ORIGINAL RESEARCH

Journal of
COMMUNITY SAFETY & WELL-BEING
A Decade of Building Safer and Healthier Communities

CELEBRATING 10 YEARS 2016 - 2026

From stigma to support: Understanding police officer mental health needs and implementation considerations for proactive wellness interventions

Lindsey Boechler*, Erin Lench†, Dasha Guliak‡, Daniel Gonsalves*, Daniel Moisan*

ABSTRACT

Police officers experience disproportionately high levels of psychological stress due to repeated exposure to potentially traumatic events, organizational pressures, and persistent mental health stigma. This sequential mixed-methods study examined police officers' mental health status, help-seeking behaviours, and organizational factors influencing the implementation of proactive wellness interventions in British Columbia, Canada. Phase I consisted of a cross-sectional survey of 179 sworn police officers using the Depression Anxiety Stress Scales-21. Approximately one-quarter of respondents reported moderate to extremely severe psychological distress, with higher distress associated with lower physical activity, increased self-medication, and greater use of mental health services. Phase II comprised four semi-structured focus groups with 29 police officers, contextualizing the quantitative findings by exploring officers' experiences with mental health, barriers to help-seeking, and factors influencing engagement with proactive wellness initiatives. Reflexive thematic analysis identified three interconnected themes: stigma, resource pitfalls, and leadership buy-in. Participants described persistent stigma, limited access to timely mental health resources, and the critical role of leadership in fostering psychologically safe workplaces. Officers also emphasized the importance of accessible, flexible, and evidence-informed interventions that fit the realities of policing. Together, these findings highlight the need for preventative mental health strategies that address both operational and organizational contributors to psychological distress. While technology-enabled approaches, including virtual reality, were viewed as promising for improving accessibility, successful implementation will depend on organizational culture, leadership support, and equitable access to evidence-based mental health resources.

Key Words Police officers; mental health; help-seeking behaviour; mixed-methods; preventative wellness.

INTRODUCTION

Police officers experience substantial operational and organizational stressors throughout their careers and are routinely exposed to potentially traumatic events and critical incidents (Bikos, 2020; Chopko et al., 2015; Weiss et al., 2010). The cumulative effects of these occupational stressors and traumatic exposures place officers at significantly elevated risk of psychological injury and mental health disorders (Carleton et al., 2018a; Stelnicki et al., 2021). Mental health challenges among police officers have been associated with long-term work absenteeism, increased use of sick leave, diminished job satisfaction, family strain, and impaired job performance (Andersen et al., 2015; Bikos, 2020). Across Canada, growing numbers of mental health-related absences have raised concerns regarding the sustainability of policing services and the broader implications for community safety (Auditor General of Ontario, 2021; Chiefs of Ontario & Ontario First Nations Policing Agreement (OFNPA), 2025).

While considerable attention has focused on documenting the prevalence of mental health challenges among police officers, comparatively less research has examined how

Correspondence to: Lindsey Boechler, Saskatchewan Polytechnic, Saskatoon Campus, Idylwyld Dr., PO Box 1520, Saskatoon, SK S7K 3R5, Canada. Telephone: +1-(306)-531-6514. **E-mail:** Lindsey.Boechler@saskpolytech.ca

To cite: Boechler, L., Lench, E., Guliak, D., Gonsalves, D., & Moisan, D. (2026). From stigma to support: Understanding police officer mental health needs and implementation considerations for proactive wellness interventions. *Journal of Community Safety and Well-Being*, 11(3), 126–137. https://doi.org/10.35502/jcswb.557

SG PUBLISHING Published by SG Publishing Inc. CSKA Official publication of the Community Safety Knowledge Alliance.

proactive mental health interventions can be designed and implemented in ways that align with the operational realities and organizational culture of policing. Emerging technologies, including virtual reality (VR), have been proposed as one approach to improving the accessibility, flexibility, and privacy of wellness programming.

VR has emerged as a promising platform for delivering mental health interventions by providing immersive, interactive, and accessible therapeutic experiences. Emerging evidence suggests that VR can enhance engagement with psychological interventions while offering flexible, private, and portable delivery that may improve access to mental health supports (Dellazizzo et al., 2020; Migoya-Borja et al., 2020; Tacca et al., 2024). These characteristics may be particularly relevant within policing, where stigma, operational demands, and irregular work schedules can limit engagement with traditional wellness programs. However, little is known about police officers' perceptions of VR-enabled wellness approaches or the organizational factors that may influence successful implementation.

The current study was undertaken as a foundational needs assessment to better understand police officers' mental health experiences and identify factors that should inform the design and implementation of proactive wellness interventions. Using a sequential mixed-methods design, phase I quantified mental health status, help-seeking behaviours, coping strategies, and receptiveness to virtually guided mindfulness practices among police officers in British Columbia. Phase II built upon these findings by exploring officers' experiences with mental health, barriers to accessing support, perceptions of mindfulness practices, and organizational factors influencing engagement with proactive wellness initiatives. By integrating quantitative and qualitative findings, this study sought to identify the individual, organizational, and contextual considerations necessary to support the implementation of accessible, evidence-informed mental health interventions within policing, including technology-enabled approaches, such as VR.

