

Understanding PTSD among correctional workers in Manitoba, Canada: Key considerations of social variables

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Abstract

Mounting evidence highlights the high prevalence of posttraumatic stress disorder (PTSD) among correctional workers. The current analysis draws on survey response data to present a social profile of correctional workers in the province of Manitoba ($n = 580$), Canada, who screened positive for PTSD ($n = 196$). We examined demographic information, professional history information, and adverse work exposure experiences, as well as treatment and support patterns. The analysis was not intended to identify correlates of PTSD development among correctional workers, but did identify the characteristics, professional and personal situations, and treatment experiences of correctional workers who screened positive for PTSD. The results highlight the multidimensional nature of work stressors, the pronounced problem of work–life conflict, and variations in seeking supports and treatments. Generally, participants screening positive for PTSD reported higher exposure to potentially psychologically traumatic events, higher environmental or occupational stressors at work, and many had prior work experience as public safety personnel. Correctional workers who screened positive for PTSD appeared more likely to access mental health supports. Promoting proactive support seeking for mental health treatment may help to mitigate the severity, frequency, stigma, and length of mental health challenges among correctional workers.

KEYWORDS

correctional workers, mental health, posttraumatic stress disorder, socio-demographic profiles, treatment experiences

1 | INTRODUCTION

Correctional work is a socially unique occupational field, whereby staff are responsible for tasks that include ensuring the safety, care, and rehabilitation of persons in custody or under community supervision. Staff often face trying work conditions (Brower, 2013; Ferdik & Smith, 2017), including exposure to potentially psychologically traumatic events (PPTEs; Denhof & Spinaris, 2016; Spinaris et al., 2012; Stadnyk, 2004) and work–life conflict

(Jaegers et al., 2021; Triplett et al., 1999). Mounting research highlights the mental health toll of correctional work on staff, including the high prevalence of posttraumatic stress disorder (PTSD) and major depressive disorder (MDD; Carleton, Ricciardelli, et al., 2020; Jaegers et al., 2019; Regehr, Carey, Wagner, Alden, Buys, Corneil, Fyfe, Fraess-Phillips, et al., 2021; Regehr, Carey, Wagner, Alden, Buys, Corneil, Fyfe, Matthews, et al., 2021; Spinaris et al., 2012). The prevalence of mental health challenges appears to be associated with PPTe exposures at work (Carleton, Ricciardelli,

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et al., 2020; Ricciardelli, Czarnuch, Afifi, et al., 2020; Ricciardelli, et al. 2021), as well as personal, social, psychological, structural, and environmental factors (Ricciardelli, 2019; Ricciardelli et al., 2018).

The high prevalence of PTSD among correctional workers is increasingly well-established; however, further research is needed to understand the characteristics of staff who screen positive for PTSD through self-reported measures. In the current study, we draw on survey data from correctional workers in Manitoba, Canada to present a social profile of correctional workers who screened positive for PTSD. Consistent with prior research, we hypothesized the prevalence of correctional workers screening positive for PTSD would be high, that participants screening positive for PTSD would report high exposure to PPTEs, and that these outcomes would be linked to occupational stressors. Situating our analyses within the growing scholarship on mental health and well-being among correctional staff, we examine demographic information, work histories, exposure to PPTEs, and work-life conflict, as well as factors tied to treatment and support among staff who screened positive for PTSD.

2 | LITERATURE REVIEW

Correctional workers often complete their occupational responsibilities under conditions marked by resource constraints, staff shortages, overtime, shift work, volatile environments, perceived inconsistent leadership, and bureaucratic red tape (Konyk et al., 2021). Staff may also experience exposure to PPTEs, including, for example, violence, injury, and death among prisoners, adverse drug reactions and overdose incidents, mental health crisis situations, suicidal and self-injury incidents, conflictual work environments, physical harm directed towards staff, and verbal aggression and threats (Boudoukha et al., 2011; James et al., 2017; Viotti, 2016; Walker et al., 2017). Following stressful incidents (e.g., deaths in custody), staff often must continue working in the environments where they experienced such incidents (Barry, 2017), which can trigger intrusions associated with PTSD (American Psychiatric Association, 2013). Staff well-being is also affected by the problem of work-life conflict, which may include a lack of time to devote to private life and relationships, and strain and role-based conflict in trying to separate work from family life (Lambert et al., 2020; Vickovic & Morrow, 2020)—all of which can produce negative outcomes for job satisfaction and commitment, including turnover intention, stress, and burnout (Lambert et al., 2020, 2021).

