The Newfoundland and Labrador Correctional Worker Health and Well-Being Study

Prepared by:

Rosemary Ricciardelli, PhD Memorial University of Newfoundland

Laura McKendy, PhD Memorial University of Newfoundland

> Tamara L. Taillieu, PhD University of Manitoba

Maryam Ghodrati, PhD Memorial University of Newfoundland

Matthew S. Johnston, PhD Memorial University of Newfoundland

Ryan Coulling, PhD Memorial University of Newfoundland

> R. Nicholas Carleton, PhD University of Regina

Tracie O. Afifi, PhD University of Manitoba The current report and the content contained herein is provided for use by Newfoundland and Labrador Correctional Services (and Public Safety) and WorkplaceNL. The work has not yet been independently peer-reviewed yet.

We look forward to continued work with Correctional Services of Newfoundland and Labrador, NAPE, and WorkplaceNL as we all strive toward optimizing employee well-being and positively informing worker mental health into the future. Additional thanks to Brittany Bennett, Zara Matthews, Stephen Czarnuch, and Elizabeth Andres.

Table of Contents

List of Tables4
Executive Summary
Introduction9
Methodology14
Results
Participant Information17
Mental Health Symptoms Disorders
Comments on Mental Health Disorders23
Suicidal Symptomology24
Comments on Suicide
Potentially Psychologically Traumatic Event Exposure27
Comments on Potentially Traumatic Events
Other Types of Events
Comments on Events
Correctional Events
Social Impacts
Support Network
Sense of Team40
Outlook
Changes to Improve Mental Health44
Discussion46
References

List of Tables

Table 1. Sample Demographic Information	17
Table 2. Mean Scores on Mental Health Disorder Screening Measures	21
Table 3. Percentage of Positive Screens for Mental Health Disorders on Self-Report Measures	22
Table 4. Prevalence of Lifetime and Past-Year Suicide Behaviours	24
Table 5. Prevalence of Potentially Psychologically Traumatic Event (PPTE) Exposure Types	28
Table 6. Prevalence of Worst/Most Distressing Potentially Psychologically Traumatic Event	
(PPTE) Exposure Types	29
Table 7. Prevalence of Correctional Traumatic Event Exposures	35

Executive Summary

- The mental health and well-being survey was completed by Correctional Workers (CWs) in the province of Newfoundland and Labrador in 2019. In total, 102 participants logged into the survey, but 6 did not respond to any of the questions; therefore, the preliminary analytic sample consisted of 96 participants. Operational (Institutional) participants accounted for 70.6% of participants. Other participant groups included: Administrative (Institutional) 12.7%, Operational (Community) 7.8%, Administrative (Community) 2.0%, and Administrative (National/Regional Headquarters) 1.0%. Complete case analyses were used; therefore, the sample size for each analysis varied based on the number of participants who had valid responses for the items in each section of the survey.
- Participants reported an average of 12.24 (median = 10.00) years of service in correctional services. Many participants (48.7%) screened positive for one or more mental health disorders based on established self-reported symptom screening tools. Overall, CWs screened positive for Posttraumatic Stress Disorder (PTSD; 19.7%), Major Depressive Disorder (MDD; 24.6%), Generalized Anxiety Disorder (GAD; 16.9%), Panic Disorder (PD; 11.9%), and Alcohol Use Disorder (AUD; 6.3%). Many CWs (24.2%) reported having seriously considered suicide at some point in their life.
- Participants reported being exposed to an average of 9.62 different types of potentially psychologically traumatic events (PPTEs). The most commonly reported PPTE exposure types (i.e., reported at least one exposure) were physical assault (87.2%), sudden violent death (85.7%), assault with a weapon (78.6%), and sudden accidental death (77.4%).
- Participants reported several PPTE specific to correctional workplaces. The two most common of these incidents were being 1) directly threatened or been the subject of

abusive language from an inmate/client (98.5%) and 2) being witness to or involved in de-escalating an inmate/client in mental health crisis (90.8%). Other very common responses included at least one exposure to a use of force situation (84.6%), witnessing a completed or attempted suicide (84.4%), and witnessing a PPTE that the questions did not describe (80%).

- Participants identified several workplace operational factors that negatively impacted mental health, as well as perceptions of physical and psychological safety; for example, feeling insecure about PPTEs or feeling that institutional or supervision structures were unsafe or ineffective. Mental health stigma, job structures (e.g., such as working long hours, overtime), and heavy workload demands combined with worker shortages, also all negatively impacted mental health.
- Participants described how mental health challenges negatively impact their everyday life; for example, experiencing negative emotions, feelings, and mood changes. Participants also described a general belief that workplace supports, or accessibility to such supports, are not always adequate.
- In terms of assessing how correctional work positively or negatively impacts participants' relationships, several participants reported having insufficient time allocated for their family and personal lives, experiencing social disconnection overall, and being unable to separate work from home life, meaning they often brought their work-persona into their home life. Some described a sense of disconnection from their family members and peers because they believe their loved ones do not fully understand or appreciate the nature of their profession. Others believed their workplace helped them form long-lasting friendships and supportive relationships, which in turn became their strong support networks.

- Participants provided varied responses when describing whether they felt part of a team. Many participants believed they were in a positive, supportive team that "has each other's back"; however, some reported conflicting dynamics, such as structural impediments to teamwork (e.g., a casual worker not feeling as included as a permanent worker). Some front-line workers reported feeling they were a part of a team with their co-workers, but not with managers. Some managers reported feeling they were a part of a team with fellow managers, but not with front-line workers.
- Many participants identified other positive aspects of their job and work-life, such as an appreciation for their contributions to public safety and society, gratitude for the financial security the job provides, and growth in interpersonal skills and conflict management.
- Participants documented several suggestions for change in the current work environment that could potentially have a positive impact on mental health, including: changes to their physical working environment (e.g., cleaner facilities); modified labour and schedule structures (e.g., less 'forced' overtime); access to more sick time or unstigmatized 'mental health days'; incentives to keep fit and exercise; pro-social cultural change in their social environment through more appreciation of their work and exercises that build teamwork, rapport, and positive working relations; and more recreational and mental health programming for criminalized persons.
- We note, since this data was collected in 2019, there have been world changing developments (i.e., COVID-19), and adverse events (e.g., death in custody, investigations, criminal charges, death of colleagues). We do not know how these experiences impacted CWs mental health and well-being. We do know that a quick review of, for example, correctional officers' (COs) years of occupational tenure, COs taking early retirement, COs

on leave, COs who left the occupation, etc. or the degree of understaffing will reveal attrition is a problem as is staffing. There is a need for more supports for CW mental health and well-being, and this includes addressing organizational stressors.

• The study results indicate that mental health disorders are prevalent among Newfoundland and Labrador CWs, and that exposure to diverse workplace stressors is frequent and compounding. The results also indicate correctional work has a broad and multi-layered negative impact on mental health and quality of life.

Introduction

Correctional work requires employees to navigate a wide range of stressors that can individually and collectively shape employee physical, social, and mental health (Dowden & Andrews, 2004; Dowden & Tellier, 2004; Ricciardelli, 2019; Ricciardelli & Power, 2020). The rates of mental health disorders appear higher among correctional workers (CWs) than the general population (Austin-Ketch et al. 2012; Lambert, Altheimer, and Hogan 2010; Lambert, Hogan, and Altheimer 2010; Tartaglini and Safran 1997). In Canada, approximately 55% of provincial, territorial, and federal CWs screen positive for at least one mental health disorder (Carleton et al., 2018). The estimate appears much higher than the diagnostic rates for mental health disorders general to the Canadian population (i.e., ~10.1%; Statistics Canada 2018). Researchers have found evidence for individual differences, including personality characteristics, that may be associated with an increased risk for CWs to develop symptoms of Posttraumatic Stress Disorder (PTSD; Kunst 2011; Kunst, Bogaerts, and Winkel 2009) or Major Depressive Disorder (MDD; Sui et al. 2014); however, the most consistent evidence implicates features inherent to correctional work as negatively impacting well-being.

A posttraumatic stress injury (PTSI) refers to a broad array of symptoms that can occur after being exposed to one or more potentially psychologically traumatic events (PPTEs; CIPSRT 2019). An Operational Stress Injury (OSI) refers to a PTSI that can occur following exposure to one or more PPTEs that happen while at work (CIPSRT, 2019; Oliphant, 2016). PTSIs and OSIs involve clinically significant symptoms associated with diagnoses including, but not limited to PTSD, Acute Stress Disorder (ASD), MDD, Panic Disorder, Substance Use Disorders, and chronic pain. The House of Commons Report presented on October 4th 2016 and the National Action Plan on PTSI from 2019 both underscore that Public Safety Personnel (PSP; e.g., border services, CWs, firefighters, paramedics, police, public safety communicators) appear to be at increased risk for PTSIs due to workplace experiences, including PPTE exposures which are the rule, rather than the exception (Oliphant, 2016; Public Safety Canada, 2019). Both government documents also underscore the urgent need for more research with PSP to inform proactive strategies and intervention strategies.