LITERATURE

Policing has been identified as one of the most stressful occupations globally (Anshel, 2000; Foley et al., 2022). Operational stressors, such as exposure to trauma, critical incidents, and unpredictable violence, are pervasive in the profession and are known to cause both immediate and delayed psychological distress (Bikos, 2020; Carleton et al., 2018b; Stelnicki et al., 2021). For many police officers, these exposures occur on a near-daily basis, contributing to the accumulation of trauma over time (Clark et al., 2015). Operational stress, considered intrinsic to the nature of police work, includes job-related trauma, physical danger, court-related duties, and the uncertainty inherent in responding to high-risk situations (Crank et al., 1993; Kop et al., 1999; Purba & Demou, 2019; Savery et al., 1993). These stressors have been identified as a significant contributor to psychological distress among police personnel (Dougherty et al., 2025; Drew & Williamson, 2025).

Beyond operational stressors, police officers are also subject to organizational stressors. Organizational stress arises from the internal structure and functioning of police organizations and includes factors such as shift work, hierarchical bureaucracy, administrative demands, and high workloads (Bikos, 2020). While operational stress is viewed as unavoidable due to the inherent nature of the profession, organizational stress is widely regarded as manageable through improved leadership, resource allocation, and structural reform (Barry et al., 2023; Ricciardelli, 2018). Research has consistently linked organizational stress to increased burnout, reduced career satisfaction, and diminished job performance (Nisar & Rasheed, 2020; Sanchez, 2021). As a result of both operational and organizational pressures, police officers experience higher levels of stress and greater incidences of mental illness compared to the general population (Bikos, 2020; Carleton et al., 2018a).

Negative consequences associated with chronic stress and repeated exposure to potentially traumatic events (PTEs) can significantly impair police officers' overall quality of life (Trombka et al., 2021). The Canadian Institute for Public Safety Research and Treatment (CIPSRT) defines a PTE as "an event involving direct or indirect experiences of actual or threatened death, serious injury, or sexual violence" (Heber et al., 2023, p. 5). The term "potentially" reflects the subjective nature of trauma, recognizing that individuals may respond differently to similar events. While not all exposures result in lasting harm, some individuals may experience symptoms of post-traumatic stress and, in some cases, develop persistent psychological difficulties consistent with a post-traumatic stress injury (PTSI; Bahji et al., 2022; Faulkner et al., 2020; Heber et al., 2023; Regehr et al., 2021; Spitzer, 2020). If a PTE occurred while the individual was engaged in their professional duties, the PTSI may be referred to as an operational stress injury (OSI; Faulkner et al., 2020; Heber et al., 2023). The term OSI encompasses a broad range of mental disorders, including anxiety disorders, depressive disorders, and post-traumatic stress disorder (Heber et al., 2023). While the symptoms of some OSIs may not meet the diagnostic criteria for a mental disorder, they can still significantly impair quality of life and interfere with an individual's ability to function effectively in social, occupational, and family settings (Heber et al., 2023).

Although the prevalence of OSIs and mental illness among police officers is well documented (Darensburg et al., 2006; Elliot-Davies & Houdmont, 2016; Karaffa & Koch, 2015; Maia et al., 2007), there is insufficient evidence that existing stress management or mental health interventions are effective in addressing the negative psychosocial, psychological, or behavioural consequences experienced by police (Burns & Buchanan, 2020; Kyprianides & Radford, 2025; Patterson et al., 2014; Treece, 2023). Although literature emphasizes the importance of novel approaches tailored to the unique culture and mental health needs of police officers (Eddy et al., 2021), many mental health and wellness programs remain slow to evolve. These programs are often reactive in nature and frequently based on anecdotal evidence rather than empirical research (Lamb & Tarpey, 2019).

Taken together, the existing literature highlights the need to move beyond documenting the prevalence of psychological injury toward understanding how innovative wellness inter-

ventions can be successfully integrated into policing. However, before implementing novel approaches, it is important to understand officers' mental health needs, current coping strategies, help-seeking behaviours, and perceptions of technology-enabled wellness programming. This foundational understanding is necessary to inform interventions that are both evidence-based and responsive to the operational realities of police work.

METHOD

This study employed a sequential explanatory mixed-methods design in which quantitative findings from phase I informed the qualitative exploration undertaken in phase II. The quantitative survey established the prevalence of mental health concerns, coping strategies, help-seeking behaviours, and receptiveness to proactive wellness practices among police officers. Phase II then used semi-structured focus groups to contextualize and explain the quantitative findings by exploring officers' lived experiences, perceptions of existing wellness supports, barriers to engagement, and views on the implementation of VR-based wellness interventions. Integration of the quantitative and qualitative data occurred during interpretation through comparison and synthesis of both data sources to develop implementation considerations.