The development of mental health disorders, including PTSD, is a key adverse outcome associated with correctional work (Carleton, Ricciardelli, et al., 2020; Regehr, Carey, Wagner, Alden, Buys, Corneil, Fyfe, Matthews, et al., 2021). For example, Carleton, Ricciardelli, et al. (2020) found that well over half of correctional workers in Ontario provincial correctional services screened positive for mental health disorder(s), which most frequently included PTSD and MDD (see also Carleton et al., 2019). Specifically, Carleton, Ricciardelli, et al. (2020) found that of 1032 institutional correctional workers participating in

the study, 61.0% of governance, 59.0% of correctional officers, 43.7% of wellness staff (e.g., nurses), 50.0% of training staff (e.g., program officers), and 52.0% of administrative staff (e.g., record keeping) reported responses evidencing a positive screen for one or more mental health disorders. Regehr, Carey, Wagner, Alden, Buys, Corneil, Fyfe, Matthews, et al. (2021) recent systematic review evidenced a high prevalence of mental health disorders, specifically including PTSD, MDD, and generalized anxiety disorder, among correctional officers relative to other occupational groups, including public safety personnel (PSP), and the general population. Regehr, Carey, Wagner, Alden, Buys, Corneil, Fyfe, Matthews, et al. (2021) also found PTSD was associated with exposure to physical violence and injury at work.

These findings resonate in other international literature. In an earlier study of the prevalence of PTSD among correctional workers in the United States, Spinaris et al. (2012) found that 27% of correctional staff screened positive of PTSD symptoms (within the past 30 days). Researchers have identified how occupational stressors, including both those that are operational (i.e., inherent to the job context) and organizational (e.g., tied to the organization and environment), negatively affect correctional worker well-being (Konyk et al., 2021). These include exposure to PPTEs, which can be direct (e.g., responding to critical incidents involving suicide, self-injury, altercations, violence), or vicarious (e.g., reviewing criminal records) (Konyk et al., 2021; Ricciardelli, Czarnuch, Carleton, et al., 2020). Across occupational groups, people who work in areas of correctional services will likely experience occupational stress and trauma, which may result in occupational stress injuries (Hall et al., 2018; Ricciardelli et al., 2023). Overall, the research strongly points to a need “for evidence-based proactive mental health activities, knowledge translation, and treatment, and a need to explore how authority without control (i.e., unpredictability at work) can inform employee mental health” (Ricciardelli et al., 2021, p. 1).

3 | METHODOLOGY

3.1 | Data and sample

Data for the present analyses of Manitoba correctional workers ($n = 580$) stems from a larger study on correctional worker experiences, mental health, and well-being in the Canadian provinces and territories. The data were collected before the onset of the COVID-19 pandemic. With the support of union and ministerial representatives, provincial correctional staff in Manitoba were invited to participate in an anonymous online survey in early 2019. Potential participants were invited by email to click on a link that directed them to the project consent form, study information page, and survey. Participation was voluntary and could be completed during paid work hours and, if desired, over multiple sittings. The survey took between 25 and 40 min to complete. The study was approved by research ethics boards at the University of Regina and Memorial University of Newfoundland.

Manitoba correctional service is responsible for the administration of short (<2 years) sentences and community sentences (probation), as well as accommodation of pretrial (remand) detainees (Government of Manitoba, 2022). In 2018/2019, Manitoba had ~8428 adults in custody under provincial correctional jurisdiction (Malakieh, 2020). The study involved different types of correctional workers involved in institutional and community correctional services, including correctional officers, probation officers, managers, nurses, teachers, administrators, and other types of correctional staff employed by the Manitoba provincial correctional service. The survey was designed to establish the prevalence of mental health disorders, discern the scope and frequency of exposure to PPTs and other stressors, and understand other key aspects of mental health and well-being. The current analyses produced a profile of individuals who screened positive for PTSD in terms of demographic variables, work history information, event exposure, as well as treatment, intervention, and support seeking practices.

3.2 | Measures

Demographic information was collected pertaining to sex, age, education, relationship status, parenting status, as well as work history and status (i.e., total years of service as correctional worker, occupational category, employment status, and security classification of institution).

Positive screens for PTSD were established using the PTSD Check List 5 (PCL-5; Ashbaugh et al., 2016; Blevins et al., 2015; Bovin et al., 2016; MacIntosh et al., 2015; Weathers et al., 2013), which includes the reporting of lifetime PPTe exposures and past month symptoms in relation to a single index PPTe (i.e., the single worst PPTe, most distressing PPTe, or the PPTe currently causing the most distress). Participants screened positive for PTSD if they exceeded the minimum clinical cut-off score of >32 and met minimum criteria for each PTSD symptom cluster (Carleton et al., 2018). Exposure to PPTes was assessed using the Life Events Checklist-5 (LEC-5), with some questions revised in accordance with prior PSP research (i.e., "natural disaster" was changed to "a life-threatening natural disaster" and "transportation accident" was changed to "serious transportation accident"; Carleton et al., 2018).

