what I've just seen [...]. It's the fact every single day I show up and we're understaffed and I'm working 12 hours and I'm – they don't care if I eat or not. They don't assign me a lunch break. They don't care if I have time to decompress between calls. (Pam, paramedic)**

She went on to describe situations where she and her partner requested a break, and were denied one by their supervisor:

> **We'll be pulling into the hospital, and she'll be on the phone with our supe and be, like, "We need half an hour." Like, just straight up, "We need half an hour. Don't put us back in rotation yet." And honestly, sometimes they'll say no. I'm like, "Do you want me in rotation right now? Like, I'm not going to be the best version of me." [They say,] "Well no, levels are low. Get back out there." (Pam, paramedic)**

Inadequate health benefits

Several PSP reported that their ability to cope and maintain their well-being was impeded by paltry health benefits, which they described as limited and insufficient. For instance, Luke, a paramedic, described the financial limits prescribed by his benefits plan and how it limits his access to physical and mental health treatments:

> **[M]y psychologist is actually cheap; he's $150 but, you know, I see him six times and see my massage therapist seven or eight times in the year and I'm done. (Luke, paramedic)**

Pam, also a paramedic, described frustration at the limits placed on mental health benefits, especially considering the nature of the work. She also pointed out that because physical and mental health benefits are pooled together, PSP are often forced to choose between the two.[j]

> **There have been times where [...] I have an injury, and I know I want to talk to somebody for my mental health. And I have to pick, because I can't afford both. [...] I think it's criminal that we ask the people who protect our society to be exposed to these awful, awful things [and then say,] "Here's your cap on your mental health. Deal with it." (Pam, paramedic)**

Stigma

Finally, several participants described an organizational culture that was incompatible with engaging in coping strategies, such as taking time to decompress after difficult calls. As Sam described it, a culture of stigma, in which taking time for oneself is seen as a weakness, was a barrier to coping, and sometimes contributed to potential professional consequences for those who do take time away:

> **[Now,] they say, "Oh, if you guys have any difficult time, you can talk to your supe and step out of the room, you know. If you need 30 minutes extra, go take a breather, walk around, come back." Which is fine, I think that was a good initiative for them. But, honestly, a lot of the employees don't take that chance to actually do that because they are scared to be judged by the peers. (Sam, communications official)**

Some PSP share that, because time off gets logged, some PSP, especially those with less seniority, are hesitant to take time off. Oliver described a situation in which some direct reports did not request time off after a traumatic experience:

> **So, if they would have asked for time off saying, "Listen, this has kind of freaked me out. I need some time off," [...] it would go into that log that, "So-and-so is asking for time off." And then that instantly gets a big casted shadow on their names as "These ones are the ones that can't do a cardiac arrest: they're going to go home sick all the time." And so, people don't do it when they're new, especially when they're new, so they suck that up. (Oliver, leadership)**

While PSP described a range of coping strategies, they also described significant challenges that inhibited their ability to utilize them. While certain coping strategies such as social activities and travel were inhibited by the evolving restrictions associated with the COVID-19 pandemic, other barriers – such as inadequate time between calls, insufficient health benefits, and mental health stigma – were attributed to the organization and its culture.

j Since this study was conducted, the organization has created a distinct benefit category for mental health and increased the amount allocated to it.

THE INFLUENCE OF PROFESSIONAL AND PERSONAL CHARACTERISTICS

Key takeaways

Professional and personal characteristics informed the types of events described as PMIEs:

- Professional characteristics: Logistics technicians were uniquely distressed by colleagues' poor work ethic and by time wastage, which was not reported by communications officials or paramedics; and PSP with longer tenure expressed that they grew comfortable exercising autonomy and courage in the face of PMIEs.
- Identity: Women more frequently reported on-the-job experiences of sexual harassment, sexual assault, and sex-based discrimination from patients, colleagues, and superiors; and they also more frequently reported that calls to help victims or perpetrators of violence were distressing.
- Life experiences: PSP were uniquely affected by PMIEs involving domestic violence and/or children if they themselves were survivors and/or parents.

This study also sought to explore whether and how the personal and professional characteristics of PSP informed their experiences or interpretation of PMIEs. Our findings indicate that the professional characteristics that influence the types of PMIEs described are job function and tenure, and that gender, adverse childhood experiences, and parenting were the most influential personal characteristics.

PROFESSIONAL CHARACTERISTICS

Job function and tenure

Not all PSP experienced the same types of PMIEs. For example, logistics technicians were uniquely distressed by what they see as poor work ethic in their colleagues. As described earlier, poor work ethic, including colleagues cutting corners or taking shortcuts in their work, is seen as distressing due to the perceived potential impact it could have on patient care, as described by Frank below:

> **I don't know what the medic is gonna use that night [or] what kind of scene they'll come on. [...] You know, that truck could be on your door, so just because [a colleague] didn't put all the stuff in there, doesn't mean it's not your responsibility to fix [their] mistake. It's [...] not a team of "Hey, not my problem." (Frank, logistics technician)**

Time wastage and a high amount of idle time seen on the floor were other examples of PMIEs mentioned by logistics technicians. Although these concerns were not shared by paramedics or communications officials, they too were disturbed by wastage, but their concerns centred on the misallocation or misuse of resources. An example of this, as detailed earlier, is the problem of having to potentially bypass "real" emergencies for non-emergencies.

Tenure is another professional characteristic that affects how PSP experience PMIEs and, in particular, how they respond or react to the situation. PSP with longer tenure in the organization or their career tended to report that they felt comfortable exercising courage or autonomy when faced with a PMIE, compared with PSP with shorter tenure.