Phase I

Phase I of this study involved a quantitative observational cross-sectional survey. Sworn law enforcement officers from British Columbia were invited to participate in an anonymous online survey. The survey captured demographic and descriptive variables including age, gender, ethnicity, years of service, rank, unit, and geographic location. Mental health status was assessed utilizing the *Depression, Anxiety, and Stress Scale – 21 items* (DASS-21). The DASS-21 is a validated self-report instrument designed to measure three emotional states: depression, anxiety, and stress (Lovibond & Lovibond, 1995). Mental health descriptive variables included help-seeking behaviour, self-medicating and coping strategies, and levels of physical activity. Variables related to mindful practice and willingness to participate in virtually guided meditation were also captured in the survey.

A total of 217 individuals responded to the survey. After excluding incomplete responses, the final sample consisted of 179 participants (Table I). The majority of respondents identified as male (71%, n = 127), and the largest proportion of respondents were between 45 and 54 years of age (48%, n = 85). Constable was the most frequently reported rank, accounting for 58% (n = 103) of participants. Respondents' DASS-21 scores were calculated and categorized according to severity using the scale developed by Lovibond and Lovibond (1995). Categorical data analysis techniques, including the Cochran-Mantel-Haenszel test, were used to assess statistically significant associations between variables. Findings from the survey informed the development of the semi-structured focus group guide, building on quantitative findings related to mental health, coping strategies, help-seeking behaviours, mindfulness practices, and receptiveness to VR-enabled wellness programming.

TABLE I Demographic characteristics of phase I and phase II participants

	N	%
Phase I participants		
Gender		
Male	127	70.9
Female	51	28.5
Other	1	0.6
Age group (years)		
25–34	28	15.6
35–44	46	25.7
45–54	85	47.5
55+	20	11.2
Rank		
Constable	103	57.5
Corporal	26	14.5
Sergeant	23	12.8
Staff Sergeant	11	6.1
Commissioned Officer	14	7.8
Other	2	1.1
Phase II participant		
FG location: Kelowna		
Male	5	62.5
Female	3	37.5
FG location: Surrey		
Male	6	75.0
Female	2	25.0
FG location: Sidney		
Male	7	100.0
FG location: Prince George		
Male	5	83.3
Female	1	16.7
Total		
Male	23	79.3
Female	6	20.7

Note. The upper section summarizes demographic characteristics of phase I survey participants (n = 179). The lower section summarizes demographic characteristics of phase II focus group (FG) participants (n = 29).

Phase II

Phase II employed a qualitative descriptive methodology using semi-structured focus groups to explore police officers' mental health experiences, perceptions of mindfulness, and views regarding VR-enabled wellness programming. A

qualitative descriptive methodology was selected because the study sought to provide a rich description of police officers' experiences and perspectives. Sworn police officers from across British Columbia were invited to participate in one of four focus groups held in Kelowna, Surrey, Sidney, and Prince George. Each session lasted between 90 and 120 minutes and was facilitated by members of the research team using a flexible discussion guide (Table II). Audio recordings were transcribed verbatim and analyzed using Braun and Clarke's (2021) reflexive thematic analysis. An inductive approach was used, allowing themes to be developed through iterative engagement with participants' accounts rather than being predetermined. Analysis followed the six phases of reflexive thematic analysis: familiarization with the data, coding, generating initial themes, reviewing themes, defining and naming themes, and producing the report. Initial codes were generated directly from the transcripts and were iteratively refined into themes through collaborative discussion and reflexive interpretation by the research team.

A total of 29 sworn police officers participated across the four focus groups (Table I), including 23 males and 6 females. Participants voluntarily disclosed demographic and occupational characteristics, including rank, unit, and years of service, according to their comfort level. Among those who provided this information, years of service ranged from <1 year to >30 years. Participants were not asked to report their age.

Researcher Positionality and Reflexivity

Members of the research team brought professional experience in policing, paramedicine, and applied health research, providing contextual understanding of the occupational environment discussed by participants. Recognizing that these experiences could influence data interpretation, the research team engaged in ongoing reflexive discussions throughout data analysis to critically examine assumptions, challenge interpretations, and ensure that themes remained grounded in participants' accounts (Wilson et al., 2022).

RESULTS

Phase I: Survey Results

Descriptive statistics from the DASS-21 results (Table III) indicate that, among the 179 respondents, the majority scored within the normal range for depression (60%), anxiety (70%), and stress (64%). When examining the higher severity levels, categorized as moderate, severe, and extremely severe, approximately one in four respondents fell into these ranges: 27% for depression, 24% for anxiety, and 26% for stress. These findings highlight a notable proportion of participants experiencing elevated psychological distress. Further analysis

TABLE II Focus group discussion guide used during Phase II data collection

Session Segment	Discussion Prompts
First half of session	Introductory questions: allow participants an opportunity to share about themselves.
	Explore participants' motivation to participate in focus group and what outcomes they would like to see come from it.
	Delve into existing level of experience in engaging in meditation/mindfulness.
	Discuss when they feel meditation would be most beneficial and explore what circumstances they feel influence this.
	Identify existing barriers to adopting mindful practices.
	Explore what participants like best about the mental health and wellness strategies they currently engage in.
Second half of session	Introduce and explain virtual reality to participants.
	Discuss potential virtual meditative resources participants would find useful (e.g., What type of resources would they be interested in? Which apps would police officers connect with? What setting would they be most likely to utilize virtual resources?).
	Is there anything else anyone would like to share?