Participants were coded as having been exposed to a specific PPTe if they reported that it happened to them, they witnessed it happen to someone else, they learned about it happening to a close family member or close friend, and/or they were exposed as part of their job. The total number of PPTe exposures was computed by summing exposures across the 16 items (Cronbach's $\alpha = 0.844$). Although missing responses on individual items was small, cumulative missing responses compromised our ability to compute the exact number of PPTe exposures for several participants; therefore, up to two missing values were allowed in the calculation of the total number of PPTe exposures variable, likely resulting in a slightly more conservative estimate of PPTe exposures in this sample.

Respondents were also asked about exposure to correctional specific events and organizational factors that may cause stress (e.g., operational incidents). We crafted the items based on prior knowledge and over a decade of experience working with correctional service providers in Canada. Respondents were asked how often (if ever) they experienced each of the 26 items. Each item was assessed on a four-point ordinal scale (never, yearly, sometimes, and often). A total workplace stress score was computed by summing scores across the individual items (Cronbach's $\alpha = 0.895$). As we were also interested in the impact of specific types of workplace stressors, a dichotomized version of each item was computed: "no" to workplace stressor (if respondent reported never or yearly exposure to the stressor) versus "yes" to workplace stressor (if respondent reported sometimes or often exposure to the stressor).

To assess work-life conflict, several items were extracted from the 20-item Operational Police Stress Questionnaire (PSP-Op) that was included in the survey (McCreary & Thompson, 2006). As we were interested in work-life conflict, only items indicative of potential work-life conflict were included in this study (nine items in total). Each item on the PSP-Op are assessed on a seven-point ordinal scale ranging from 1 (*no stress at all*) to 7 (*a lot of stress*). A score of 4 on each item is indicative of a "moderate" amount of stress. A dichotomized version of each item was computed: "no" work-life conflict (respondents with a response of <4 on item) versus "yes" to work-life conflict (respondent with a response of ≥ 4 on item).

We also asked participants about support seeking practices in the past year, including their access of both formal (i.e., family doctor or general practitioner; psychiatrist; psychologist; and/or social worker, counselor, or psychotherapist) and informal (i.e., friend; family member; and/or coworker, supervisor, or boss) types of support.

3.3 | Statistical analyses

Cross tabulations using χ^2 tests of association (categorical variables) and *t* test statistics (continuous variables) were conducted to examine differences in variables of interest between PTSD groups (i.e., respondents screening positive for PTSD vs. respondents not screening positive for PTSD). Phi coefficient (for categorical variables) and Pearson's correlation coefficient (*r*; for continuous variables) were also computed as an indicator of the strength of the association between a PTSD status and variables of interest in this study. Results at $p < 0.05$ were considered statistically significant.

4 | RESULTS

4.1 | Demographic and work history information

The total sample included 580 workers (40.2% of the total sample was female). The majority of participants were between 30 and

TABLE 1 Sample demographic information in total sample and by PTSD screening status.

Demographics	No PTSD subsample % (n)	PTSD subsample % (n)	Total sample % (n)	χ^2 (df)
Sex				
Male	58.7 (222)	61.9 (120)	59.8 (342)	
Female	41.3 (156)	38.1 (74)	40.2 (230)	0.521 (1)
Age				
21–29 years	5.7 (21)	6.7 (13)	6.0 (34)	
30–39 years	33.2 (123)	28.4 (55)	31.5 (178)	
40–49 years	37.5 (139)	43.8 (85)	39.6 (224)	
50–59 years	18.3 (68)	17.5 (34)	18.1 (102)	
60 years and older	5.4 (20)	3.6 (7)	4.8 (27)	3.349 (4)
Education level				
High school graduate or less	17.5 (67)	24.7 (48)	20.0 (115)	
More than high school	82.5 (315)	75.3 (146)	80.0 (461)	4.177 (1)*
Marital status				
Partnered	79.5 (302)	68.8 (132)	75.9 (434)	
Not partnered	20.5 (78)	31.3 (60)	24.1 (138)	8.013 (1)**
Parental status				
Children in home	74.5 (283)	76.2 (147)	75.0 (430)	
No children in home	25.5 (97)	23.8 (46)	25.0 (143)	0.196 (1)
Employment status				
Full time	77.5 (297)	76.8 (149)	77.3 (446)	
Part time	20.1 (77)	17.0 (33)	19.1 (110)	
Other	2.3 (9)	6.2 (12)	3.6 (21)	5.861 (2)
Total years of service				
Less than 4 years	7.3 (27)	4.1 (8)	6.2 (35)	
4–9 years	36.7 (136)	34.0 (66)	35.8 (202)	
10–15 years	28.0 (104)	28.4 (55)	28.1 (159)	
More than 15 years	28.0 (104)	33.5 (65)	29.9 (169)	3.573 (3)
Occupational category				
Correctional Officer	68.5 (263)	74.5 (146)	70.5 (409)	
Community Operational	7.0 (27)	6.6 (13)	6.9 (40)	
Community Administrative	0.8 (3)	2.0 (4)	1.2 (7)	
Program Officer	8.9 (34)	3.6 (7)	7.1 (41)	
Institutional Management/Administrative	14.6 (56)	11.7 (23)	13.6 (79)	
Administrative Headquarters	0.3 (1)	1.0 (2)	0.5 (3)	11.703 (6)
Security classification of institution				
Maximum/high maximum	14.6 (56)	23.5 (46)	17.6 (102)	