PTSIs impact worker well-being and have considerable organizational implications. Job stressors and burnout can contribute to problems such as absenteeism, low organizational commitment, and issues with job performance (Lambert, Hogan, et al., 2010; Lambert & Paoline, 2008). For example, Lambert, Hogan, and Altheimer (2010) found that employees experiencing burnout are more likely to 1) intend to leave; 2) intend to miss scheduled workdays; and 3) have increased absenteeism and turnover, all of which may exacerbate pressures faced by other worker members. Stress reactions can also lead to withdrawal and distraction, as well as impaired workplace performance and productivity (Brower, 2013).

Researchers have attributed the high prevalence of PTSIs among CWs to occupational stressors including PPTE exposures (Cullen, Link, Wolfe, & Frank, 1985; Grossi & Berg, 1991; Hayes, 1985; Summerlin, Oehme, Stern, & Valentine, 2010; Triplett, Mullings, & Scarborough, 1996, 1999). CWs frequently report PPTE exposures while on duty (e.g., attempted or completed death by suicide; violent situations; vicarious experiences), which appears to negatively impact their mental health (Carleton et al. 2019; Ricciardelli et al. 2020; Ricciardelli and Power 2020; Weinrath 2016). In general, PPTE exposures remain a critical risk factor for the development of mental health disorders (American Psychiatric Association, 2013).

Occupational stressors other than PPTE exposures can also contribute negatively to the well-being of CWs (Carleton, Afifi, et al., 2020; Konyk et al., 2021; Rosemary Ricciardelli,

Czarnuch, Carleton, Gacek, & Shewmake, 2020; Viotti, 2016); for example, factors related to logistical and time structures (e.g., shift work, overtime), workplace conditions (e.g., resource constraints, high workloads, low job autonomy), and workplace social context (e.g., worker relations, perceptions of the employer) (Bourbonnais et al. 2007; Boyd 2011; Martin et al. 2012; Swenson, Waseleski, and Hartl 2008; Viotti 2016). Organizational factors, such as stigma and perceptions of organizational support, can also buffer or exacerbate the impacts of operational stressors (Lerman, Harney, and Sadin 2021; Ricciardelli et al. 2021; Ricciardelli, Carleton, et al. 2020). The available results underscore the important interactions between mental health and each of PPTE exposures, other operational stressors, and organizational stressors (Carleton, Afifi, et al. 2020; Konyk et al. 2021; Ricciardelli, Czarnuch, et al. 2020; Ricciardelli and Carleton 2021), all of which offer important opportunities to help CWs.

Research on CW stress and well-being has typically focused on correctional officers. Community CWs (e.g., probation officers, mental health workers, program officers) may face different job pressures compared to CWs working in institutions; nevertheless, evidence points to important overlaps between occupational stressors, including PPTE exposures and secondary trauma (Norman & Ricciardelli, 2021). For example, community CWs may regularly deal with graphic or disturbing content (e.g., details of offences or victimization), be subject to threats or verbal intimidation, experience client deaths, intervene in mental health situations, be investigated for well intended actions, and experience burnout resulting from the emotional demands of their job (Gayman, Powell, & Bradley, 2018; Lewis, Lewis, & Garby, 2013; Norman & Ricciardelli, 2021). Community CWs may also face organizational factors that contribute to job strain (e.g., high caseloads, negative work cultures, role conflict; Norman and Ricciardelli 2021; RhinebergerDunn and Mack 2019); accordingly, despite seemingly different workplace duties, institutional and community CWs appear at substantial risk for PTSIs.

There are several potential barriers to mitigating stressors and treating PTSIs among CWs. For example, PTSIs among CWs and other PSP may occur gradually (i.e., presenting with increased severity over time) and cumulatively (i.e., impacted by different work events and components) (American Psychiatric Association, 2013; Crawley, 2013), such that CWs may delay treatment-seeking until symptoms become intolerably distressing or impairing (Gurda, 2019). Stigma surrounding mental health challenges and perceptions of occupational norms may also influence treatment-seeking (Gurda 2019; Ricciardelli, Carleton, et al. 2020; Ricciardelli et al. 2021). Occupational norms regulate emotional expressions in correctional contexts, encouraging values such as strength, authority, resilience, and stoicism (Crawley & Crawley, 2008; Crawley, 2004). CWs may feel asking for help indicates weakness and that their mental health is an individual, rather than organizational, responsibility (Gurda, 2019; Johnston, Ricciardelli, & McKendy, 2021). PPTE exposures may also be normalized within correctional workplaces, fuelling arguments involving notions of PPTE desensitization (Carleton, Ricciardelli, et al., 2020; Ricciardelli, Czarnuch, Afifi, et al., 2020). Collectively, barriers to proactive efforts and treatmentseeking may substantially exacerbate mental health challenges (Ricciardelli, Carleton, et al. 2020; Ricciardelli et al. 2021; Stadnyk 2004).

Despite the widespread understanding that PTSIs pose significant concerns for workers, there is an absence of data describing rates of PTSIs among Canadian provincial correctional employees in Newfoundland and Labrador. The absence of data presents a significant barrier to understanding the scope and impact that PTSIs may have on workers, as well as the effectiveness of current efforts to mitigate PTSIs. Empirical insights can inform the development and implementation of appropriate frameworks to promote worker well-being.

In collaboration with the Newfoundland and Labrador Division of Correctional Services (Don Roache was Superintendent of Prisons, Andrew Parsons was Minister of Justice), we undertook the mental health and well-being survey to 1) measure self-reported rates of mental health symptoms among Newfoundland and Labrador CWs; and 2) better understand the interplay between work experiences and well-being. The results can critically inform decisions to support the mental health of provincial CWs in Newfoundland and Labrador by 1) supporting policies and research regarding CW health; and 2) providing cross-sectional information about potential risk and resiliency factors for mental health that can be explored further by future researchers.

Methodology

Provincial CWs in Newfoundland and Labrador were invited to complete an online survey in 2019. The survey included established screening measures for several mental health disorders, as well as questions pertaining to demographics, history of PPTE exposures, PPTE exposures specific to correctional workplaces, and content focused on workplace experiences and well-being. Questions included a mixture of both structured and open-ended response options that allowed participants to elaborate in more depth about their experiences.

Positive screens for mental health disorders were based on self-reported symptoms in reference to established measures and associated cut-off scores. Symptoms were assessed using the following screening tools: the PTSD Check List 5 (PCL-5) (Weathers et al., 2013); the Patient Health Questionnaire (PHQ-9) (Kroenke, Spitzer, & Williams, 2001); the Panic Disorder Symptoms Severity scale, Self-Report (PDSS-SR) (Shear et al., 1997); the Generalized Anxiety Disorder scale (GAD-7) (Spitzer, Kroenke, Williams, & Löwe, 2006); and the Alcohol Use Disorders Identification Test (AUDIT) (Saunders, Aasland, Babor, De La Fuente, & Grant, 1993). Participants were also asked about having been formally diagnosed with other mental health disorders.

Suicidal ideation, planning, and attempts were assessed through a series of yes/no questions. For suicidal ideation, questions included: "have you ever contemplated suicide?" and "has this happened in the past 12 months?" For suicide planning, questions included: "have you ever made a serious plan to attempt suicide?" and "has this happened in the past 12 months?" For suicide attempts, questions included: "have you ever attempted suicide?" and "did this happen in the past 12 months?"

PPTE exposures were assessed using the Life Events Checklist-5 (LEC-5; note that some questions were revised in line with previous PSP research). Participants who experienced at least one LEC-5 event were asked to select a single index PPTE they viewed as the worst PPTE, the most distressing event, or the event that was currently causing the most distress. Participants were asked to rate their past month of symptoms relative to the index PPTE using the PCL-5 items. We also asked participants about the frequency of PPTE exposures specific to correctional workplaces (i.e., events and situations occurring within the context of correctional careers that may cause stress; e.g., situations involving violence).

Informed consent language was approved by the research ethics board at Memorial University of Newfoundland and Labrador and University of Regina and included in the first pages of the survey. Accessing the survey required participants to report having read the provided informed consent language, which detailed the purpose of the survey, the potential benefits and risks, and the estimated time required for completion.

Participants were asked to create a unique login access code referred to as a response ID prior to starting the survey for the first time. The code allowed participants to login into the survey and input survey responses from any computer and allowed them to complete the survey over multiple sittings, if desired. Participant identities were further protected by making the recovery of a lost code impossible; as such, participants who lost their codes and wanted to continue participating would have had to restart the survey.

We collected survey responses using Qualtrics and the data is stored on a secure server. Qualtrics uses Transport Layer Security (TLS) encryption (i.e., HTTPS) technology that protects user information using both server authentication and data encryption. Qualtrics does not transmit to other parties any data recorded during use. Participant responses are each assigned to a nondescript unique ID and their IP address information is removed from the data set and deleted from the server following data collection. Participation is anonymous. In addition, the research assistants are all subject to confidentiality and non-disclosure agreements.