For others, capitulation toward their circumstances gave way to confidence, which they leveraged to do what they knew was right despite the consequences they may face. Put another way, they are worn down and feel they have nothing to lose. These PSP recognize that when exposed to a PMIE, they take actions now that they would not have taken earlier in their careers. This is well illustrated by Ines:

> **I'm [many] years [in] and I don't care anymore, so if I'm going to – I'm not watching somebody die on my stretcher, so if they need something I'm going to do it if I can't get a bed for them right away, and then I just deal with whatever comes down the chain. (Ines, paramedic)**

The protective effect of tenure is also well represented by Christina, a paramedic, who was reflecting on a PMIE that happened at the start of her career: "[Back then,] I just followed what my rules and my policies said. Now, having more experience, I might have taken the slap on the hand." This sentiment, however, is not commonly shared among PSP. As noted earlier, some felt helpless and retreated while others complied to avoid discipline or sanctions.

PERSONAL CHARACTERISTICS

Identity

This study also explored if identification with one or more under-represented groups influenced either the types of events that PSP identified as PMIEs, the action taken in response to them, or the meaning or impact of PMIEs.

Regarding sex and gender, most female PSP shared that they experienced one or more forms of sex-based discrimination, violence, or harassment. This included sexist jokes and comments about their appearance, jokes or judgements about their abilities, assumptions about their qualifications or authority, and unwanted touching or advancements from colleagues, superiors, and patients. These experiences certainly troubled women and had a negative impact on those who shared them. For example, when describing having her authority as a paramedic questioned by a patient, Thea noted that women's experiences are qualitatively different from men's:

> **Like, I don't think the patient would have reacted to a male that way. I don't think that management would have treated a male that way either. [...] You'll be bullied by patients, you'll be bullied by family members, or intimidated or whatever wording you want to use. I think definitely a woman's experience of that would be totally different than a man's. (Thea, paramedic)**

When it comes to PMIEs, however, even though female PSP described events that violated their morals, values, or ethics, they indicated that they did not interpret or respond differently to these experiences because they are women. One exception, described below, is that calls involving sexual violence or intimate partner violence differently impacted female survivors of childhood sexual trauma.

This study also asked participants who identified as people of colour, a person with a disability, or as 2SLGBTQ+ whether and how their identity informs how they respond to PMIEs or difficult experiences at work. This, however, does not seem to impact their interpretation of events, in that participants who identified with one or more marginalized groups said that it had limited or no relevance to how they perceived or responded to these events. It is worth noting, however, that in our sample only two PSP identified as people of colour, two identified as people with disabilities, and 11 identified as 2SLGBTQ+.

Life experiences

On the other hand, life experiences, including parenting, adverse childhood experiences, and experience with disease or illness, impacted both PSP interpretations of PMIEs and PSP perceptions of their work in general.

Life experience in the form of adverse childhood experiences informed PSP interpretations and responses to PMIEs. Certainly, adverse childhood experiences intersect with sex and gender, in that PSP who identified as survivors of childhood sexual trauma were reticent toward these types of calls in a different way than male PSP were. For example, Skylar shared the following about having to respond to a sexual assault call:

> **There was a lot that was really, really painful about that call, but then it also really struck home, just because I also went through a sexual assault when I was a young child. And so there was just, like, a lot that was really challenging about that call. (Skylar, paramedic)**

Grant, a paramedic, shared that his experience as a survivor of violence informed the way he approaches and reacts to calls involving violence or assault. He reflected that "as a sexual, verbal, physical, emotional abuse survivor, that's definitely impacted a lot of my kind of interaction with patients that either have been assaulted, or [are] assaulters themselves or abuser[s]."

Other PSP described their role as a parent as a life experience that impacts the way they respond or react to difficult calls. For instance, Pam, the mother of a young girl, struggles with calls to treat teenage girls who engage in self-harming behaviours:

> **In terms of difficult calls, ones that I find stay with me and I have a hard time getting rid of is the amount of young girls cutting themselves. I have a daughter, and I'm constantly looking at these 12-, 13-, 14-year-old girls cutting themselves. And it is just – it's hard. It's hard to see that over and over and over again, and come home and look at my little girl and think, [...] "What can I do better to make sure she doesn't get to that?" Those calls I hate, absolutely hate. And, I mean, the second I became a mom, all of them became so much harder. (Pam, paramedic)**

THE ROLE OF PEER SUPPORT

Key takeaways

Formal and informal peer support helped PSP grapple with incident-specific concerns and workplace issues, but it was not sought as a way to process aspects of these issues that are potentially morally injurious.

- Peer support helped PSP feel heard and understood, and affirmed the validity of their concerns and reactions.
- Concerns about confidentiality, the expertise or qualifications of peer supporters, and the overall efficacy of the program made some PSP reluctant to seek peer support.

Finally, the study explored whether and how PSP use informal and formal peer supports to make sense of or cope with PMIEs, as well as their perception of the degree and nature of helpfulness of these supports. As suggested when we discussed coping strategies, PSP use a range of peer, social, and professional supports to help them manage in the face of potentially traumatic or stressful events that occur on the job or in the work environment.

Motivation for seeking support varies from person to person, as do the outcomes individuals are hoping for. Some, for example, are looking to talk through the event logically with someone, others are looking for validation of their feelings and/or decision-making, and others sought company and a distraction. As we will discuss later, many who are reluctant to use the organization's formal peer support program questioned its usefulness and/or the experience of peer supporters.

PRODUCTIVE ELEMENTS OF PEER SUPPORT

Relatability

Because many PSP engage peers to debrief about a specific call or experience, and for verification of their actions or decisions, they appreciate that peers understand the job. Relatability is a quality that enables them to speak freely and honestly and to not have to provide extensive detail to educate the supportive person. For instance, Mariana and Eve, shared the following in regard to the organization's formal peer support program:

> **My neighbour will have no fricking clue what I'm talking about or what I've just gone through and wouldn't understand whatsoever, but peer support, I mean, they're there, they do the job too, right? And so, they understand [...] it can really challenge you. And it can just be – it can be really sad, sometimes, too. And to know that somebody else just understands that, even if they didn't hear that call or experience that call the way that you did. (Mariana, communications official)**

> **I find that when you talk to another paramedic, they understand, they know where you're coming from, and they understand the job [...]. I don't think I'd ever talk to someone who doesn't specialize in post-traumatic stress or OSI or anything because they couldn't understand our job. (Eve, paramedic)**