TABLE 1 (Continued)

Demographics	No PTSD subsample % (n)	PTSD subsample % (n)	Total sample % (n)	χ^2 (df)
Medium	14.6 (56)	15.8 (31)	15.0 (87)	
Minimum	8.1 (31)	4.6 (9)	6.9 (40)	
Multilevel	44.5 (171)	38.3 (75)	42.4 (246)	
Not applicable	18.2 (70)	17.9 (35)	18.1 (105)	9.449 (4)

Abbreviation: PTSD, posttraumatic stress disorder.

* $p < 0.05$; ** $p < 0.01$.

49 years of age (71.1%), reported more than a high school education (80.0%), reported living with a partner (75.9%), and had children living in the home (75.0%). Most participants reported working full time in correctional services (77.3%), reported more than 4 years of total service (93.8%), and worked as Correctional Officers (70.5%). In total, 33.8% of the sample screened positive for PTSD. The mean score on the PTSD scale was 27.45 (SD = 19.72).

Sociodemographic characteristics in the total sample and by PTSD screening status are provided in Table 1. Respondents with a positive PTSD screen were more likely to report lower levels of education (i.e., high school graduate or less) and non-partnered marital status (i.e., single, separated, divorced, or widowed) than respondents. No other significant differences were noted between PTSD subgroups based on sociodemographic characteristic or work history/status variables (i.e., total years of service, occupational category, employment status, or security classification on institution).

4.2 | Exposures to PPTEs

The prevalence of PPTe exposures based on the LEC-5 in the total sample and by PTSD screening status is provided in Table 2. Participants reported diverse PPTe exposures as measured by the LEC-5. Not all PPTe were necessarily work-related and exposures can be experienced differently (e.g., witnessing, responding to, directly experiencing). The mean number of PPTe exposures was 10.49 (SD = 3.66). Participants in the PTSD subsample reported a significantly higher mean number of PPTe exposures (mean = 11.32, SD = 3.26) than participants who did not screen positive for PTSD (mean = 10.07, SD = 3.78; $t = -3.789$, $df = 526$, $p < 0.001$; $r = 0.163$). In the total sample, the most commonly reported PPTEs exposures were: physical assault; sudden violent death (e.g., homicide, suicide, assault with a weapon, serious accident at work, home, or during recreational activity, and sudden accidental death. Participants with a positive screen for PTSD were significantly more likely to report exposure to 10 of the 16 different individual PPTEs and any other stressful event or experience than participants who did not screen positive for PTSD (see Table 2).

4.3 | Exposure to workplace stressors

In the total sample, the mean workplace stressor score was 71.29 (SD = 13.83). Participants in the PTSD subsample reported a significantly higher mean workplace stress score (mean = 75.36, SD = 12.57) than participants who did not screen positive for PTSD (mean = 62.91, SD = 12.49; $t = 10.168$, $df = 475$, $p < 0.001$; $r = 0.423$). The prevalence of exposure to workplace stressors in the total sample and by PTSD screening status is provided in Table 3. Exposures to correctional workplace stressors were frequent and diverse, and associated with operational and organizational elements. Participants in the PTSD subsample were significantly more likely than participants who did not screen positive for PTSD to report several operational events and situations (i.e., interactions involving prisoners/clients): being the victim of verbal abuse from a prisoner or parolee; engaging in use of force with a prisoner or parolee; feeling one's character was being attacked by a prisoner or parolee; providing direct support for a violent event between prisoners or parolees that resulted in an injury; reading work-related documents with graphic or unsettling context (e.g., death in custody reports); feeling unsafe due to the risk of being exposed to an illegal drug or other chemical substance; feeling unsafe due to the risk of intervening with a prisoner/release having an adverse reaction to drugs; being spit on/urinated/defecated on by a prisoner or parolee; and being the victim of physical violence from a prisoner or parolee.