The time to complete the survey was approximately between 45 minutes and 90 minutes; however, there was considerable variability due to survey logic skip patterns. Participants were able to skip sections based on responses to screening questions and associated skip logic; for example, if a participant responded "no" to the question "have you ever been diagnosed with a mental illness," the participant was skipped past the associated subgroup of questions. Completion times would have increased for participants who met the criteria for survey subsections. Variation in the length of responses to open-ended questions also impacted completion times.

Results

Participant Information

There were 102 CWs who started the survey; and, of those, 90 CWs completed the demographic questions at the start of the survey (i.e., 12 persons did not respond to this section of the survey). Of those 12 persons with missing demographic information, 6 responded to the question on occupational category. Complete case analysis was used; therefore, analytic samples included all participants with valid responses on each item included in the analysis. Data were analyzed from a total of 90 to 96 participants (52.2% identified as male; 47.8% as female) who completed at least the demographics items. The average age was 40.63 (median = 41). Participants reported being married or in a common law relationship or remarried (67.4%), single (22.5%), divorced, separated, or widowed (10.1%). Participants reported completing a four year university/college program or higher (24.4%), some post-secondary education, but less than a four year degree (67.9%), or high school or less (7.7%). Participants reported an average 12.24 (median = 10.00) years of service.

Demographics	% (<i>n</i>)
Total Sample	96 (96)
Sex(n=90)	
Female	47.8 (43)
Male	52.2 (47)
Age (<i>n</i> =90)	
24-29	14.4 (13)
30-39	33.3 (30)
40-49	34.4 (31)
50-59	14.4 (13)
60 and older	^
Marital status (n=89)	
Single	22.5 (20)
Married/Common-law/ Remarried	67.4 (60)

Table 1. Sample Demographic Information

Separated/Divorced/ Widowed	10.1 (9)
Race/ethnicity (<i>n</i> =75)	
White	64.7 (66)
Other	8.8 (9)
Education level (<i>n</i> =78)	
High school graduate or less	7.7 (6)
Some post-secondary school	67.9 (53)
University/college degree or higher	24.4 (19)
Years of service (<i>n</i> =90)	
Less than 4 years	18.9 (17)
4 to 9 years	28.9 (26)
10 to 15 years	21.1 (19)
More than 15 years	31.1 (28)
Urban vs rural work location ($n=91$)	
Urban	98.9 (90)
Rural	^
Occupational Group (n=96)	
Operational (Institutional)	70.6 (72)
Operational (Community)	7.8 (8)
Administrative (Institutional)	12.7 (13)
Administrative (Community)	^
Administrative (National/Regional	^
Headquarters)	
Notes ASample size between 1 and 5 so date not presented	

Notes.. ^Sample size between 1 and 5, so data not presented

Symptom Screenings for Mental Health Disorders

Positive Screens for One or More Mental Health Disorders

Nearly half of participants (48.7%) screened positive for one or more mental disorders based on self-reported symptoms (due to substantial amount of missing data on the AUDIT, AUDs were excluded from the computation of the any mental disorder variable). The most common positive screens were for MDD (24.6%) and PTSD (19.7%). Male CWs (30.3%) and female CWs (33.3%) reported a similar prevalence of any mental disorder (excluding AUD). To protect participant confidentiality related to small cell count sizes (i.e., less than 5 participants), we are unable to report other sociodemographic covariates stratified by any mental disorder status. The prevalence of screening positive for any mental disorder (excluding AUD) was 28.9% among Operational (Institutional) CWs. To protect participant confidentiality related to small cell count sizes (i.e., less than 5 mental disorder status).

than 5 participants), we are unable to report the prevalence of screening positive for any mental disorder in other occupational groups.

Positive Screens for PTSD

There were 19.7% of participants who screened positive for PTSD based on self-reported symptoms. The prevalence of screening positive for PTSD was 20.0% among Operational (Institutional) CWs. To protect participant confidentiality related to small cell count sizes (i.e., less than 5 participants), we are unable to report the prevalence of screening positive for PTSD in other occupational groups.

Positive Screens for MDD

There were 24.6% of participants who screened positive for MDD. The prevalence of screening positive for MDD was 20.8% among Operational (Institutional) CWs. To protect participant confidentiality related to small cell count sizes (i.e., less than 5 participants), we are unable to report the prevalence of screening positive for MDD in other occupational groups.

Positive Screens for Generalized Anxiety Disorder (GAD)

There were 16.9% of participants who screened positive for GAD. The prevalence of screening positive for GAD was 15.2% among Operational (Institutional) CWs. To protect participant confidentiality related to small cell count sizes (i.e., less than 5 participants), we are unable to report the prevalence of screening positive for GAD in other occupational groups.

Positive Screens for Panic Disorder (PD)

There were 11.9% of participants who screened positive for PD. The prevalence of screening positive for PD was 12.8% among Operational (Institutional) CWs. To protect participant confidentiality related to small cell count sizes (i.e., less than 5 participants), we are unable to report the prevalence of screening positive for PD in other occupational groups.

Multiple Positive Screens

• There were 36.4% of participants who screened positive for more than one disorder (excluding AUD due too large number of missings on this measure). A substantial minority of participants (30.3%) screened positive for three or more mental disorders (excluding AUD due to large number of missings on this measure).

	п	Mean (SD)	Possible Score Range
PTSD (PCL-5)	66	21.76 (18.58)	0 to 80
MDD (PHQ-9)	60	6.25 (5.75)	0 to 27
GAD (GAD-7)	59	4.88 (4.77)	0 to 21
PD (PDSS-SR)	53	2.53 (4.54)	0 to 28
Alcohol Use Disorder (AUDIT)	32	6.81 (4.86)	0 to 40
Total Sample	96	-	-

Table 2. Mean Scores on Mental Health Disorder Screening Measures

Notes. PTSD=posttraumatic stress disorder; PCL-5=Posttraumatic Stress Disorder Checklist for DSM-5; MDD=Major Depressive Disorder; PHQ-9=Patient Health Questionnaire; GAD=Generalized Anxiety Disorder; GAD-7=Generalized Anxiety Disorder Scale; PD=Panic Disorder; PDSS-SR=Panic Disorder Symptoms Severity Scale, Self-Report; AUD=Alcohol Use Disorder; AUDIT=Alcohol Use Disorders Identification Test; SD=standard deviation.

	% (<i>n</i>)	Established Cut-Off Score*
PTSD (PCL-5) (<i>n</i> =66)	19.7 (13)	>32
MDD (PHQ-9) (<i>n</i> =61)	24.6 (15)	>9
GAD (GAD-7) (<i>n</i> =59)	16.9 (10)	>9
PD (PDSS-SR) (<i>n</i> =59)	11.9 (7)	>7
Alcohol Use Disorder (AUDIT) (<i>n</i> =32)	٨	>15
Any Positive Screen For Any Mental Disorder ¹ ($n=39$) Total Number of Positive Screens ($n=33$)	48.7 (19)	
0	60.6 (20)	
1	٨	
2	^	
3 or More	30.3 (10)	
Total Sample	96 (96)	

Table 3. Percentage of Positive Screens for Mental Health Disorders on Self-Report Measures

¹The any mental disorder and total number of positive screens variables do not include alcohol use disorders due to the large number of missings items on the AUDIT measure in this sample.

Notes. PTSD=posttraumatic stress disorder; PCL-5=Posttraumatic Stress Disorder Checklist for DSM-5; MDD=Major Depressive Disorder; PHQ-9=Patient Health Questionnaire; GAD=Generalized Anxiety Disorder; GAD-7=Generalized Anxiety Disorder Scale; PD=Panic Disorder; PDSS-SR=Panic Disorder Symptoms Severity Scale, Self-Report; AUD=Alcohol Use Disorder; AUDIT=Alcohol Use Disorders Identification Test. Participants were asked to "Please include any other comments you may have about anxiety, mood, or other mental health disorders." Key themes included:

- → Normalization of mental health symptoms: Mental health symptoms may be accepted by participants as being inevitable (e.g., "I always felt that it was normal for people to have anxiety towards certain things and be moody from time to time").
- → Impacts on mood, disposition: Participants reported experiencing negative emotions and feelings such as anxiety, anger, frustration, and irritability (e.g., "Always feel very protective and easily angered").
- → Inadequate support or use of support: Participants described a lack of effective support options (e.g., "I have anxiety however have never been diagnosed by a physician"; "I was off work for a period of six months...I was never told the problem, was given medication...I was never given a diagnosis").

"It's ruining my life. I just want to be normal"

Suicidal Behaviours - Ideation, Planning, Attempts

To protect participant confidentiality related to small cell count sizes (i.e., less than 5 participants), we are unable to report the prevalence of suicidal behaviours by sociodemographic covariates or by occupational groups. Additionally, lifetime suicide attempts and all past-year suicidal behaviours are not reported in order to ensure participant confidentiality.