TABLE III Distribution of DASS-21 depression, anxiety, and stress severity scores

Measure	Severity	Normal	Mild	Moderate	Severe	Extremely Severe
Depression	*n*	107	23	23	15	11
	%	59.8	12.8	12.8	8.4	6.1
Anxiety	*n*	125	11	22	12	9
	%	69.8	6.1	12.3	6.7	5.0
Stress	*n*	114	18	25	16	6
	%	63.7	10.1	14.0	8.9	3.4

revealed statistically significant associations between DASS-21 scores and other survey variables.

Associations between employment characteristics and DASS-21 outcomes are displayed in Table IV and were analyzed in χ^2 tests. A significant association was found between respondents' unit of employment and DASS-21 severity scores. Specifically, police officers working in Community Engagement and Major Crimes units reported higher proportions of severe and extremely severe symptoms on the depression scale ($p < 0.001$, $V = 0.15$). Similarly, police officers demonstrated significant relationships between unit of employment with anxiety ($p < 0.001$, $V = 0.18$) and stress ($p < 0.001$, $V = 0.18$). In contrast, no significant associations were observed between DASS-21 severity scores and respondents' years of service or rank.

Regarding mental health care-seeking behaviour, 83% of respondents ($n = 150$) reported having sought mental health care at some point during their career. Higher self-reported scores on the DASS-21 scales were associated with more frequent use of mental health support services. As the severity of a respondent's scores on the DASS-21 scale increased, so did the likelihood of a friend or family member suggesting to them that they should seek advice or care from a mental health specialist. Similarly, those who reported more severe mental health symptoms tended to be prescribed medication for their mental health.

Statistically significant associations were found between DASS-21 severity scores and the frequency of self-reported self-medication. These results suggest that as the severity of depression ($p < 0.001$, $V = 0.36$), anxiety ($p < 0.001$, $V = 0.29$), and stress ($p < 0.001$, $V = 0.33$) increases, respondents are more likely to engage in self-medication using drugs or alcohol.

Over half of respondents (52%) reported never engaging in meditation, while 33% indicated they meditated occasionally, and 17% practiced meditation multiple times per week. The top three barriers to meditation cited by respondents were being distracted by their thoughts (51%), environmental distractions (41%), and a lack of time (39%). Linear-by-linear association tests revealed no statistically significant relationship between meditation frequency and DASS-21 severity scores for depression ($p = 0.766$), anxiety ($p = 0.594$), or stress ($p = 0.899$).

Despite limited engagement with traditional meditation practices, 65% of respondents indicated they would be likely or very likely to try virtually guided meditation if it were made available, suggesting considerable openness to technology-enabled wellness interventions. Willingness to participate varied by unit; notably, members of the Patrol and Traffic Units, despite contributing the highest number of survey responses, reported the lowest likelihood of engaging in VR-based meditation. Across nearly all participating departments, respondents expressed a preference for accessing VR mindfulness practices at home rather than in the workplace. Overall, these findings indicate that while officers reported relatively low engagement with existing mindfulness practices, many were receptive to exploring VR as an alternative method of accessing proactive mental health supports.

Phase II: Focus Group Results

Qualitative findings from the focus groups provided deeper insight into the mental health challenges faced by police officers while also reflecting on how innovative technologies might address existing barriers. Participants described personal and organizational barriers to mental health care while discussing the characteristics they believed would be neces-

TABLE IV Associations between employment characteristics and DASS-21 outcomes

Variable	*p*	*V*	*w*	Significance
Years of service | depression	0.708	0.12	0.27	Not Significant
Years of service | anxiety	0.542	0.13	0.29	Not Significant
Years of service | stress	0.850	0.17	0.38	Not Significant
Rank | depression	0.062	0.16	0.32	Not Significant
Rank | anxiety	0.240	0.15	0.31	Not Significant
Rank | stress	0.112	0.16	0.31	Not Significant
Location | depression	<0.001	0.16	0.46	Significant
Location | anxiety	<0.001	0.20	0.56	Significant
Location | stress	<0.001	0.24	0.68	Significant
Employment unit | depression	<0.001	0.15	0.30	Significant
Employment unit | anxiety	<0.001	0.18	0.35	Significant
Employment unit | stress	<0.001	0.18	0.37	Significant
Self medicate | depression	<0.001	0.36	0.62	Significant
Self medicate | anxiety	<0.001	0.29	0.50	Significant
Self medicate | stress	<0.001	0.33	0.58	Significant

Note. DASS-21 = Depression Anxiety Stress Scales (21-item version). Cramér's *V* and Cohen's *w* represent effect size measures for χ^2 tests. Significance determined at $p < 0.05$.

sary for successful implementation of VR-enabled wellness programming within policing. Discussions highlighted how police culture, organizational structures, leadership practices, and accessibility influenced both help-seeking behaviours and receptiveness to VR-based interventions.