Participants in the PTSD subsample were significantly more likely than participants who did not screen positive for PTSD to report "sometimes" or "often" experiencing several stressors associated with social relations of work (i.e., with coworkers or management): harassment by other staff; harassment by management; feeling unsafe due to coworker negligence, noncompliance, or incompetence; workplace hazing; feeling one's character was being attacked by a colleague; and feeling one's character was under question by management.

Participants in the PTSD subsample were also significantly more likely than participants who did not screen positive for PTSD to report "sometimes" or "often" experiencing several organizational stressors: feeling unsafe due to overcrowding; feeling unsafe due to

TABLE 2 Prevalence of exposure to PPTs (LEC-5) in total sample and by PTSD screening status.

PPT	No PTSD subsample % (n)	PTSD subsample % (n)	Total % (n)	χ^2 (df)	ϕ
Life threatening natural disaster	64.7 (242)	66.0 (124)	65.1 (366)	0.086 (1)	0.012
Fire or explosion	68.4 (251)	74.2 (138)	70.3 (389)	1.991 (1)	0.060
Serious transportation accident	79.1 (295)	81.5 (154)	79.9 (449)	0.447 (1)	0.028
Serious accident at work, home, or during recreational activity	79.5 (287)	89.9 (170)	83.1 (457)	9.634 (1)**	0.132**
Exposure to a toxic substance	45.8 (153)	62.9 (112)	51.8 (265)	13.619 (1)***	0.163***
Physical assault	93.1 (353)	99.0 (192)	95.1 (545)	9.381 (1)**	0.128**
Assault with a weapon	80.8 (298)	90.4 (169)	84.0 (467)	8.535 (1)**	0.124**
Sexual assault	68.1 (250)	71.7 (134)	69.3 (384)	0.729 (1)	0.036
Other unwanted or uncomfortable sexual experience	67.8 (249)	78.6 (147)	71.5 (396)	7.038 (1)**	0.113**
Combat or exposure to a war zone	23.0 (85)	32.6 (62)	26.3 (147)	6.049 (1)*	0.104*
Captivity	33.7 (125)	45.7 (85)	37.7 (210)	7.603 (1)**	0.117**
Life threatening illness or injury	78.6 (294)	81.1 (154)	79.4 (448)	0.460 (1)	0.029
Exposure to severe human suffering	62.8 (225)	77.6 (142)	67.8 (367)	12.070 (1)***	0.149***
Sudden violent death	82.1 (302)	90.5 (172)	84.9 (474)	7.015 (1)**	0.112**
Sudden accidental death	78.5 (289)	84.4 (152)	80.5 (441)	2.689 (1)	0.070
Serious injury, harm, or death your caused to someone else	25.5 (94)	38.5 (67)	29.7 (161)	9.627 (1)**	0.133**
Any other very stressful event or experience	46.8 (123)	78.2 (111)	57.8 (234)	37.271 (1)***	0.303***

Abbreviations: LEC-5, Life Events Checklist-5; PTSD, posttraumatic stress disorder.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

being short staffed; and feeling unsafe or ill prepared as the result of inadequate training. In addition, participants were also asked whether the capacity in their institution or case-load was regularly over capacity: most participants in the PTSD subsample were significantly more likely to report that their institution or caseload was regularly over capacity than participants who did not screen positive for PTSD (65.2% vs. 53.3%; $\chi^2 = 6.385$, $df = 1$, $p = 0.012$; $\phi = 0.113$).

4.4 | Work-life conflict

Findings regarding indicators associated with work-life conflict are provided in Table 4. Participants in the PTSD subsample were significantly more likely than participants who did not screen positive for PTSD to describe the impact of work on their personal lives in the past six months as “moderate” or “a lot” with respect to: managing their social lives outside of work; having enough time to spend with friends and family; having enough time to stay in good physical condition; lack of understanding from family and friends about one’s work; making friends outside the job; social life limitations; and having friends or family feel stigmatized by their job with correctional work. Participants in the PTSD subsample were also more likely to describe the mental and emotional impact of their work as “moderate” or “a lot” with respect to: fatigue;

feeling like they are always on the job; and difficulty shifting gears between work and home (see Table 3).