Ideation

There were 14.7% of participants reported having seriously considered suicide at some point in their life, with a higher percentage for reported by male CWs (32.4%) than female CWs (12.0%).

Planning

There were 12.9% of participants who reported having made a plan to die by suicide at some point in their life.

Attempts

To protect participant confidentiality due to low cell count sizes (i.e., less than 5 participants), we are unable to report on lifetime or past-year suicide attempts in the sample.

Table 4. Prevalence of Lifetime and Past-Year Suicide Behaviours

	% (n)
Lifetime Suicide Behaviours	
Ideation (<i>n</i> =62)	14.7 (15)
Plan (<i>n</i> =62)	12.9 (8)
Attempt (n=62)	А. А.
Past-Year Suicide Behaviours Ideation (<i>n</i> =55)	^

Attempt (n=62)

Notes.. ^Sample size between 0 and 5, so data not presented

 $^{\wedge}$

Participants were asked the open-ended question: "Please include any additional comments you may have about the section on suicide." Key themes included:

→ Very few participants who answered this question (n =4) and each approached this question differently. For example, one participant described the reasons they experienced suicidal feelings or ideation: "It was a low point in my career. I had 4 suicide attempts occur in a 16-18 month period with no debriefing or support...". Another participant responded by indicating that they "never had any intention of harming [themselves]" but were experiencing specific challenges, which led to some suicidal thoughts. An additional participant described surviving suicide thoughts and behaviours without providing details: "I sat in the garage in the lawn chair with the car running and something clicked and I stopped." These responses show some CWs' awareness of some of the reasons CWs might experience suicidal thoughts and feelings, such as through their exposure to PPTE and other occupational stressors, and thus require immediate and long-term resources and other avenues for support when they encounter distress.

Potentially Psychologically Traumatic Event Exposures

Participants were asked to report their prior experiences with a range of PPTEs as per the Life Events Checklist-5 (LEC-5; note that some questions were revised in line with previous PSP research) (see Ricciardelli et al., 2020). The reported events did not necessarily occur in the workplace.

Participants reported being exposed to an average of 9.62 different PPTEs. There was no statistically significant difference in exposures to different PPTE types between participants who screened positive for a mental health disorder (10.93), and participants who did not screen positive for a mental disorder (8.89).

The most commonly reported prior PPTE exposure type was physical assault (87.2%). Other commonly reported PPTE exposure types were sudden violent death (85.7%), assault with a weapon (78.6%), and sudden accidental death (77.4%). PPTE experiences may have occurred outside of the workplace; nevertheless, the correctional work environment is very likely impacted the exposure frequencies (Ricciardelli et al. 2020; Ricciardelli, Czarnuch, et al. 2020) as supported by data from the qualitative questions presented below.

Potentially Psychologically Traumatic Event	% (<i>n</i>)
Life threatening natural disaster (<i>n</i> =80)	48.8 (39)
Fire or explosion $(n=84)$	59.5 (50)
Serious transportation accident (<i>n</i> =84)	64.3 (54)
Serious accident at work, home, or during recreational activity (n=83)	68.7 (57)
Exposure to toxic substance $(n=73)$	42.5 (31)
Physical assault (<i>n</i> =86)	87.2 (75)
Assault with a weapon $(n=84)$	78.6 (66)
Sexual assault $(n=85)$	62.4 (53)
Other unwanted or uncomfortable sexual experience (n=83)	72.3 (60)
Combat or exposure to a war zone $(n=82)$	19.5 (16)
Captivity $(n=83)$	34.9 (29)
Life threatening illness or injury (<i>n</i> =82)	62.2 (51)
Severe human suffering (<i>n</i> =81)	71.6 (58)
Sudden violent death $(n=84)$	85.7 (72)
Sudden accidental death ($n=84$)	77.4 (65)
Serious injury, harm, or death you caused to someone else $(n=83)$	34.9 (29)
Any other very stressful event or experience (<i>n</i> =66)	56.1 (37)
Total number of different types of potentially traumatic exposures, $Mean$ (SD) $(n=74)$	9.62 (3.94)

Table 5. Prevalence of Potentially Psychologically Traumatic Event (PPTE) Exposure Types

Notes: SD=Standard Deviation. ^Sample size between 1 and 5, so data not presented

Type of Worst Exposure	% (<i>n</i>)
Life threatening natural disaster	A
Fire or explosion	٨
Serious transportation accident	12.5 (9)
Serious accident at work, home, or during recreational activity	^
Exposure to toxic substance	^
Physical assault	8.3 (6)
Assault with a weapon	8.3 (6)
Sexual assault	٨
Other unwanted or uncomfortable sexual experience	Λ
Combat	^
Captivity	Λ
Life threatening illness or injury	^
Severe human suffering	9.7 (7)
Sudden violent death	29.2 (21)
Sudden accidental death	^
Serious injury, harm, or death you caused to someone else	^
Any other very stressful event or experience	16.7 (12)
Total Sample: % (n)	100.0 (72)
Notes: ^Sample size between 1 and 5 so data not presented	100.0 (72)

Table 6. Prevalence of Worst/Most Distressing PPTE Exposure Types

Notes: ^Sample size between 1 and 5, so data not presented

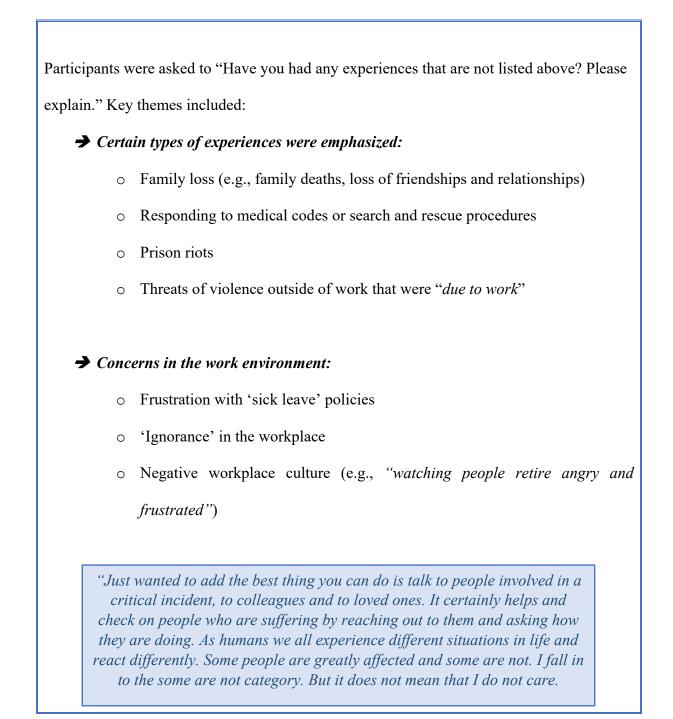
Key Themes Tied to Correctional Work from the question: "Please feel free to provide any additional comments regarding your exposure to [PPTE]."

- → Exposure to prisoner/client violence and harm: Some participants noted that witnessing (and for some, intervening and responding to) different types of violence and harm was a regular component of their job, including prisoner/client violence (e.g., assaults), prison riots, death incidents, suicide, and self-harm (e.g., "client at work drank himself to death"). Some referenced particularly graphic or troubling incidents or types of incidents (e.g., "I witnessed an inmate slice his throat right in front of me with a make shift knife, blood squirting everywhere"). Certain types of staff may more routinely deal with violent incidents (e.g., correctional officers), whereas other types of staff to may witness or otherwise deal with the consequences of violence in the context of case management or post-incident review processes (e.g., reviewing materials).
- → Vicarious trauma: Some participants explained forms of vicarious trauma in relation to their work with individuals who have been subject to or have enacted harm against others (e.g., learning about graphic or disturbing events/acts, such as descriptions of violent offences, abuse "on a daily basis"). Participants involved in case management and/or rehabilitative interventions may be required to review, learn, and hear about troubling aspects of a person's history (e.g., "Sometimes have to read offence details of sexual assaults").

Physical harm to staff: Some participants referenced violence against staff members in the form of physical assaults and threats.

- → Lack of client support programs: Some participants described frustration with a lack of mental health and addictions programs for clients (e.g., "Feeling so powerless and witnessing the lack of support in our community and institutions to help those who suffer from mental health and addictions").
- → PPTE responses: Participants described mental health challenges from responding to PPTE that, despite best efforts, sometimes still resulted in client death (e.g., "Myself and another CO started CPR...I could not clear her airway").
- → Organizational support: Frustration with a lack of consistent de-briefing postincidents and organizational supports following PPTE exposures (e.g., "What caused the most stress was the lack of preventative measures put in place following the incident").

"Everyday we as correctional officers come to work not knowing if we are going to make it home to our families that night, the physical dangers in this job are one thing but to have that hanging over your head day in and day out is emotionally stressful as well".