Relatability was also described in positive terms when PSP discussed their experiences with informal support among their peers:

> So, I think just being in the same environment, just having the same schedule, having the same workload, having the same calls, being exposed to the same thing is help in itself because [...] my wife doesn't get it, my friends don't get it. You don't really understand what it's like unless you're working for the service. So, just quite honestly knowing what it's like is enough. Just being relatable is enough. (James, logistics technician)

Understanding and support

Some PSP appreciated interactions with peers, both formal and informal, because they found their peers to be understanding and appreciated that they were there to be supportive and non-judgemental. Pam and Grant, for instance, both paramedics, described positive informal interactions with colleagues, who also happened to be part of the formal peer support team:

> I've had one [supervisor], over my career, that's particularly great, and he's also [...] with the peer support team. So he has, you know, additional training. And he's just – [...] he'll come toward me, and I'm putting sunglasses on already trying to stop the tears. I don't know what it is. He just – he's one of those guys that just – I just vomit emotion all over him. (Pam, paramedic)

> My friend helped [...] I know he's a recent member in the peer support team and he's also a good friend. So, what I appreciated was he had the peer support background, the training, the access to the information [...]. I thought I could be very honest with him, being friends with him, and that knowing that what I got to share with him he would listen, provide support. And he provided it, and it was definitely judgement-free, which I appreciate. (Grant, paramedic)

Several PSP described positive experiences of simply being able to vent to someone who understands the nature of the work. Rick, a communications official, described reaching out to peer support right after a distressing call:

> It was the nightshift [...]. We went for a walk around the neighbourhood and just chatted [...]. I was distraught, I was crying [...]. We didn't talk necessarily about the call when we went for that walk. We just walked around the neighbourhood. He just – he was great; he just listened. Listened to me rant. And that allowed me to keep going that shift and afterwards, too. (Rick, communications official)

Debriefing and validation

Others mentioned seeking and appreciating debriefing as well as receiving validation from peers, both formally and informally, regarding their feelings and/or decision-making. One participant commented on a specific interaction with a member of the peer support team after having to instruct an uninjured 911 caller to take a course of action that could have been life-saving for the injured person but traumatic for the caller:

> She basically told me, "You did everything that you could. You were, you know, kind. You weren't yelling at him, you weren't swearing, you weren't being rude. You were kind, but you were being firm, and you were directing him to do what he needed to do." And yeah, and then she's basically the one who kind of, like, helped me flip my train of thought from, "I've just destroyed a man's life and traumatized him forever" to "I gave him the opportunity to do everything that he could." So, it was helpful. And I don't think that I would have been able to change that kind of thought pattern that I had if I hadn't have reached out to her. (Mariana, communications official)

Other PSP described informal interactions with their peers to be helpful for support with stress, general frustrations about work, and debriefing after difficult calls. Brenda, a paramedic, described leaning on her partner for support and validation, saying, "I talked to my other partner about it, and he was, like, 'You know you did everything right.'"

Similarly, Joan, also a paramedic, spoke about finding comfort in informal interactions with peers, where they can discuss and debrief specifically about the medical or decision-making aspects of the situation:

> **Then, afterwards, if I'm going to talk about it from the medical perspective, because there, you obviously know, I always go like "Ah! Should I have done that? Should I have not done that!" So… They'll help me reassess my medical decisions. (Joan, paramedic)**

Others spoke more broadly about the importance and comfort of opening up to peers. For instance, Elisa, a paramedic, mentioned, "I think everyone kind of shares the same kind of need for an outlet, and I know for myself those outlets are best with my peers."

Finally, several PSP also appreciated the choice and immediacy offered by the organization's formal peer support program. Those who shared this view noted that being able to connect with the person they thought would be most able to support them and often on very short notice were important features of the program that increased their receptiveness to it.

UNPRODUCTIVE EXPERIENCES

Some PSP who had engaged the formal peer support program shared that they had had unproductive experiences with it. For some, the approach or response of the peer supporter was not appropriate given what they were going through. Some felt that rather than providing a space for honesty and true emotions, peer support focused too heavily on positivity, which had an invalidating effect on the peer.

Rebecca, now in leadership, recalled seeking peer support during her time in communications. She said that the peer supporter's response didn't align with the gravity of her experience and, consequently, wasn't what she needed from them in that moment:

> **I'm sure they meant well, but for me it was just toxic positivity. And I understand that process but it's not – I don't need sunshine and rainbows after delivering a dead baby. One of my colleagues said it best, that all she wanted was someone to sit with her in the poop and not complain about the smell. [But] they just wanted me to stop […] being where I was, and I was still where I was, so it didn't work for me. (Rebecca, leadership)**

Others felt that peer supporters were not actually supportive, with some reporting that peer supporters minimized the significance of their trauma or experience. For instance, one participant described a situation in which he felt that his experience of trauma was invalidated by the peer supporter:

> **Well, there was one peer support person who I tried to use at one point, and they said […], "Oh, it's too soon for you to be traumatized by these calls. It's too – you're too new." […] And I was, like, "What? Excuse me?" So that really kind of – I just got thrown right off. So, obviously, I haven't used this person since and – but yeah, that really kind of […] switched for me being […] whatever I was to just being angry. And I don't get angry, very rarely, and I was, like, "How dare you say this to me? You know, have you listened to what I just dealt with?" (Rick, communications official)**

RELUCTANCE AND BARRIERS TO PEER SUPPORT

In addition to past unproductive experiences, there are several other reasons that make many PSP reluctant to engage with the formal peer support program. They cite lack of anonymity; lack of trust in peer supporters' qualifications, experience, or ability to maintain confidentiality; concern that the mental health of the peer supporter is just as poor as theirs; the belief that they didn't need peer support; not knowing how to access the program; changes to their peer supporter mid-issue; and the rank or tenure of the peer supporter. The reason for hesitation was drawn from direct experiences with the program and in some cases assumptions about the program.