4.5 | Reported access to interventions and support

Participants in the PTSD subsample were significantly more likely than participants who did not screen positive for PTSD to report accessing formal and informal types of support in the past year to deal with emotions, mental health, or the use of alcohol or drugs. Most commonly, participants reported accessing informal support from friends (36.7% vs. 21.9%; $\chi^2 = 14.573$, $df = 1$, $p < 0.001$; $\phi = 0.159$), family members (34.7% vs. 21.4%; $\chi^2 = 12.043$, $df = 1$, $p < 0.001$; $\phi = 0.144$), and co-workers, supervisors, or boss (30.1% vs. 12.8%; $\chi^2 = 25.753$, $df = 1$, $p < 0.001$; $\phi = 0.211$). The most common formal type of support access was a family doctor or general practitioner (34.2% vs. 12.5%; $\chi^2 = 38.383$, $df = 1$, $p < 0.001$; $\phi = 0.257$). Although a lower percentage of respondents reported accessing a psychiatrist (9.7% vs. 2.6%; $\chi^2 = 13.732$, $df = 1$, $p < 0.001$; $\phi = 0.154$), psychologist (14.3% vs. 2.3%; $\chi^2 = 30.986$, $df = 1$, $p < 0.001$; $\phi = 0.231$), or other type of counselor (12.8% vs. 7.6%; $\chi^2 = 4.161$, $df = 1$, $p = 0.041$; $\phi = 0.085$); the prevalence of more formal help-seeking was significantly higher for respondents

TABLE 3 Prevalence of workplace stressors in total sample and by PTSD screening status.

Workplace stressor	No PTSD subsample % (n)	PTSD subsample % (n)	Total % (n)	χ^2 (df)	ϕ
Experienced workplace hazing	36.1 (120)	56.0 (93)	42.8 (213)	17.867 (1)***	0.189***
Harassment from another employee	48.0 (160)	76.0 (127)	57.4 (287)	35.660 (1)***	0.267***
Harassment from management	47.7 (159)	76.6 (128)	57.4 (287)	37.987 (1)***	0.276***
Felt unsafe due to overcrowding	46.2 (154)	68.9 (115)	53.8 (269)	22.888 (1)***	0.214***
Felt unsafe due to being short staffed	57.2 (190)	72.9 (121)	62.4 (311)	11.577 (1)***	0.152***
Felt unsafe due to risk of being exposed to an illegal drug or other chemical	47.4 (158)	59.6 (99)	51.5 (257)	6.592 (1)**	0.115**
Feet unsafe due to coworker negligence, noncompliance, or incompetence	75.4 (251)	89.8 (149)	80.2 (400)	14.411 (1)***	0.170***
Felt unsafe or ill prepared as a result of inadequate training	54.8 (182)	71.1 (118)	60.2 (300)	12.224 (1)***	0.157***
Been the victim of physical violence from a prisoner or releasee	26.7 (89)	38.7 (63)	30.6 (152)	7.320 (1)**	0.121**
Been the victim of verbal abuse from a prisoner or releasee	80.7 (268)	90.4 (150)	83.0 (418)	7.625**	0.124**
Been spit/urinated/defecated on by a prisoner or releasee	22.7 (75)	37.7 (63)	27.7 (138)	12.577 (1)***	0.159***
Engaged in use of force with a prisoner or releasee	65.4 (217)	79.5 (132)	70.1 (349)	10.578 (1)***	0.146***
Felt character was attacked by a prisoner or releasee	68.5 (228)	81.2 (134)	72.7 (362)	9.026 (1)***	0.135**
Felt character was attacked by a colleague	51.4 (171)	71.9 (120)	58.2 (291)	19.222 (1)***	0.196***
Felt character under question by management	47.3 (157)	77.8 (130)	57.5 (287)	42.452 (1)***	0.292***
Witnessed a colleague use excessive force with a prisoner or releasee	26.8 (89)	42.1 (69)	31.9 (158)	11.785 (1)***	0.154***
Used excessive force with a prisoner or releasee	8.4 (28)	16.0 (26)	10.9 (54)	6.356 (1)*	0.113*
Provided direct support for a violent event between prisoners or releasees that resulted in an injury to a prisoner or releasee that required medical attention	43.4 (144)	53.4 (87)	46.7 (231)	4.393 (1)*	0.094*
Provided direct support to a prisoner or releasee overdose	20.5 (68)	27.6 (45)	22.8 (113)	3.151 (1)	0.080
Provided direct support to an attempted or completed prisoner or releasee suicide	42.4 (140)	52.7 (87)	45.9 (227)	4.703 (1)*	0.097*
Provided direct support at a prisoner or releasee death by unnatural causes (e.g., homicide)	8.5 (28)	16.5 (27)	11.1 (55)	7.114 (1)**	0.120**
Felt helpless witnessing a scene of prisoner or releasee on release violence	36.3 (121)	48.2 (79)	40.2 (200)	6.400 (1)*	0.113*
Made mistakes that have led to negative consequences or injuries for prisoners or releasees	4.8 (16)	11.4 (19)	7.0 (35)	7.383 (1)**	0.112**
Had difficulties shifting gears between work and home	61.7 (206)	87.3 (145)	70.2 (351)	34.936 (1)***	0.264***
Read work-related documents with graphic or unsettling context (e.g., death in custody reports)	69.7 (232)	82.0 (137)	73.8 (369)	8.796 (1)***	0.133**
Felt unsafe due to risk of intervening with a prisoner/releasee having an adverse reaction to drugs (e.g., meth, opioids)	40.7 (136)	59.0 (98)	46.8 (234)	14.944 (1)***	0.173***