Participants were asked: "Do you have any other comments regarding these events?" Key themes included:

Certain incidents, or types of incidents, can have a lasting impact (e.g., "fear of unknown, adrenaline dump, nightmares")

The impact of incidents and "PTSD" symptoms are "cumulative", and can be "distressing to recount everything"

→ Concerns were expressed around the management of PPTEs (e.g., lack of postevent supports, policy changes to sick time), which result in individualized responses (e.g., "Others who don't know how to decompress after stressful events aren't so luck")

"Inmate behaviour like smearing feces on walls of cells is commonplace. Suicide attempts by inmates are common. I have been bitten and spit at. I have been sworn at many times. I have broken up numerous fights and involved in riots. Our government in NL is reducing away sick leave and are slow to raise wages...many staff are leaving and there are many inexperienced staff coming in. If they do not provide adequate compensation the job will be difficult to fill!"

Correctional Events

Participants were asked about their exposure to a range of diverse stressors during their correctional career. Many participants reported being exposed on at least one occasion to each of several different types of stressors. The two most common types of stressors were being directly threatened or the subject of abusive language from an inmate/client (98.5%) and being witnessed to or involved in de-escalating an inmate/client in mental health crisis (90.8%)

At least half or more reported at least one exposure to:

- A use of force situation (84.6%)
- Witnessing a completed or attempted suicide (84.4%)
- Witnessing to a potentially traumatizing event that has not been described in the questions (80.0%)
- Have been witness to a violent death or life threatening injury, either visually or by hearing (75.4%)
- Have thought their life was in danger because of any other situation (e.g., fire, riot, unrest, lockdown, altercation) (73.8%)
- Have thought that their life was in danger because a person under their supervision had a weapon or was suspected of having a weapon (64.6%)
- Have been one of the first on scene to discover someone had died violently or had suffered a life threatening injury because of either an accident, altercation or criminal/misconduct event (60.9%)
- Have had bodily fluids thrown on you at the hands of an inmate/client (59.4%)
- Have been the victim of an assault perpetrated by a person under their supervision in the workplace (57.8%)

• Have been called to/or testify at an inquest (55.6%)

Many participants reported chronic exposures to specific types of stressors. For example, over half of participants reported exposure <u>16 or more times</u> to being directly threatened or the subject of abusive language from an inmate/client (64.6%) and de-escalating an inmate/client in mental health crisis (50.8%).

 Table 7. Prevalence of Correctional Traumatic Event Exposures

Correctional Event	% (<i>n</i>)
You have had to use force or suit up and resort to 'use of force' in a non-tra	
Never exposed	15.4 (10)
1 to 5 times	18.5 (12)
6 to 10 times	13.8 (9)
11 to 15 times	12.3 (8)
16 times and more	40.0 (26)
You have thought that your life was in danger because a person under your	supervision had a weapon or
was suspected of having a weapon $(n=65)$	
Never exposed	35.4 (23)
1 to 5 times	38.5 (25)
6 to 10 times	13.8 (9)
11 to 15 times	^
16 times and more	10.8 (7)
You have thought that your life was in danger because of any other situation	on (e.g., fire, riot, unrest,
lockdown, altercation) (<i>n</i> =65)	
Never exposed	26.2 (17)
1 to 5 times	47.7 (31)
6 to 10 times	15.4 (10)
11 to 15 times	^
16 times and more	9.2 (6)
You have been the victim of an assault perpetrated by a person under your $(n=64)$	supervision in the workplace
Never exposed	42.2 (27)
1 to 5 times	45.3 (29)
6 to 10 times	10.9 (7)
11 to 15 times	^
16 times and more	^
You have been witness to a violent death or life threatening injury, either v	isually or by hearing $(n=65)$
Never exposed	24.6 (16)
1 to 5 times	36.9 (24)
6 to 10 times	16.9 (11)
11 to 15 times	^
16 times and more	20.0 (13)
You have been one of the first on scene to discover someone had died viole	
threatening injury because of either an accident, altercation or a criminal/m	
Never exposed	39.1 (25)

Correctional Event	% (<i>n</i>)
1 to 5 times	40.6 (26)
6 to 10 times	12.5 (8)
11 to 15 times	^
16 times and more	^
You have been witness to, or on the scene of, a successful or attemp	ted suicide, either visually or by
hearing (<i>n</i> =64)	
Never exposed	15.6 (10)
1 to 5 times	50.0 (32)
6 to 10 times	20.3 (13)
11 to 15 times	^
16 times and more	9.4 (6)
Never exposed	9.2 (6)
1 to 5 times	27.7 (18)
6 to 10 times	9.2 (6)
11 to 15 times	^
16 times and more	50.8 (33)
You have been directly threatened or been the subject of abusive lan	guage from an inmate/client ($n=65$)
Never exposed	^
1 to 5 times	20.0 (13)
6 to 10 times	12.3 (8)
11 to 15 times	^
16 times and more	64.6 (42)
You have had bodily fluids thrown on you at the hands of an inmate	
Never exposed	40.6 (26)
1 to 5 times	39.1 (25)
6 to 10 times	14.1 (9)
11 to 15 times	^
16 times and more	^
You have been witness (by sight or sound) to a potentially traumatiz	
to make someone feel intense fear, helplessness, or horror) that has n	not been described in the preceding
questions $(n=65)$	
Never exposed	20.0 (13)
1 to 5 times	49.2 (32)
6 to 10 times	16.9 (11)
11 to 15 times	
16 times and more	13.8 (9)
A person has died while under your supervision ($n=64$)	75.0 (40)
Never exposed	75.0 (48)
1 to 5 times	25.0 (16)
6 to 10 times	^
11 to 15 times	^
16 times and more	
You have had a client/inmate engage in stalking behaviour toward y	
Never exposed	59.4 (38)
1 to 5 times	35.9 (23)
6 to 10 times	^
11 to 15 times	^
16 times and more V_{current} have been called to (an tastified at an inspect (are (2)))	
You have been called to/or testified at an inquest ($n=63$)	
Never exposed	44.4 (28)
1 to 5 times	50.8 (32)
6 to 10 times	^
11 to 15 times	^
16 times and more	· · · · · · · · · · · · · · · · · · ·

Social Impacts

Participants were asked, "Please describe how your job has a negative or positive impact on your relationships." Key themes included:

- → Time-based conflict: The features of correctional work (e.g., shift work, "forced" overtime, working on holidays and weekends) can leave staff feeling as though they lack time to allocate to family and personal lives (e.g., "Not having enough time at home"). In essence, missing life events, being "mentally drained", or simply not being home when others are not working can make building or maintaining relationships difficult.
- → Negative impacts on mood, disposition and personality: Stress or negative experiences at work can be "brought home" in the form of irritability, anger, agitation, stress, negativity, exhaustion, and other adverse impacts on self (e.g., "bringing home stress impacts my family negatively"). Often, loved ones at home closest to staff bear the brunt of these negative impacts (i.e., 'taking out' frustration on loved ones). Some CWs expressed experiencing difficulty in "shifting gears" between work and home, bringing their work persona into their personal lives (e.g., marked by being authoritative or hyper-vigilant). Work experiences may also shape staffs' views of the world and others, leading to tendencies such as being "over-protective", "assuming the worst," or being "distrustful" or "skeptical" of others.

→ Social disconnect from peers and family: Forms of social disconnection were expressed by some CWs, which includes a sense of feeling "distant" or withdrawn from personal relationships, as well as tendencies of self-isolation. For some, social disconnect may be tied to other impacts of correctional work, including emotional fatigue or lack of trust, which result in workers preferring to be alone. Some described a sense of being unable to connected with peers who do not work in correctional services (e.g., "Like a brother/sisterhood with CO Workers some outside friends can't understand).

Positive impacts: Some participants felt their work positively contributed to their social relationships (e.g., "As a professional, conversations are interesting and relative to my taste in partners"). Other participants also described a sense of pride in their occupation (e.g., "Positive because I am doing something I love to do and it's a good income").

"It segregates you from society. It has made me into a bitter, cynical person. I am getting help for my issues now but just recently crawled out of a very dark place."

"Positive impact my child sees me in a uniform and takes great pride in that. My father was in uniform as I grew up and it was a great impact on me". We asked participants "Can you tell us about how you use your support network to deal with negative experiences at work?" Key themes included:

- → Talking and problem-solving: Many participants stated they 'talked out' issues informally with their support network (or formally discuss "in confidence" with a professional support); several stated the valued getting 'open' feedback and hearing a different perspective. Some participants described supports with similar work experiences as useful (e.g., family members with public safety backgrounds; colleagues who have shared similar experiences).
- → Accessing EAP: Some participants identified EAP as their primary source of support.
- ➔ Indirect support (positive engagement): Other participants referenced indirect forms of support (e.g., engaging in positive social activities and relationships as a means of balancing out the stressors of work).
- → Constraints to drawing on supports: Some participants reported difficulties drawing on informal supports who did not have similar work backgrounds (e.g., "I cannot talk to family/friends about work, they do not understand"). Participants may have felt like non-correctional workers do not understand the stressors specific

to correctional work; participants may not want to upset, disturb, or burden others with the details of their work; and participants may be constrained in sharing details due to confidentiality rules.