Stigma

Stigma emerged as a central theme across all focus groups, with participants sharing personal experiences and observations that reflected the ongoing presence of mental health stigma within their organizations. A recurring sentiment was that police culture often equates mental health challenges with weakness, which discourages open dialogue and help-seeking. As one participant noted:

> There is more empathy for our clients than for our own colleagues at times. And that's the shitty part, you take a leave for the night, and it is thought "Well, are they weak?". (Participant 17)

Concerns were also raised about potential career repercussions, with many police officers expressing fear that disclosing mental health issues or accessing support services could hinder their chances of promotion. As one participant explained:

> I feel, in some cases, the fact that you are receiving counseling or are needing help prohibits you from advancing [professionally]. (Participant 27)

Participants also described how the effects of unaddressed trauma could manifest in subtle or escalating behavioural changes. These changes were often misunderstood or responded to with disciplinary procedures rather than psychological support. One participant reflected:

> I started getting myself in trouble. When I first came in, [for the] first three or four years, I was the golden child. I could do nothing wrong, like I was killing it. And then I had my little event, and I didn't notice it, but that was kind of my tipping point when I went over the edge. And I just started getting in trouble, started getting a little heavy-handed, nothing to the point where it was bad, bad, but just going a little further than I should have. And then I started getting a lot of trouble, repeatedly… (Participant 4)

This account underscores the cultural expectation that police officers endure their psychological burdens in silence and how organizational responses may focus more on correcting behaviour than addressing root causes.

Participants emphasized the need for a cultural shift within policing—one that normalizes mental health conversations and education, thereby prioritizing psychological well-being. As one officer shared:

> I said when I got injured, "what the hell is wrong with me? I don't know what's wrong with you". Even my coworkers [asked] "why are you so angry? What's wrong with you?" I have no goddamn idea. So, I think education is a huge piece to implementing any of the stuff. (Participant 5)

Many participants emphasized the importance of integrating mindfulness practices into police officers' daily routines, whether through meditation, walking, or the use of mindfulness apps. They also highlighted the value of introducing these practices early in training to foster long-term mental health awareness among both recruits and serving officers. As one participant explained:

> You have to start at [training]. Consider you're already talking to experienced police officers who have realized they're broken and are seeking help, but essentially, if you want to implement it, you have to make it part of [training] so you would start at [the beginning]. (Participant 11)

Together, these perspectives highlight the enduring barriers to mental wellness created by stigma and point to the importance of organizational reform, early education, and leadership-supported normalization of mental health care across all stages of an officer's career.

Resource pitfalls

The second theme identified was Resource Pitfalls, which captured the significant challenges police officers faced in accessing mental health support across police detachments and workplaces. Participants shared a range of experiences that illustrated the systemic gaps in care availability.

In some cases, participants were required to travel long distances to receive treatment. As one participant explained:

> I had to travel two and a half hours to get treatment for PTSD, and I did that for two and a half years, almost three years, back and forth. So, anything that can be brought closer to help members, I'm all in. (Participant 6)

Others described having to conduct therapy sessions over the phone in public spaces, with one officer recounting:

> I was meeting in restaurants and on the telephone with psychologists for my PTSD, which was not ideal. (Participant 1)

Participants stationed in smaller or remote police detachments reported even greater difficulty accessing appropriate mental health resources. One participant noted:

> We are struggling in [my detachment]. We are very small … and we have several members that are currently off, and they've been off for a while … and we are seeing the cards crumble. And I always ask myself, how come this is happening? (Participant 22)

Another participant added:

> There's not one psychologist in [my town]. I don't have a choice, like I can't go see anybody local even if I wanted to. (Participant 28)

In some cases, participants described hitting a breaking point, at which they felt compelled to take their mental health into their own hands by researching suitable programs, paying out of pocket, and, in one instance, travelling across the

country in search of meaningful support. As one participant described:

> I had to pay for my own treatment [near] Ottawa. I went to this amazing program… That was after going to my boss a blubbering mess, begging him to do something because I didn't know what to do. (Participant 4)

In response to these barriers, participants emphasized the need for mental health tools that are readily and consistently accessible, particularly in small and remote communities. As one officer emphasized:

> To have something for the members and those in the smaller detachments that's available right away, not in two weeks, two months down the road… I think that would have a huge impact on how our members heal from all their mental health injuries, and stress injuries and stuff like that. Huge. (Participant 1)

Overall, there was broad agreement that existing mental health resources were insufficient and that accessibility issues were especially pronounced in rural and remote areas. Participants advocated for immediate, flexible, and portable tools that could help eliminate these persistent service gaps. Many participants viewed VR as one potential mechanism for addressing these barriers because it could provide timely, portable, and private access to evidence-informed wellness practices without requiring travel or reliance on limited local resources.