Abbreviation: PTSD, posttraumatic stress disorder.

* $p < 0.05$; ** $p < 0.01$; *** $p < 0.001$.

screening positive for PTSD than respondents who did not. Among those with a perceived need for assistance, when asked if they felt they had received as much support (information, medication, counseling, therapy, or help) as they needed, respondents screening

positive for PTSD were more significantly less likely to report that they received as much help as they needed than participants who did not screen positive for PTSD (13.9% vs. 40.5%; $\chi^2 = 28.467$, $df = 2$, $p < 0.001$; $\phi = 0.290$).

TABLE 4 Prevalence of work–life conflict in total sample and by PTSD screening status.

Work–life conflict indicator	No PTSD subsample % (n)	PTSD subsample % (n)	Total % (n)	χ^2 (df)	ϕ
Managing your social life outside of work	36.0 (119)	75.6 (124)	49.1 (243)	69.013 (1)***	0.373***
Not enough time available to spend with friends and family	46.7 (154)	76.8 (126)	56.7 (280)	40.593 (1)***	0.287***
Finding time to stay in good physical condition	66.5 (220)	84.0 (136)	72.2 (356)	16.572 (1)***	0.183***
Lack of understanding from family and friends about your work	48.3 (160)	77.4 (127)	58.0 (287)	38.119 (1)***	0.278***
Making friends outside the job	38.5 (127)	66.5 (109)	47.8 (236)	34.372 (1)***	0.264***
Limitations to your social life (e.g., who your friends are, where you socialize)	37.9 (125)	72.4 (118)	49.3 (243)	51.998 (1)***	0.325***
Friends/family feel the effects of the stigma associated with your job	29.6 (98)	68.9 (113)	42.6 (211)	69.240 (1)***	0.374***
Fatigue (e.g., shift work, overtime)	61.0 (202)	86.5 (141)	69.4 (343)	33.399 (1)***	0.260***
Feeling like you are always on the job	33.6 (111)	70.7 (116)	46.0 (227)	60.700 (1)***	0.351***

Abbreviation: PTSD, posttraumatic stress disorder.

*** $p < 0.001$.

5 | DISCUSSION

The current study found that 33.8% of participating correctional workers from Manitoba screened positive for PTSD. The result is consistent with prior research indicating a high prevalence of PTSD among correctional staff in Canada; for example, the percentage was previously identified as 31% among provincial correctional workers in Ontario (Carleton, Ricciardelli, et al., 2020) and 33% among federal correctional officers (Fusco et al., 2020). We found minimal gender, age, occupational tenure, or educational differences between participants who screened positive for PTSD and those who did not. Participants who screened positive for PTSD were less likely to be partnered (e.g., married), which accords with evidence that social and familial support can mitigate mental health challenges (Johnston et al., 2022). Correctional workers who screened positive for PTSD were somewhat more likely to be correctional officers, which suggests the nuances of working frontline in prison spaces may be specific factors that negatively impact mental health. The supposition is consistent with literature describing the challenging prison work environment, which is laced with uncertainty, unpredictability, and risk to self and others (Ricciardelli et al., 2021; Ricciardelli & Power, 2020). Prior work experience in public safety occupations or in the armed forces also appeared associated with screening positive for PTSD, possibly due to protracted impacts of prior PPTe exposures.