"A colleague usually can understand what you are going through, because they are going through the exact same things."

Sense of Team

Participants were asked to "Why or why not? (Do you feel like part of a team at work)". Key themes included:

➤ Some participants provided positive accounts of their working environment, marked by trust, rapport, and collaboration. Other participants described conflictual work relations with coworkers and/or managers (e.g., *"too many people pulling in opposite directions"*). The variability may be due to different work environments associated with provincial correctional services (e.g., different institutions or offices, different sub-groups of workers), fluidity and diversity in the work environment (e.g., identifying as a team with some staff but not others), or the focus and perspective of the participant. In any case, there was no single understanding of team culture; both cohesion and conflict were salient themes in responses. → Supportive dynamics: Many participants emphasized positive, supportive team dynamics, describing teams that work well together, get along well, and help each other out. One participant explained, "We have to have each others back 24/7". Some participants expressed feeling a sense of team with coworkers, but not with management (e.g., "team with co-workers, not management"), and some managers expressed the same sentiment (e.g., "Part of Management team but not total staff"), highlighting some disconnect between front-line managers and co-workers.

→ Conflictual dynamics: Some participants described dynamics marked by conflict, even when effort was made towards cohesion (e.g., "team dynamic does not exist, we try but in the end it's not there"). Some casual employee participants described being disconnected from permanent staff. Participants also noted the presence of workplace harassments, gossip, and rumors.

"I just feel supported and respected by the majority of my co-workers and managers, it makes a difference."

Outlook

Participants were asked to: "Please tell us how you think your job contributes positively to your overall well-being and outlook on life". Key themes included:

- Security and stability: Commenting on the practical aspects of their job, some CWs appreciated the stability and security afforded by their job, which facilitates a comfortable lifestyle and enables one to support their family.
- → Positive meaning: Some participants derived positive meaning from their work; for example, noting the rewarding feeling of helping others towards positive change, or taking pride in public safety contributions (e.g., "I like to think I'm having a positive impact on others"). The descriptions suggest correctional work can have positive aspects that can precipitate pride and a sense of accomplishment among staff (e.g., "I find joy in helping others").
- → Benefits of work experiences: Some participants explained how their work experiences had helped them develop positive attributes and interpersonal skills; for example, the ability to exercise authority appropriately (e.g., "I enjoy having authority. Authority to make a difference...to help to relate...to be human").

→ Null or negative effects: Some participants felt their job did not positively contribute to their well-being or outlook, or had negative impacts such as being unable to keep a positive orientation or outlook on life.

"I feel that I am making a difference by working with people to change their outlook on life, so that contributes to me feeling like I have purpose in the work I do".

Participants were asked to "Please tell us what changes in your current work environment could have a positive impact on your mental health." Key themes included:

- → Improving the social environment: Some participants referenced the need for changes in the culture or social environment of their work, referencing unfavorable social conditions (e.g., lack of cohesion among staff, lack of appreciation by management) and desire for social features such as teamwork, rapport, and positive working relations. Some participants pointed to relations between managers and staff as an area of needed change, with efforts to decrease divides, increase communication, and promote opportunities for positive interactions and exchanges.
- → Changes to physical working environment: Some participants requested that the facility they work in be "cleaner" (e.g., presence of "mold and rodents") or replaced with a new institution.
- → Modified labour and schedule structures: Some participants expressed the need for changes that could improve conditions of work or contribute to well-being including, for example, more staff, increased job security (e.g., permanent positions; better pay) and greater flexibility in work schedules (e.g., less 'forced' overtime; change in 'constant night shifts'). Several participants stated a preference for enhanced leave options, including earned days off or 'mental health days' (e.g.,

"Mental health days to take time for self and to do more things with family"). Reducing the stigma and negative connotations associated with leave was another identified need area (e.g., *If mental health stigmas were not as bad"*).

Exercise: Some participants requested incentives for their committed occupational performance and for time to exercise. This included access on shift to exercise opportunities.

→ More client programming: Some participants recognized the need for more client programming (e.g., "space for programs for inmates would improve everybody's situation").

"If people would be kinder to each other and try to resolve their conflicts with coworkers".

Discussion

The current results were based on survey data collected from participating Newfoundland and Labrador provincial CWs. The results provide additional evidence that mental health disorders are prevalent among CWs, even relative to some other PSP. Almost half (48.7%) of participants screened positive for one or more mental health disorders (excluding AUDs due to large number of missings on AUDIT measure in sample). The prevalence of mental health disorders among CWs appears much higher than the diagnostic rate for the general public in Canada (i.e., 10%), but similar to that previously identified among CWs (e.g., 55% among federal CWs; see Carleton et al. 2018).

Participants most commonly screened positive for MDD (24.6%). A similar MDD screening rate was found among Ontario provincial correctional officers (37%; Carleton et al. 2020) and other CWs in Canada (i.e., 31%; Carleton et al. 2018). Participants also frequently screened positively for GAD (16.9%) and PTSD (19.7%). Many participants screened positive for PD (11.9%) or AUD (6.3%).

Several participants screened positive for more than one disorder (36.4%) or for three or more disorders (30.3%; excludes AUDs). The current results indicate that mental health profiles among CWs are complex, possibly pointing to varied impacts of exposures to diverse occupational and/or life stressors. Many occupational stressors remain difficult to mitigate in correctional environments; however, the current results point to the need for diverse, wide-ranging mental health policies and programs to support CWs in any position. Many CW participants offered concrete solutions to improve their mental health and well-being, including, but not limited to, more flexibility in their work schedule, on-site and corrections-specific counsellors that are immediately available, more unstigmatized access to sick time or 'mental health days', and organizational changes that improve workplace morale, teamwork, and safety, promoting positive workplace relations.

Reports of suicidal behaviours from participants appear much higher than would be expected from the general public. Many participants reported having seriously considered suicide (14.7%) or planned to die by suicide (12.9%) at some point in their lifetime. The results are consistent with previously reported percentages for lifetime suicidal ideation (28%) and planning (13%) among CWs (Carleton et al. 2018). The current results from Newfoundland and Labrador CWs highlight the substantial risk for suicidal behaviours, and given the complex and diverse causes, also point to the need for a national (not just institutional) strategy to address suicidal behaviours amongst PSP.

There appear to be protective factors that can mitigate the impact of workplace stressors on mental health; for example, higher education, being married/partnered, having a higher income, or having children. Marital status broadly appears associated with fewer mental health challenges among PSP (Carleton et al., 2018), possibly by providing different forms of emotional, psychological, and practical support for CWs; nevertheless, most participants who reported having such protective factors still reported substantial mental health challenges, indicating the protections are limited.

Social support may be a protective factor against adverse mental health outcomes; however, correctional work may impede positive work life balance, as well as the development and maintenance of positive personal relationships. Participants emphasized different types of negative impacts on their familial/personal relationships due to workplace factors. The quality and quantity of time spent with loved ones appears particularly impacted by negative effects of mental health, mood, disposition, and burnout, as well as by the logistical and time-based constraints associated with conditions of work (e.g., shift work and being on call). Some participants emphasized feeling socially estranged (e.g., disconnected or not understood by others outside of their work), which may have contributed to feelings of isolation. Overall, access to the types of social supports that may mediate workplace stress appear structurally constrained by workplace conditions, especially given that some participants reported building positive and supportive relationships at work.

Many participants reported exposures to diverse types of PPTEs from numerous sources. Participants also reported chronic exposure to certain types of stressors (e.g., inmate/client mental health crises, threats/verbal abuse), indicating that such events are frequent and regular component of their work. In addition to operational (i.e., job content) stressors, qualitative responses indicated that organizational factors can also be stressors (e.g., feeling unsupported following incidents and as though the employer does not prioritize worker well-being). The results are consistent with prior research indicating how tension between management or administrators and frontline worker can be a poignant occupational stressor (Brower, 2013).

Workplace stressors among CWs are varied and caused by different operational and organizational factors; accordingly, the participant recommendations were associated with different organizational facets, including measures to enhance conditions of work (e.g., improved staffing levels), improve labour security and stability, enhance work life balance, facilitate more positive relations at work, and improve worker mental health and wellness (e.g., on-site wellness measures, access to mental health resources).

Activities designed to embed wellness into the workplace may symbolically function to communicate organizational support for CWs. Perceptions of organizational support may influence employee-level and organizational factors (e.g., job satisfaction, employee commitment,

performance and behaviour; Eisenberger et al. 1986; Rhoades and Eisenberger 2002; Sun 2019). Workplaces may be marked by inherently stressful circumstances; however, adverse impacts can be buffered by organizational factors (e.g., the sense that worker contributions are recognized and valued) and the presence of activities to enhance worker mental health (Lerman et al., 2021).