Anonymity and confidentiality

Some of this skepticism regarding the peer support program stems from feelings of not being able to trust their peers and a presumed lack of anonymity. For instance, Jack, in leadership, commented that "as great as the peer support program here is, it isn't terribly anonymous." Similarly, Oliver, also in leadership, mentioned that he's "a very personal [individual] and I don't like to share my personal information with anybody, not knowing the extent that it's going to be used," adding that, in the past, personal information that he has shared has been used against him.

Another participant, Camila, who works as a communications official, described skepticism toward opening up to peers in any capacity at work, including through peer support, due to a lack of trust and the aforementioned culture of gossip:

> **[…] I'm very discreet at work. I learned a long time ago that, to be – like, to be totally honest, you cannot trust anyone there, okay? [It] is a heavy gossip zone. […] So to be honest, no, I do not speak to colleagues or supervisors. I do have a few colleagues that are friends, but that actually still work there, only two. […] I'm still, you know, careful with what I share [and] it would never be at work, it would be on our personal time. (Camila, communications official)**

Qualifications and health of the peer supporter

PSP also reported hesitancy in reaching out to peer supporters due to a lack of confidence in their training. Oliver felt that peer supporters did not receive sufficient training:

> **I don't believe that our staff, although they, you know, they mean so well – but they have little to no training. I mean, basically they're like, "If you want to talk, I'll listen." (Oliver, leadership)**

Another cited concerns about the health of the peer supporter as a barrier to using the peer support program, commenting that:

> **[…] you're just simply talking to another paramedic who, quite frankly, is practically as injured as you are in so many ways. (Camila, communications official)**

Offered in a way that does not encourage uptake

One participant described the way in which peer support is offered to employees to be, in itself, a barrier to engaging with the formal peer support program:

> So it's offered to us now by supervisors, but it's not in a way that anyone would really take up on it. So it's, like, "Oh, are you okay? Do you need peer support?" [...] Not that it's thrown in your face, because they're trying to offer it, but it's also, like, no one does. No one takes it. Like, unless they know that they want to talk about it, like, it's not offered in a way that would – you'd take it up. (Thea, paramedic)

Issues of access

Some PSP cited difficulties in accessing formal peer support. For instance, James, a logistics technician, noted that "[...] it was a little difficult to find peer support especially on the overnights." Similarly, Ava, a communications official, also noted that there may not always be a peer supporter available, and that they may not be physically in the same building, if one needed immediate support:

> [...] sometimes we don't have a peer support member available right away on the floor, depending what members are working or not. Depending what platoon they're on. So, some platoon have peer support members at all times and some only, like, Sundays, and some of them not. So, I wish we had someone in every platoon, like, basically every single day. There are peer support members from – like, on the paramedic side, but we're not paramedics so sometimes what we're going through is a little bit difference and we also need to basically either call them on the phone or we need to go to a different building. (Ava, communications official)

Other issues of access were also noted, including a lack of clarity about where to go, hours of availability, and whether appointments are needed, and the process to book one. James, a logistics technician, described these issues of access:

> I wasn't sure where I was supposed to go. I know there was a room. So, that was a bit difficult to navigate. [...] Yeah, it would have been a little bit easier to just kind of, you know, figure out what I was supposed to do, if I knew a little bit more about the peer support schedule. [...] I don't really know when [the room is] manned and when it's not manned. It kind of says, like, "The peer support today is" and it's left empty. [...] So, that was a little bit annoying. (James, logistics technician)

Lack of continuity

PSP also described a lack of continuity in the peer support program as a frustration with the program. For instance, Thea, a paramedic, described frustration with having to re-explain to a new peer supporter the event that drove her to seek support, because the initial peer "left after two sessions, and then I had to re-explain the whole thing to the next person. And I didn't have as much of a connection with [them] and then I didn't go back after that." For her, that discontinuity contributed to discontinuation of her participation.

Rank or seniority of peer supporter

Some PSP shared hesitancy toward the peer support program because they were more tenured PSP and many of the peer supporters are less tenured PSP. For instance, Julien, a paramedic, who, as discussed earlier, does not like to dwell on calls, disclosed that he tried peer support once, "but it wasn't for me. I just wasn't impressed. I didn't want to talk to somebody else that was junior to me."

Oliver, a member of the leadership team, shared a similar sentiment, which he connected to concerns around confidentiality: "I'm a senior guy [...]. Who am I going to go speak to? [...] It would be like, "Oh, you talked to the [senior guy]? Like, what's his story?" And some would keep it private, and others wouldn't, so I don't have that confidence." He went on to describe the difficulty with addressing this imbalance given the tenure of the staff as a whole:

> **I just found out today, 40% of our workforce has five years or less experience. [...] So, those people who are brand new might be more inclined to [reach out], but anybody who's my age, I'm not going to confide in somebody who's 30 years my junior who's been on the road for five years. It's just, it's – that's not going to compute. (Oliver, leadership)**