Previous research demonstrates that both operational stressors as well as organizational factors (e.g., social relations of work) associated with PTSD among correctional workers (James & Todak, 2018). Consistent with this research, participants who screened positive for PTSD in the current study reported an average exposure of 11.32 different types of PPTe (out of a possible 16). The most frequent PPTe exposure types included physical assault, sudden violent death, and serious accidents. Negative interactions with

colleagues and management were also pronounced for participants who screened positive for PTSD. Many respondents who did not screen positive for PTSD still reported experiencing PPTe exposures and other stressors, which remains in line with prior research (Christopher et al., 2018; Gist, 2020).

For participants who screened positive for PTSD, organizational stressors also appeared influential, a factor to consider in the profile of such participants. Consistent with prior research (Konyk et al., 2021; Norman & Ricciardelli, 2021), stressors such as prison overcrowding, high case loads, short staffing, and inadequate training were more frequent experiences. Unlike operational stressors, which are a consequence often of unpredictable human behaviors and a risk inherent to the job, experiences of organizational stressors may be more easily amendable targets for change. Indeed, there is evidence that organizational stressors account for substantial variance in PTSD symptoms (Carleton, Affi, et al., 2020), offering important opportunities to support mental health. For example, mental health might be systematically improved by addressing gaps in staff-prisoner/client ratios, providing training to enhance staff safety and ability to respond to stressful work events, enhancing support resources to deal with workplace stressors, and enhancing the quality of horizontal and vertical staff relations.

Work–life conflict was also more pronounced among persons who screened positive for PTSD group than those who did not. Participants who screened positive for PTSD reported struggling to find time to spend socially with friends and loved ones during nonwork hours, to engage in physical exercise, felt a lack of understanding from loved ones about their occupational experiences, and also felt their work was stigmatized. Such feedback supports previous research associating work–life conflict with negative mental health outcomes (Lambert et al., 2020, 2021; Vickovic & Morrow, 2020). Work–life conflict may undermine or

limit activities in personal lives that might otherwise offset negative impacts of work stress (e.g., lack of time, lack of support, and fatigue). The mental and emotional effects of correctional work were more pronounced for participants who screened positive for PTSD, who reported greater stress, fatigue, or an inability to “turn off” work—arguably describing feeling trapped in an occupational mindset even when at home.

Participants who screened positive for PTSD group were more likely to seek mental health supports, most of which were informal supports. Gaps in accessing formal supports may be tied to the tendency among correctional workers to treat their mental health concerns as an individual, private matter (Johnston et al., 2021). Challenges in support seeking (e.g., the stigma of mental health; Ricciardelli et al., 2018) are a topic necessitating future research, particularly access to formal supports in comparison with informal supports. Promoting proactive support seeking for mental health treatment may help to mitigate the severity, frequency, and length of mental health challenges among correctional workers. Organizational supports can destigmatize open discussions about mental health and encourage staff to seek help, support, and treatment following exposure to PPTe and other occupational or life stressors.

6 | STRENGTHS AND LIMITATIONS

This study builds on the emerging literature pertaining to correctional work and mental health challenges by providing a profile of individuals who screened positive for PTSD in terms of demographic variables, work history information, event exposure, as well as treatment, intervention, and support seeking practices. One limitation is that given the overlap between listservs, the sampling frame or response rate of the survey cannot be determined. An accurate response rate would provide further insight into the extent to which correctional workers are comfortable sharing information related to their mental health, which remains a stigmatized topic in both correctional work and society at large. A second limitation is that the data relies on self-reported measures through the PCL-5. Although the PCL-5 remains a strong screening measurement, diagnoses generated in clinical environments are needed to confirm the presence of a mental health disorder. A third limitation is how we did not assess pre-traumatic influences that could augment or contribute to PTSD, such as childhood adverse events (see Affifi et al., 2021). Thus, it is difficult to make broad claims about mental health status when the focus in the current study is on PTSD symptoms as they materialize throughout correctional work.

7 | CONCLUSION

Overall, PPTe exposures included situations that were both work and nonwork related, each possibly compromising correctional worker mental health and well-being. Work stressors must also be recognized as not simply pertaining to interactions with prisoners or

clients, but also the physical, social, and organizational context in which such interactions occur. Generally, participants screening positive for PTSD reported higher exposure to PPTes, higher environmental or occupational stressors at work, and many had prior work experience as PSP. We do caveat that prior work history as PSP makes disentangling the impact of correctional work difficult. In addition, most correctional workers did not access formal mental health supports in the past year; however, correctional workers who screened positive for PTSD appeared more likely to access such supports.

CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

The data that support the findings of this study are available on request from the corresponding author. The data are not publicly available due to privacy or ethical restrictions.

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