Overall, the current study results indicate that mental health disorders are prevalent among Newfoundland and Labrador CWs, and that exposure to diverse workplace stressors is frequent and compounding. The results also indicate correctional work has a broad and multi-layered negative impact on mental health and quality of life. Participant recommendations for improvements suggest organizational opportunities to help; however, participants also evidenced that there is no simple or singular solution. Embedding wellness in the workplace may require inter-connected, but distinct, activities across an array of organizational spheres. We hope that the current results can be used to promote mental health and wellness strategies moving forward.

References

- American Psychiatric Association. (2013). Diagnostic and Statistical Manual of Mental Disorders (5th ed.). Washington DC: American Psychiatry Association. https://doi.org/10.1176/APPI.BOOKS.9780890425596
- Austin-Ketch, T. L., Violanti, J., Fekedulegn, D., Andrew, M. E., Burchfield, C. M., & Hartley, T. A. (2012). Addictions and the criminal justice system, what happens on the other side?
 Post-traumatic stress symptoms and cortisol measures in a police cohort. *Journal of Addictions Nursing*, 23(1), 22–29. https://doi.org/10.3109/10884602.2011.645255
- Bourbonnais, R., Jauvin, N., Dussault, J., & Vézina, M. (2007). Psychosocial work environment, interpersonal violence at work and mental health among correctional officers. *International Journal of Law and Psychiatry*, *30*(4–5), 355–368.

https://doi.org/10.1016/J.IJLP.2007.06.008

Boyd, N. (2011). CORRECTIONAL OFFICERS IN BRITISH COLUMBIA, 2011 Working Conditions. *British Columbia, Canada: Simon Fraser University*.

Brower, J. (2013). Correctional Officer Wellness and Safety Literature Review a CORRECTIONAL OFFICER WELLNESS AND SAFETY LITERATURE REVIEW Correctional Officer Wellness and Safety Literature Review . *Department of Justice Office of Justice Programs Diagnostic Center, Us.*

Carleton, R. N., Afifi, T. O., Taillieu, T., Turner, S., Krakauer, R., Anderson, G. S., ... McCreary, D. R. (2019). Exposures to potentially traumatic events among public safety personnel in Canada. *Canadian Journal of Behavioural Science*, 51(1), 37–52. https://doi.org/10.1037/CBS0000115

Carleton, R. N., Afifi, T. O., Taillieu, T., Turner, S., Mason, J. E., Ricciardelli, R., ... Griffiths,

C. T. (2020). Assessing the Relative Impact of Diverse Stressors among Public Safety
Personnel. *International Journal of Environmental Research and Public Health*, *17*(4),
1234. https://doi.org/10.3390/IJERPH17041234

- Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D. M., ...
 Asmundson, G. J. G. (2018). Mental Disorder Symptoms among Public Safety Personnel in
 Canada. *Canadian Journal of Psychiatry. Revue Canadienne de Psychiatrie*, 63(1), 54.
 https://doi.org/10.1177/0706743717723825
- Carleton, R. N., Ricciardelli, R., Taillieu, T., Mitchell, M. M., Andres, E., & Afifi, T. O. (2020). Provincial correctional service workers: The prevalence of mental disorders. *International Journal of Environmental Research and Public Health*, 17(7). https://doi.org/10.3390/IJERPH17072203
- CIPSRT. (2019). Canadian Institute for Public Safety Research and Treatment (CIPSRT). (2019). Glossary of terms: A shared understanding of the common terms used to describe psychological trauma (version 2.1). Regina, SK: Author. Retrieved February 1, 2022, from https://www.cipsrt-icrtsp.ca/assets/glossary-of-terms-version-21.pdf
- Crawley, E. (2013). Doing prison work: The public and private lives of prison officers. Doing Prison Work: The Public and Private Lives of Prison Officers, 1–281. https://doi.org/10.4324/9781843924432
- Crawley, E., & Crawley, P. (2008). Understanding prison officers: culture, cohesion and conflict.
 In In J. Bennett, B. Crewe, & A., Wahidin. (Eds). Understanding prison staff (pp. 134–152).
 London: Willan Publishing. https://doi.org/10.4324/9781843925491
- Crawley, E. M. (2004). Emotion and performance: Prison officers and the presentation of self in prisons. *Punishment and Society*, 6(4), 411–427.

https://doi.org/10.1177/1462474504046121

- Cullen, F. T., Link, B. G., Wolfe, N. T., & Frank, J. (1985). The social dimensions of correctional officer stress. *Justice Quarterly*, 2(4), 505–533. https://doi.org/10.1080/07418828500088711
- Dowden, C., & Andrews, D. A. (2004). The Importance of Staff Practice in Delivering Effective Correctional Treatment: A Meta-Analytic Review of Core Correctional Practice. *International Journal of Offender Therapy and Comparative Criminology*, 48(2), 203–214. https://doi.org/10.1177/0306624X03257765
- Dowden, C., & Tellier, C. (2004). Predicting work-related stress in correctional officers: A metaanalysis. *Journal of Criminal Justice*, 32(1), 31–47. https://doi.org/10.1016/J.JCRIMJUS.2003.10.003
- Eisenberger, R., Huntington, R., Hutchison, S., & Sowa, D. (1986). Perceived Organizational Support. *Journal of Applied Psychology*, 71(3), 500–507. https://doi.org/10.1037/0021-9010.71.3.500
- Gayman, M. D., Powell, N. K., & Bradley, M. S. (2018). Probation/Parole Officer Psychological Well-Being: the Impact of Supervising Persons with Mental Health Needs. *American Journal of Criminal Justice*, 43(3), 509–529. https://doi.org/10.1007/S12103-017-9422-6
- Grossi, E. L., & Berg, B. L. (1991). Stress and Job Dissatisfaction Among Correctional Officers: An Unexpected Finding. *International Journal of Offender Therapy and Comparative Criminology*, 35(1), 73–81. https://doi.org/10.1177/0306624X9103500107
- Gurda, M. (2019). Barriers that Prevent Correctional Officers from Seeking Help for Extreme
 Work Stress: A Qualitative Exploratory Case Study . Retrieved January 13, 2022, from
 ProQuest Dissertations Publishing website: https://ocul-

uwo.primo.exlibrisgroup.com/discovery/fulldisplay?docid=cdi_proquest_journals_2212273 213&context=PC&vid=01OCUL_UWO:UWO_DEFAULT&lang=en&search_scope=OCU LDiscoveryNetwork&adaptor=Primo

Central&tab=OCULDiscoveryNetwork&query=any,contains,Barriers that prevent correctional officers from seeking help for extreme work stress: A qualitative exploratory case study (Doctoral dissertation

- Hayes, W. S. (1985). Assault, battery & injury of Correctional Officers by inmates: An occupational health study. (Doctoral Dissertation) (John Hopkins University, USA). John Hopkins University, USA. Retrieved from https://www.ojp.gov/ncjrs/virtual-library/abstracts/assault-battery-and-injury-correctional-officers-inmates
- Johnston, M. S., Ricciardelli, R., & McKendy, L. (2021). Suffering in Silence: Work and Mental Health Experiences among Provincial Correctional Workers in Canada. *Corrections*, 1–19. https://doi.org/10.1080/23774657.2021.1978906
- Konyk, K., Ricciardelli, R., Taillieu, T., Afifi, T. O., Groll, D., & Nicholas Carleton, R. (2021).
 Assessing relative stressors and mental disorders among Canadian provincial correctional workers. *International Journal of Environmental Research and Public Health*, 18(19), 10018. https://doi.org/10.3390/IJERPH181910018/S1
- Kroenke, K., Spitzer, R. L., & Williams, J. B. W. (2001). The PHQ-9: validity of a brief depression severity measure. *Journal of General Internal Medicine*, *16*(9), 606–613. https://doi.org/10.1046/J.1525-1497.2001.016009606.X
- Kunst, M. J. J. (2011). Working in prisons: A critical review of stress in the occupation of correctional officers. In *In J. Langan-Fox & C. L. Cooper (Eds.), Handbook of Stress in the Occupations* (p. 283). Edward Elgar Publishing.