Perceived lack of need or desire

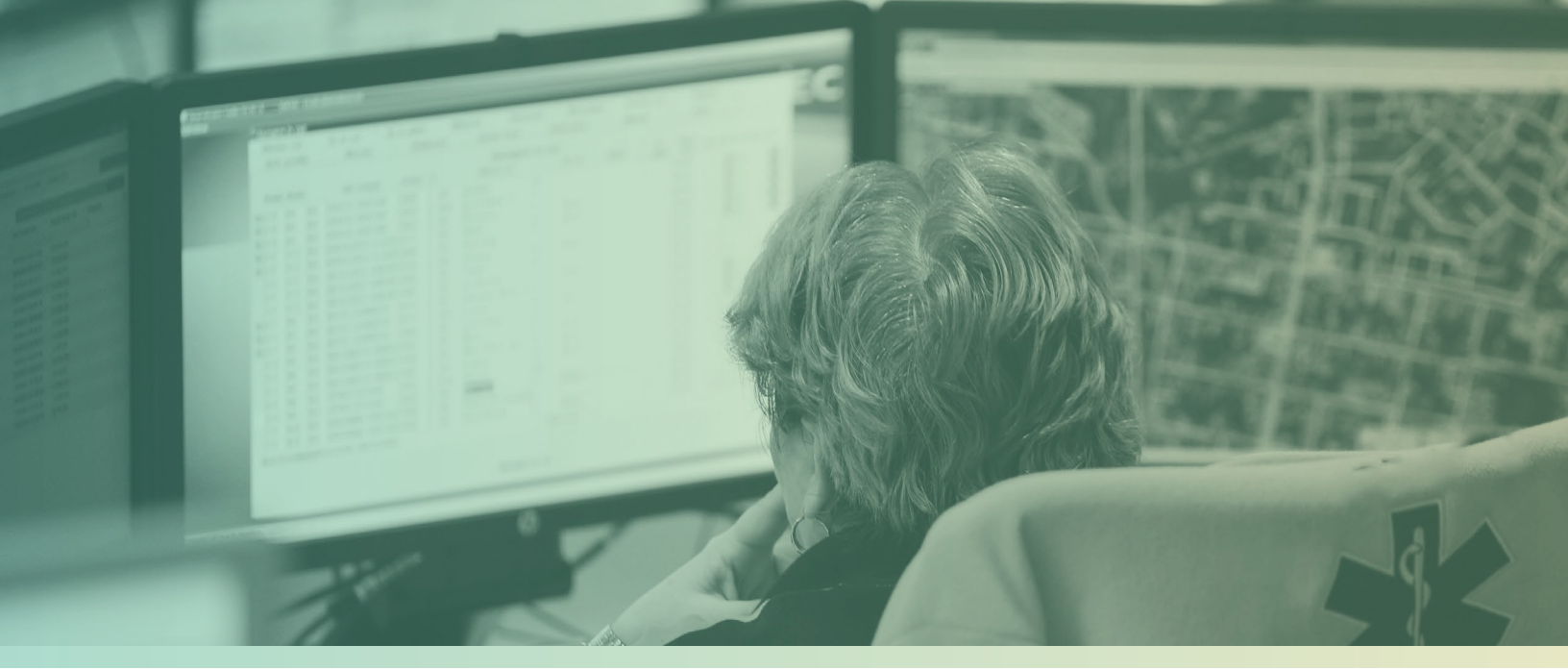
One factor that led some PSP to not utilize the peer support program, was simply not wanting to, or not feeling the need to. For instance, Frank, a logistics technician, felt that he doesn't feel the need for peer support because "I don't need a sounding board."

Julien, a paramedic, on the other hand, wants to move on rather than rehash the details of a potentially traumatizing event. His reasons for not talking to a peer supporter parallel his above-cited remarks about coping through keeping busy:

> **I want to move on. I don't want to get into detail, I don't want to do all this ****, and I don't want to talk about it for the next couple of days. The call is done, let's move on. [...] Yeah, it was a dirty, messy call. Everybody's stressed. That person is without a husband. Yeah, it's terrible, but I got to live my life, too, and I want to move on. I don't want it stuck in my head. I don't want to lose sleep. (Julien, paramedic)**

Although several of the PSP we interviewed currently use or had used the peer support program, their motivation for seeking peers was primarily to debrief and process difficult calls, and to review their decision-making processes. However, there is no evidence from this study to indicate that PSP used either informal peer support or the formal peer support program to discuss or make sense of the moral or ethical component of these situations, even though PSP, as articulated above, do have insight into the moral and ethical register of distressing experiences.

While many PSP have used the formal peer support program, the moral or ethical component of a difficult call(s) is not what compels them to seek peer support nor does this component form the content of the interaction with the formal peer. Rather, as noted, PSP reach out to peer support to help them manage or cope with traumatic calls or experiences and with general job-related stress. Because PSP did not seek out peers for this purpose, nor did they comment on what might motivate them to do so, it is not possible to affirm that peers respond to PMIEs or morally challenging situations, nor what skills or competencies they put into practice to provide this type of support.



DISCUSSION AND IMPLICATIONS

At the micro level, the PMIEs that PSP experienced were due to the very nature of their work and occurred during the performance of work-related duties. PSP experienced these things, including having to provide treatment that harmed patients or that was futile, or being unable to provide treatment at all, specifically because of their work duties. Another salient PMIE that PSP experienced arose from their obligation to treat individuals who have caused harm or whose actions they find reprehensible. PSP fulfill this duty by reminding themselves that the perpetrator is a patient and by intentionally focusing on the person's injuries rather than their actions. This shift in focus allows PSP to follow their duty of care despite any moral opposition or value judgements.

Another source of job-level PMIEs are attributed to others' actions or inactions. These included situations in which others were careless or lazy, demonstrated negligence or neglect, or showed disrespect or a lack of compassion. Overall, the micro-level PMIEs faced by PSP in our study resemble those described by PSP in the literature, which include not acting in a patient's best interest, having to deny family members the opportunity to see their loved ones, and not having the authority to provide certain medication[35, 56]. Notably, PSP did describe situations in which they and/or their partner were physically assaulted or threatened with violence, but did not, generally speaking, associate the threat itself with a violation of their morals, values, or ethics; rather, there were other aspects of the situation – having to treat the perpetrator – that threatened PSP's sense of "what's right," and this formed the potentially morally injurious component of the experience.

Further, PMIEs that originate from meso- and macro-level forces include events caused by or attributed to the organizational culture or climate, and from failures at a systems level. At the organizational level, PMIEs included PSP having unmet needs or concerns, feeling like they were being silenced or pressured to concede, and receiving unjust discipline or sanctions. At a systems level, PSP experienced limited control or autonomy over their work; struggled with competing policies, priorities, and politics; and experienced the consequences of overstressed systems. It is critical to emphasize that these PMIEs often occur in conjunction with role-related PMIEs, in that the intersection of multiple forces contribute to the occurrence of the PMIE but are felt at a specific level.