Leadership buy-in

The third major theme identified was Leadership Buy-In, reflecting participants' views on the importance of leadership support in promoting mental health and wellness within policing. Throughout the focus groups, participants emphasized that leadership engagement, at all levels, is essential for fostering a culture that values and prioritizes mental well-being.

While participants recognized efforts made by senior leadership to support mental health, some described a disconnect at the mid-management level, particularly among junior and senior non-commissioned officers, who are most responsible for providing day-to-day support. In some instances, participants shared that they felt uncertain about whether their mental health concerns would be taken seriously or supported. One participant shared:

> The constables, we work really great together as a team, have an amazing detachment. It's above us that it's painful, it's so painful, and I'm not supported. I told my sergeant I think I'm just going to go for a time-out walk. His eyes would bug out, "Why?" Because I need a time-out from you, actually, and I need to go walk it off before I say something. (Participant 5)

This quote illustrates how rigid supervisory responses can intensify stress and discourage healthy coping strategies, even in otherwise supportive peer environments. Some participants described how immediate supervisors often failed to recognize or accommodate mental health needs, creating friction and deepening the divide between frontline officers and leadership.

In some instances, participants shared that they were unsure whether their concerns would be taken seriously at all. As one participant recounted:

> I went in there asking for help, and I figured he's the one that's preaching that, you know, "door's open, come on in, I'll do everything I can for you". And then I did, and he basically gave me the same [advice] my [training] instructor said: "A 40 [ounce] of gin and a bad night and you'll be better in the morning". (Participant 4)

Participants also reflected on leadership's role in normalizing proactive wellness practices during shifts, including the use of brief VR-guided mindfulness sessions. Officers suggested that these interventions could be integrated into existing work routines if supported by supervisors. These practices were seen as small but meaningful acts of support that could be integrated into daily routines. As one participant noted:

> That's where the supervisors and upper management need to put in the support for that and if a member needs to take five minutes to go to their happy place, then let them go to do that when they need that kind of thing. And to take five to 10 minutes here and there, it is not an unreasonable ask for members doing a 12-hour shift. … It is not unreasonable at all. (Participant 5)

Additionally, participants expressed a hope that leadership would remain open to exploring new and innovative mental health tools, particularly given the limitations of current approaches. As one officer shared:

> I think it's important to bring it up to leadership because in the last couple of years countless members have taken their lives and what we've been doing in the past isn't working. So, we need to rely on new technology and new ideas. (Participant 18)

Overall, participants highlighted leadership as a key factor in the successful implementation of mental wellness initiatives. Support and encouragement from leaders, especially those in supervisory roles, were seen as vital to ensuring police officers feel safe, supported, and empowered to prioritize their mental health.

Many participants described experiencing significant mental health challenges while encountering barriers to accessing timely and appropriate mental health supports. Help-seeking continued to be perceived as a sign of weakness, with participants expressing hesitation to access services because of concerns about stigma and potential career repercussions. Several participants also described relying on maladaptive coping strategies during periods of psychological distress.

While engagement in mindfulness practices was generally limited, participants expressed considerable openness to approaches that were accessible, flexible, and relevant to the realities of policing. Many viewed technology-enabled wellness programming as a promising means of delivering

brief, private, and proactive mental health supports, particularly when endorsed by organizational leadership and made available throughout an officer's career.

Participants emphasized the importance of proactive, preventative mental wellness initiatives and identified a lack of sustainable, evidence-informed programming within policing. Such initiatives were viewed as key to reducing stigma and fostering a supportive culture around mental health. Critically, participants highlighted the influential role of leadership, noting that meaningful engagement and endorsement at all levels, particularly among direct supervisors, are essential for successful implementation. Finally, participants underscored the importance of introducing mental wellness tools early in an officer's career, specifically during academy training, to establish a strong foundation for long-term mental health and resilience.

DISCUSSION

This sequential mixed-methods study provides insight into police officers' mental health needs and the organizational factors influencing proactive wellness initiatives. By integrating quantitative and qualitative findings, the study demonstrates that psychological well-being in policing is shaped not only by repeated exposure to operational stressors but also by organizational influences including stigma, leadership support, and access to mental health resources. Together, these findings suggest that improving police officer wellness requires strategies that address both the cumulative effects of operational trauma and the organizational environments in which officers work and seek support.

The distinction between operational and organizational stressors is particularly important when interpreting these findings. Operational stressors, including repeated exposure to PTEs, violence, and critical incidents, are inherent to policing and cannot be eliminated (Bikos, 2020; Carleton et al., 2018b). Consequently, interventions targeting operational stress are likely to focus on strengthening resilience, improving psychological preparedness, and supporting recovery following traumatic exposures. In contrast, organizational stressors, including workplace culture, leadership practices, administrative processes, and access to mental health resources, are potentially modifiable through organizational change (Barry et al., 2023; Ricciardelli, 2018). The qualitative findings help explain the quantitative burden of psychological distress observed in phase I by demonstrating how repeated operational exposures are compounded by organizational barriers that discouraged help-seeking and delayed access to care, reinforcing previous research demonstrating that organizational stress often contributes as much to police officers' psychological burden as operational trauma itself (Barry et al., 2023; Drew & Williamson, 2025; Ricciardelli, 2018). These findings suggest that sustainable improvements in police wellness will require interventions that address both sources of stress simultaneously rather than focusing exclusively on trauma exposure.