https://doi.org/10.4337/9780857931153.00036

- Kunst, M. J. J., Bogaerts, S., & Winkel, F. W. (2009). Peer and inmate aggression, type Dpersonality and post-traumatic stress among Dutch prison workers. *Stress and Health*, 25(5), 387–395. https://doi.org/10.1002/SMI.1247
- Lambert, E. G., Altheimer, I., & Hogan, N. L. (2010). Exploring the relationship between social support and job burnout among correctional staff. *Criminal Justice and Behavior*, 37(11), 1217–1236. https://doi.org/10.1177/0093854810379552
- Lambert, E. G., Hogan, N. L., & Altheimer, I. (2010). An Exploratory Examination of the Consequences of Burnout in Terms of Life Satisfaction, Turnover Intent, and Absenteeism Among Private Correctional Staff. *The Prison Journal*, 90(1), 94–114. https://doi.org/10.1177/0032885509357586
- Lambert, E. G., & Paoline, E. A. (2008). The influence of individual, job, and organizational characteristics on correctional staff job stress, job satisfaction, and organizational commitment. *Criminal Justice Review*, 33(4), 541–564. https://doi.org/10.1177/0734016808320694
- Lerman, A. E., Harney, J., & Sadin, M. (2021). Prisons and Mental Health: Violence, Organizational Support, and the Effects of Correctional Work. *Criminal Justice and Behavior*. https://doi.org/10.1177/00938548211037718
- Lewis, K. R., Lewis, L. S., & Garby, T. M. (2013). Surviving the Trenches: The Personal Impact of the Job on Probation Officers. *American Journal of Criminal Justice*, 38(1), 67–84. https://doi.org/10.1007/S12103-012-9165-3
- Martin, J. L., Lichtenstein, B., Jenkot, R. B., & Forde, D. R. (2012). "They can take us over any time they want": Correctional officers' responses to prison crowding. *Prison Journal*, 92(1),

88-105. https://doi.org/10.1177/0032885511429256

- Norman, M., & Ricciardelli, R. (2021). Operational and organisational stressors in community correctional work: Insights from probation and parole officers in Ontario, Canada. *Probation Journal*. https://doi.org/10.1177/0264550520984253
- Oliphant, R. (2016). HEALTHY MINDS, SAFE COMMUNITIES: SUPPORTING OUR PUBLIC SAFETY OFFICERS THROUGH A NATIONAL STRATEGY FOR OPERATIONAL STRESS INJURIES Report of the Standing Committee on Public Safety and National Security. Retrieved from http://www.parl.gc.ca
- Public Safety Canada. (2019). Supporting Canada's Public Safety Personnel: An Action Plan on Post-Traumatic Stress Injuries. Retrieved February 1, 2022, from Ottawa, ON: Government of Canada website: https://www.publicsafety.gc.ca/cnt/rsrcs/pblctns/2019-ctn-plnptsi/index-en.aspx.
- Rhineberger-Dunn, G., & Mack, K. Y. (2019). Impact of Workplace Factors on Role-Related Stressors and Job Stress Among Community Corrections Staff. *Criminal Justice Policy Review*, 30(8), 1204–1228. https://doi.org/10.1177/0887403418787227
- Rhoades, L., & Eisenberger, R. (2002). Perceived organizational support: A review of the literature. *Journal of Applied Psychology*, 87(4), 698–714. https://doi.org/10.1037/0021-9010.87.4.698
- Ricciardelli, Rose. (2019). Also serving time : Canada's provincial and territorial correctional officers. *University of Toronto Press*, 211.
- Ricciardelli, Rosemary, & Carleton, R. N. (2021). A qualitative application of the Job Demand-Control-Support (JDCS) to contextualize the occupational stress correctional workers experience. *Https://Doi.Org/10.1080/0735648X.2021.1893790*, 1–17.

https://doi.org/10.1080/0735648X.2021.1893790

Ricciardelli, Rosemary, Carleton, R. N., Gacek, J., & Groll, D. L. (2020). Understanding needs, breaking down barriers: Examining mental health challenges and well-being of correctional staff in ontario, canada. *Frontiers in Psychology*, *11*, 1036.

https://doi.org/10.3389/FPSYG.2020.01036/BIBTEX

- Ricciardelli, Rosemary, Czarnuch, S., Afifi, T. O., Taillieu, T., & Carleton, N. R. (2020). Public safety personnel's interpretations of potentially traumatic events. *Occupational Medicine*, 70(3), 155–161. https://doi.org/10.1093/OCCMED/KQAA007
- Ricciardelli, Rosemary, Czarnuch, S., Carleton, R. N., Gacek, J., & Shewmake, J. (2020).
 Canadian Public Safety Personnel and Occupational Stressors: How PSP Interpret Stressors on Duty. *International Journal of Environmental Research and Public Health 2020, Vol. 17, Page 4736, 17*(13), 4736. https://doi.org/10.3390/IJERPH17134736
- Ricciardelli, Rosemary, Haynes, S. H., Burdette, A., Keena, L., McCreary, D., Nicholas Carleton, R., ... Groll, D. (2021). MENTAL HEALTH, STIGMA, GENDER, AND SEEKING TREATMENT: INTERPRETATIONS AND EXPERIENCES OF PRISON EMPLOYEES. © *Applied Psychology in Criminal Justice*, (1), 16.
- Ricciardelli, Rosemary, & Power, N. G. (2020). How "Conditions of Confinement" Impact "Conditions of Employment": The Work-Related Well-Being of Provincial Correctional Officers in Atlantic Canada. *Violence and Victims*, *35*(1), 88–107. https://doi.org/10.1891/0886-6708.VV-D-18-00081
- Saunders, J. B., Aasland, O. G., Babor, T. F., De La Fuente, J. R., & Grant, M. (1993).
 Development of the Alcohol Use Disorders Identification Test (AUDIT): WHO
 Collaborative Project on Early Detection of Persons with Harmful Alcohol Consumption--

II. *Addiction (Abingdon, England)*, *88*(6), 791–804. https://doi.org/10.1111/J.1360-0443.1993.TB02093.X

- Shear, M. K., Brown, T. A., Barlow, D. H., Money, R., Sholomskas, D. E., Woods, S. W., ... Papp, L. A. (1997). Multicenter collaborative panic disorder severity scale. *The American Journal of Psychiatry*, 154(11), 1571–1575. https://doi.org/10.1176/AJP.154.11.1571
- Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A brief measure for assessing generalized anxiety disorder: the GAD-7. *Archives of Internal Medicine*, 166(10), 1092–1097. https://doi.org/10.1001/ARCHINTE.166.10.1092
- Stadnyk, B. (2004). PTSD IN CORRECTIONS EMPLOYEES IN SASKATCHEWAN EXECUTIVE SUMMARY (Masters Thesis). University of Regina.
- Statistics Canada. (2018). 2015 Canadian Community Health Survey. Retrieved January 11, 2022, from Ottawa website: https://www23.statcan.gc.ca/imdb/p2SV.pl?Function=getSurvey&Id=795204
- Sui, G. Y., Hu, S., Sun, W., Wang, Y., Liu, L., Yang, X. S., & Wang, L. (2014). Prevalence and associated factors of depressive symptoms among Chinese male correctional officers. *International Archives of Occupational and Environmental Health*, 87(4), 387–395. https://doi.org/10.1007/s00420-013-0877-6
- Summerlin, Z., Oehme, K., Stern, N., & Valentine, C. (2010). Disparate levels of stress in police and correctional officers: Preliminary evidence from a pilot study on domestic violence. *Journal of Human Behavior in the Social Environment*, 20(6), 762–777. https://doi.org/10.1080/10911351003749169
- Sun, L. (2019). Perceived Organizational Support: A Literature Review. International Journal of Human Resource Studies, 9(3), 155. https://doi.org/10.5296/IJHRS.V9I3.15102

- Swenson, D. X., Waseleski, D., & Hartl, R. (2008). Shift Work and Correctional Officers: Effects and Strategies for Adjustment: *Journal of Correctional Health Care*, 14(4), 299– 310. https://doi.org/10.1177/1078345808322585
- Tartaglini, A. J., & Safran, D. A. (1997). A topography of psychiatric disorders among correction officers. *Journal of Occupational and Environmental Medicine*, 39(6), 569–573. https://doi.org/10.1097/00043764-199706000-00012
- Triplett, R., Mullings, J. L., & Scarborough, K. E. (1996). Work-related stress and coping among correctional officers: Implications from organizational literature. *Journal of Criminal Justice*, 24(4), 291–308. https://doi.org/10.1016/0047-2352(96)00018-9
- Triplett, R., Mullings, J. L., & Scarborough, K. E. (1999). Examining the effect of work-home conflict on work-related stress among correctional officers. *Journal of Criminal Justice*, 27(4), 371–385. https://doi.org/10.1016/S0047-2352(98)00066-X
- Viotti, S. (2016). Work-related stress among correctional officers: A qualitative study. *Work (Reading, Mass.)*, *53*(4), 871–884. https://doi.org/10.3233/WOR-152238
- Weathers, F. W., Litz, B. T., Keane, T. ., Palmieri, P. A., Marx, B. P., & Schnurr, P. P. (2013). The PTSD Checklist for DSM-5 (PCL-5). Retrieved January 23, 2022, from Scale available from the National Center for PTSD at www.ptsd.va.gov. website: https://www.ptsd.va.gov/professional/assessment/adult-sr/ptsd-checklist.asp
- Weinrath, M. (2016). Behind the walls : inmates and correctional officers on the state of Canadian prisons. In *UBC Press*.