PSP are exposed to and experience PMIEs specifically originating from their organization, including toxicity in the workplace, ineffective or insufficient communication, micro-aggressions from leadership that were facilitated by a hierarchical structure, and insufficient resources to work according to standards, all of which have been identified in recent studies.[42, 56] More specifically, organizational betrayals arose for PSP in our study when they were denied sufficient time to process or debrief after difficult calls, or when their complaints were not taken seriously or obstructed. Some hypothesized that this situation is problematic for

paramedics in part because it leads to the inability to process traumatic situations.[42] Organizational or institutional betrayal is entangled with MI as an inefficient, non-existent, or callous response by the organization in response to problematic situations breaks the psychological contract between the individual and the organization.[17, 18]

Myriad psychological, behavioural, social, and spiritual consequences may occur following exposure to PMIEs.[4, 32, 35, 56] Complementing the existing literature, our findings indicate that the accumulation of stressful and traumatic situations in combination with a single intense event was not uncommon, and had varying impacts on the PSP who shared their experiences. The emotional reactions most frequently reported by participants were anger, frustration, helplessness, and resignation. In terms of specific mental health problems, PSP self-reported diagnoses of PTSD, anxiety and/or depression, difficulties with memory and other cognitive functions (e.g., concentration, decision-making), feeling burned out, sleep disturbances, problematic substance use, and weight loss. In the MI literature focused on outcomes, these impacts are categorized as secondary symptoms of MI.[16, 32] Other impacts reported by PSP also included negative impacts on job performance and morale, as well as on their lives outside of work. While the impact of PMIEs on performance or morale is not a predominant line of inquiry in the MI literature, likely because of the focus on ex-service members, studies of moral distress have also documented the relationship between moral distress and worker morale in health care professionals.[26]

Notably, however, events did not provoke primary features of MI that have also been reported in the literature, specifically guilt and shame. Such events might contribute to unresolved feelings of guilt and shame, leading, for example, to intrusive thoughts or rumination.[42] Although not expressed by PSP in our study, recent examinations of the MI literature have concluded that there is not always a linear relationship between exposure to PMIEs and primary morally injurious outcomes such as guilt and shame.[29] What did arise in this study is that perceived betrayals, along with other situations, led some PSP to feel as though they "don't matter" and are "not human." The dehumanizing effect of PMIEs on PSP has been identified in other studies of PSP and more recently in studies about the experiences of health care workers during the COVID-19 pandemic.[56]

Although a single, intense event may lead to outcomes associated with MI, this study found that PSP more frequently described an accumulation of PMIEs, in combination with stressful and traumatic experiences, until a "final straw" event led to consequences such as impaired social functioning, self-loathing, and feeling damaged. Notably, all of these outcomes have been associated with or are symptomatic of MI.[16, 43] This accumulation to a final event was, as described in a recent editorial on MI in paramedicine, one in which "difficult experiences (both from work and life) build up, and the 'bucket' containing our emotional life starts to overflow."[42]

A related, crucial finding of this study was that the inverse is also present: PMIEs not only impact how PSP view themselves, but they also impact how PSP view society and humanity, as well as how they interpret the world around them. Specifically, repeated exposure to PMIEs related to social problems like mental illness and addiction, intimate partner violence, and crime and poverty bred cynicism and compromised some participants' capacity for compassion toward those who struggle with these issues. This finding aligns with recent explorations of the spiritual and existential impacts of MI, which determined that exposure to events that violate core beliefs can contribute to a loss of faith in humanity, giving up on or questioning morality, a loss of caring, and fatalism.[20]

This study also contributes insight into the role of professional and personal characteristics on PMIEs. Our findings indicate that job function and tenure inform PSP's experiences of PMIEs, with different PSP groups emphasizing different micro-level PMIEs based on their role. This finding complements results of a previous study reporting differences in the types of traumatic events experienced by various Canadian PSP groups.[13] There also seems to be a positive association between tenure and acting in accordance with one's morals when faced with PMIEs, for the longer-tenured PSP in our study were more likely to do what they believed was right regardless of policy and/or potential consequences.

Life experiences uniquely impact how PSP interpret and respond to PMIEs, due to relatability to the event. Situations involving children seem to have a stronger impact on PSP after they become parents, and situations involving domestic and/or sexual violence appear to have a greater impact on those who are themselves survivors, as they indicated that they can personally relate to these calls. This finding supports recent studies identifying preliminary associations between life experiences, specifically adverse childhood experiences, and the onset of moral injury symptoms later in life for Canadian Armed Forces (CAF) members, Veterans, and PSP.[5, 52] This study could not determine any interaction between identity and PMIEs based on race, disability, and sexual orientation, but we did determine that female gender seems to inform PSP's experiences of events, and the types of events considered potentially morally injurious. In the literature, some authors have identified gender differences in exposure to PMIEs in Veterans;[38] however, more research is needed to examine this relationship, especially in PSP populations.

This study also explored the coping strategies employed by PSP. Alongside humour, healthy habits, and generally keeping busy, PSP sought support from formal and informal peers and from social supports such as friends and spouses. These findings align with those of other studies on coping strategies in the PSP context, which have demonstrated that PSP use dark or black humour to relieve stress for informal debriefings and appraisals following critical incidents.[22] Alongside other studies, this study also found that formalized peer support can enhance a sense of social support, lower distress in help-seekers, and reduce stigma by championing help-seeking.[1, 27, 41, 60] Although peers were an integral source of support in the face of difficult experiences, PSP looked to peers for validation and empathy and not to deliberate the morally or ethically problematic nature of an experience. With regard to formal peer support for PMIEs, our findings are inconclusive regarding whether it is an appropriate mechanism for helping PSP process or manage the impacts of these events, particularly regarding meso- and macro-level events that are specific to the organizational climate and culture. This is because no PSP expressed seeking peer support to discuss organization-specific concerns.