The present findings also provide important insight into police officers' help-seeking behaviours. Although 83% of survey respondents reported seeking mental health care during their careers, the qualitative findings suggest that help-seeking often occurred only after symptoms became severe because of fears of appearing weak, concerns about career progression, and uncertainty regarding how supervisors would respond. Taken together, these findings suggest that willingness to seek care does not appear to be the primary barrier. Rather, organizational culture and perceived career consequences appear to delay help-seeking until psychological distress becomes too difficult to manage. This pattern is consistent with previous research demonstrating that organizational culture, self-stigma, and concerns about career repercussions remain significant barriers to early help-seeking among police officers (Bikos, 2020; Karaffa & Koch, 2015).

The qualitative findings provide important context for the observed association between higher DASS-21 scores and greater reliance on self-medication. Participants described numerous barriers to accessing timely mental health care. Officers described travelling considerable distances for treatment, paying privately for specialized programs, or relying on telephone counselling in environments that offered little privacy. Importantly, these findings suggest that maladaptive coping behaviours may arise not only from the cumulative psychological impact of policing but also when timely and appropriate mental health supports are inaccessible or perceived as professionally risky. Improving access to preventative mental health resources may therefore reduce reliance on self-medication while encouraging earlier engagement with healthier coping strategies.

The resource challenges described by participants also highlight an important distinction between organizational and contextual barriers. Some obstacles, such as stigma, inadequate supervisor support, and insufficient organizational investment in preventative wellness programming, are largely within the control of policing organizations. Others, including shortages of mental health professionals, geographic isolation, and long travel distances experienced by officers serving rural and remote communities, reflect broader health system challenges that extend beyond individual police services. This distinction has important implications for intervention design because, while organizational reforms may improve workplace culture and encourage earlier help-seeking, they cannot fully address limitations in regional mental health infrastructure. Consequently, innovative approaches that prioritize accessibility, flexibility, and privacy may help address some of the contextual barriers identified by participants, particularly for officers working in rural and remote communities. Although these approaches cannot replace comprehensive clinical mental health services, they may complement existing supports by improving access to proactive mental health resources.

Leadership emerged as a critical factor influencing the successful implementation of mental health initiatives. Participants consistently identified supervisors as playing a central role in determining whether officers felt psychologically safe accessing support or engaging in proactive wellness practices. While many participants acknowledged growing organizational recognition of mental health, they frequently described inconsistent support at the supervisory level, where day-to-day workplace culture is often established. These findings support growing evidence that leadership is a critical determinant of organizational culture and psychological safety, influencing officers' willingness to

engage with mental health and wellness initiatives (Boechler, 2025; Drew et al., 2023). Beyond facilitating access to formal services, leadership was viewed as essential to normalizing preventative practices, supporting participation in wellness activities, and reinforcing that proactive mental health care is an accepted part of professional policing.

Viewed collectively, the quantitative findings identify the extent of psychological distress and help-seeking among police officers, while the qualitative findings explain the organizational and contextual factors that influence when, how, and whether officers engage with mental health supports. Together, these findings provide a more comprehensive understanding of police officer wellness than either phase alone.

Beyond informing intervention design, the present findings also have important implications for implementation. Across both phases of the study, participants consistently emphasized that the success of proactive mental health initiatives depends not only on the intervention itself but also on the organizational context in which it is introduced. Leadership support, workplace culture, perceptions of psychological safety, accessibility, scheduling flexibility, and privacy were repeatedly identified as factors influencing officers' willingness to engage with wellness programming. These findings suggest that implementation success depends not only on intervention efficacy but also on organizational readiness to support and sustain preventative mental health initiatives. Consequently, future implementation efforts should consider organizational culture, leadership engagement, and practical barriers to participation alongside evaluation of intervention effectiveness.

Survey respondents demonstrated considerable willingness to engage with virtually guided mindfulness practices despite limited prior experience with meditation, while focus group participants emphasized the importance of interventions that were flexible, private, accessible, and easily integrated into operational routines. Many participants viewed VR as a potential platform capable of meeting these requirements because it could provide portable, evidence-informed wellness supports that reduce barriers associated with travel, scheduling, and stigma. However, participants' enthusiasm should not be interpreted as evidence of effectiveness. Rather, the present findings identify implementation considerations that should guide future evaluation of VR-based interventions. Consistent with emerging evidence supporting VR as a platform for delivering psychological interventions (Dellazizzo et al., 2020; Migoya-Borja et al., 2020), participants' enthusiasm suggests that VR may be an acceptable delivery platform, provided implementation is supported by organizational readiness, leadership engagement, accessibility, psychological safety, and sustained efforts to reduce stigma.