This study is not without limitations, which should be considered when interpreting and using the results. First, this is an exploratory study that solicited participants' subjective identification, experience, and interpretation of events that they believed violated their morals, values, and/or ethics. Second, participants represent three of the many PSP occupations, and were drawn from the same publicly funded PSP organization in an urban centre in Ontario, Canada. As a result, the findings may not be generalizable to other PSP occupations, organizations, or contexts, including other regions, provinces, or territories that may have different populations, service needs, and operational realities. In addition, the study did not have sufficient participation from racialized and 2SLGBTQ+ individuals to identify themes in relation to the experiences they shared. Finally, PSP who participated in the study may have done so due to a particular experience or interest, which should also be considered when interpreting the findings. Despite these limitations, the findings from this study provide important insights and contribute to the growing literature on PMIEs and MI in Canadian PSP and the settings in which they work.

CONCLUSION

In Canada and elsewhere, research on MI continues to grow, yet evidence on its origins, manifestations, and symptomology in occupational contexts remains scant. A suite of scholarship is emerging to establish what PMIEs and MI look like in health care occupations and settings, but there remains a paucity of literature in public safety occupations and settings. This study contributes to this developing literature, drawing on the lived experiences of 38 PSP from emergency services in Ontario, Canada, to identify the types of events that PSP describe and understand as potentially morally injurious; the myriad mental, physical, and cognitive health impacts of these events; how PSP make sense of and cope with them; and the role of peer support in processing PMIEs and managing their effects.

Our findings reveal that PMIEs are in fact a feature of the PSP experience and that MI, as a construct, resonates with many PSP. As PSP identify and describe their experiences, PMIEs originate from multiple contexts and multiple levels specifically because they are striving to make a difference and help people in an organization that has its own culture and climate and while being governed by (and accountable to) the broader health care system. PMIEs – events described and experienced as a violation of the morals, values, or ethics that PSP hold – make it difficult for PSP to act in accordance with their core belief in helpfulness, kindness, honesty, integrity, the "golden rule," and the "do no harm" principle. For PSP, PMIEs interact with and are exacerbated by traumatic experiences and persistent stress. These experiences erode the trust they place in their leadership and in the health care system to protect patients and PSP themselves. They also produce a sense of inner conflict that fosters self-doubt and erodes confidence in decision-making, and they produce feelings of anger, frustration, helplessness, and resignation.

Ultimately, although this study did not endeavour to associate participants' experiences or outcomes with any particular definition of MI, there are notable, discernable points of convergence and divergence between our findings and existing definitions and outcomes of MI. This is unsurprising, given the notable differences between the PSP context and the military and Veteran context in which MI was first conceptualized. Although it was, as noted, important to approach the data without preconceived notions of what did or did not constitute PMIEs or MI in PSP – given how little is known about MI in PSP and the contextual differences between PSP and military and Veteran settings – it is nonetheless pertinent to consider points of overlap and difference, as these support efforts to advance expansions of MI into occupational settings.

For some PSP, it appears that the level from which the events originate – micro, meso, or macro – informs to some degree the impacts that these events have on their well-being. Micro-level events related to the nature of the work, although distressing, appear

not quite as problematic for some PSP, as these were expected as part of the job and thus easier to accept. Our results suggest that PSP may be more strongly distressed by the meso- and macro-level events, which are associated with the organization and the broader health care system, as these were unexpected, and not something they had prepared to face. PSP adopted a range of coping strategies to deal with the impacts of PMIEs, traumatic calls, and role-related and organizational-level stress. We found that, while they do seek the support of their peers in informal and formal settings, moral or ethical issues or discussions are neither the motivation for nor the substance of those conversations.

From here, there are further research and theoretical inquiries to pursue, as what has been demonstrated in this study as well as other recent studies of MI in PSP have only begun to contemplate the origins, expressions, and effects of PMIEs in this population. Further explorations in this emergent area may consider, for example, how the types of events identified as PMIEs and the impacts of these events on PSP well-being might differ if other contexts and settings are taken into account. In addition, this study uncovered compelling findings around the role of tenure in taking action in the face of situations that went against what was right, but further studies are needed to enhance understanding of the interaction between length of service and interpretations and reactions to PMIEs. Crucially, further research on the uses of peer support is needed to determine if peer support is an appropriate mechanism for helping PSP manage the impacts of PMIEs or of moral injury. Future studies may explore if there might in fact be PSP occupations or contexts in which PMIEs and MI are shared between peers, in order to begin to establish the conditions and competencies that make those conversations possible. Finally, intersectional studies of MI in PSP will be critical to understand the unique experiences of diverse PSP, as well as how PMIEs may co-occur with discrimination and/or harassment based on race, ethnicity, religion, sex, gender identity, sexual orientation, ability, or country of origin.

The results of this study clearly demonstrate that the types, interpretations, and impact of PMIEs in PSP overlap in many respects with what has been identified by researchers conducting studies of MI with military and Veteran populations. They also reveal that the PMIEs and effects from PMIEs that PSP experience differ considerably from those articulated in the military and Veteran MI literature. This suggests that the experiences of PSP, in terms of PMIEs and MI, are qualitatively different from those of military and Veteran populations. A more comprehensive picture of the micro-, meso-, and macro-level factors that contribute to PMIEs and symptoms of MI in PSP, across occupations and contexts, is critical to enhancing understanding and developing appropriate interventions to prevent PMIEs and support PSP.

AFTERWORD

by Laryssa Lamrock, National Strategic Advisor, Families

When I first started working in the field of Veteran and Family mental health in 2008, my understanding of moral injury (MI) was that it was one possible component of PTSD, along with the impacts of specific traumatic events, wear and tear over the course of a career, and grief. I remember hearing a speaker at a conference I attended present the concept and I accepted it.

In fact, I later included it in the psycho-educational presentations I delivered for the organization I worked with. However, my exposure to moral injury came long before 2008.

A couple of decades before, someone close to me deployed to the Balkans with the Canadian Armed Forces. Despite their presence as a United Nations peacekeeper, they observed atrocities that, to them, were inexplicable. Humanity's inhumanity. I believe it's the human process to attempt to make sense of what we experience. Perhaps that's exactly part of what makes us human. And, since the event in the Balkans shook this person's core beliefs (moral compass), the result was anger, guilt, and confusion that endured much longer than the tour itself. What I observed as a Family member is they felt helpless with no sense of control over what happened.

Many years later, I married a Veteran with PTSD. He had completed multiple international tours as well as domestic duties that repeatedly exposed him to trauma. By this time, I understood that PTSD had physiological underpinnings as well as being a psychological condition. I was educated on the signs and behaviours associated with the symptoms, but I also knew that hypervigilance and avoidance were not what was keeping him up at night. This time, I felt helpless as I watched guilt, shame, inner conflict, and distress slowly erode his being.

Now, we are starting to gain a better understanding that MI is separate and distinct from PTSD, and that it is complex and unique to each individual. Two people may be present at the same event, yet each may experience and process it differently.

That said, researchers, clinicians, and academics do not yet fully understand MI. Further, this kind of injury is still new and somewhat unclear, especially for the individuals who are at the greatest risk – those on the front lines. Many may be able to appreciate how a military member could be morally injured during service. By its very nature, war challenges morals and personal integrity. However, when it comes to other occupations, such as those in public safety, MI might be harder to understand.

Some may wonder, what is the similarity between the experiences of military members and public safety personnel (PSP)? The military and public safety organizations serve different functions in our societies, after all. While the origin and context of the injury may be different, the fundamental impacts are the same. MI is an injury of the conscience. An injury to one's integrity. We need to learn from that, no matter what the uniform.

This report identifies that most potentially morally injurious events (PMIEs) experienced by PSP appear related to the nature of the job, the organizational culture, or issues with the health care system. Essentially, they signal a loss of trust in the systems and organizations that these professionals initially believed would protect them. Unfortunately, I suspect that, for many PSP, these findings are not a surprise. The swath of the mental health consequences cuts across both their professional and their personal lives, ultimately impacting their Families, as well.*

There is an irony that those who choose professions that tend to draw people of good conscience, integrity, and with strong ethics, and who exude compassion and offer us safety and protection, feel they are not offered the same in return. Most who choose the calling to become PSP implicitly understand the risks associated with the nature of the work. Yet, they still commit to the profession out of desire to help others and make a difference in their communities.

It's when this study sheds light on risk factors that could likely be mitigated, minimized, or prevented with fundamentals such as acknowledgement, education, accountability, and compassion that the distress sets in.

In the words of Maya Angelou, "Do the best you can until you know better. Then when you know better, do better."

As our knowledge of MI progresses, advocates are identifying that the responsibility of mitigating certain risks for moral injury lies with organization-wide approaches. Supports need to be implemented at the organizational, team, and individual levels.** Admittedly, this takes an investment of resources when organizations are already feeling stretched thin. Some may believe this poses a dilemma, as organizations must prioritize how financial resources are allocated. Arguably, the one resource we can't afford to deplete are the people who choose to care for us.

Prevention and support don't need to be complicated or costly, but they do require thoughtful effort, honest conversation, and persistence. Leaders must work toward creating a supportive culture. Organizations must make a commitment to investing in well-being, which may mean reallocating or being creative with resources. PSP need to feel heard and acknowledged. Those doing the listening need to follow through and, above all, be honest.

As we look forward, there is also an opportunity to keep Families in sight, as they have been identified as a source of support for PSP who can provide "a level of emotional support not required with other occupations."*** I experienced this firsthand in supporting my loved ones as they tried to cope with their own moral injuries. There is an unspoken expectation that Families will take on roles of support, advocacy, and caretaking, with minimal education or access to their own supports and services. This comes as the expense of personal health and relationships. It can impact the Family's economic health and the ability of the caretaker to keep up with their jobs and professional responsibilities.

Quite simply, we need to do better.

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APPENDIX A – INTERVIEW QUESTIONS

1. **Can you tell me a bit about yourself? What led you to work at the [name of organization]?**
   - What do you value about your role?

2. **Most people have some kind of moral code that guides them – principles that they uphold or believe in, or values that guide their conduct or behaviour. What would you say are your "core values" or beliefs?**
   - Have these changed over time? Can you tell me more about that?

3. **In your work, have you encountered situations that have gone against your "moral code," values, or personal beliefs? This can be before or during COVID-19.**
   - What happened? When?
   - What did you do when you were in that position? What was your reason for making that decision?
   - What about this was troubling or problematic?

4. **Can you tell me how or why you think these things happen/ed?**

5. **Let's focus on one or two experiences that impacts/ impacted you the most, or that you think is most relevant in relation to moral or ethical challenges. With that in mind, can you share with me what types of emotions, images, thoughts, or physical reactions you feel/felt when you think/thought about it?**
   - How do these emotions affect you?
   - Have these events changed how you think about yourself or who you are as a person?

6. **[If no to Q3] Why do you think you might not have experienced events that are against your moral code or beliefs? What do you think prevents it?**

7. **Can you share with me how you cope/coped with difficult situations on the job?**
   - Was it helpful? Why/why not?

8. **Do/did you talk to a peer or supervisor?**
   - How did they respond? What did they do or say?
   - What did they do that was helpful? What was unhelpful?
   - Is there something that you would have liked to try or access but that wasn't available?

9. **Can we talk about your experience as [insert role] during COVID-19? How has the pandemic impacted your work?**
   - Have you found that you encounter more morally difficult situations than before the pandemic? Can you describe these for me? What do you think might contribute to this?
   - How, if at all, has the pandemic challenged your morals or beliefs?

10. **[If they identify with one or more equity-seeking groups] What are your thoughts on when, how, or how often your identity informs your experience of these events?**
    - Are there other aspects of your identity/life experience that inform/ed your experience of these events?

11. **Are there aspects of your experience that we haven't talked about but that you think are significant?**

The work of the Atlas Institute for Veterans and Families is made possible thanks to funding from Veterans Affairs Canada.

Funded by Veterans Affairs Canada
Financé par Anciens Combattants Canada

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