Collectively, these findings add to the growing body of literature supporting preventative approaches to police mental health that extend beyond crisis response and treatment alone. Participants emphasized that wellness practices should be introduced early, reinforced throughout service, and integrated into everyday policing rather than reserved for periods of crisis. These findings suggest that officers' receptiveness to technology-enabled wellness interventions depends less on the technology itself than on whether the intervention aligns with the operational realities of policing and is supported by an organizational culture that promotes psychological safety. Ultimately, improving police officer mental health will require implementation strategies that are as carefully designed as the interventions themselves, recognizing that sustained organizational commitment is fundamental to fostering meaningful and lasting improvements in officer well-being.

Limitations

This study offers important insights into police officer wellness; however, respective limitations should be acknowledged. First, although the study confirmed the prevalence and impact of psychological distress among police officers, it did not distinguish between operational and organizational sources of stress. Given growing evidence that these stressors may influence mental health through different mechanisms and require different intervention strategies, future research should examine their independent and combined effects.

Second, phase I employed a cross-sectional survey design, preventing conclusions regarding causality. Although significant associations were identified between psychological distress, self-medication, physical activity, and help-seeking behaviours, the direction of these relationships cannot be determined and may have been influenced by unmeasured confounding variables.

Third, participation was voluntary, introducing the potential for self-selection bias. Officers with either particularly positive or particularly negative experiences related to mental health may have been more likely to participate, potentially limiting the representativeness of both the survey and the focus group findings.

Finally, although participants represented a range of policing roles and geographic regions across British Columbia, the findings may not be transferable to all policing contexts or jurisdictions with different organizational structures, cultures, or mental health resources.

FUTURE DIRECTIONS

The findings of this study highlight several priorities for future research on police officer mental health and proactive wellness interventions. First, greater attention should be given to distinguishing the relative influence of operational and organizational stressors on mental health outcomes. Understanding how these sources of stress interact, and whether they respond differently to preventative interventions, will be important for developing targeted and effective wellness strategies.

Second, future research should build upon needs assessments by evaluating the effectiveness, feasibility, and long-term implementation of proactive mental health interventions within policing. While participants expressed openness to innovative, technology-enabled approaches, rigorous evaluation through randomized and longitudinal study designs is needed to determine their impact on psychological well-being, resilience, help-seeking behaviours, organizational culture, and operational outcomes.

Third, implementation research is needed to better understand how organizational factors, including leadership practices, workplace culture, and organizational readiness, influence the successful adoption of preventative

mental health programs. Future studies should also examine approaches that support supervisors in recognizing early indicators of psychological distress and facilitating timely access to mental health resources before symptoms become severe.

Finally, future research should examine innovative approaches that improve equitable access to evidence-based mental health supports, particularly for officers serving rural and remote communities where geographic isolation and limited availability of specialized services remain persistent barriers. Digital and technology-enabled interventions, including VR, represent one potential avenue for improving accessibility; however, their effectiveness, acceptability, sustainability, and integration within existing systems of care require further investigation. Multi-jurisdictional research involving police services across Canada would also strengthen understanding of how regional, organizational, and policy differences influence police mental health needs and the implementation of proactive wellness initiatives.

Collectively, these priorities support a shift from reactive models of mental health care toward evidence-informed, preventative approaches that address both the operational realities of policing and the organizational environments in which officers work.

CONCLUDING REMARKS

This study provides a foundational understanding of the mental health needs of police officers and the organizational factors that should inform the development and implementation of proactive wellness interventions. By integrating quantitative and qualitative findings, the study demonstrates that psychological well-being in policing is shaped not only by repeated exposure to operational stressors but also by organizational factors such as stigma, leadership support, and access to timely mental health resources. Importantly, these findings identify key implementation considerations for proactive wellness initiatives rather than evidence of intervention effectiveness, providing a foundation to guide the design, evaluation, and implementation of future interventions.

The findings suggest that police officers are receptive to preventative approaches that are accessible, flexible, and responsive to the realities of policing. While VR emerged as one promising platform for delivering proactive wellness programming, the results indicate that the success of any intervention will depend on more than the technology itself. Organizational commitment, leadership engagement, efforts to reduce stigma, and equitable access to evidence-based supports are all critical to fostering meaningful and sustained improvements in police officer well-being.

As policing organizations continue to strengthen their approaches to psychological health, sustained investment in evidence-informed, preventative wellness strategies—and the organizational commitment required to successfully implement them—may support healthier careers, strengthen organizational resilience, and contribute to the long-term sustainability of policing services.

ACKNOWLEDGEMENTS

We extend our sincere gratitude to the police officers who participated in this study. Their willingness to share candid and deeply personal experiences provided invaluable insights that made this research possible. We recognize the courage it takes to speak openly about mental health in policing, and we are truly grateful for their contributions to advancing knowledge and fostering meaningful change.

FUNDING

This research was supported by Saskatchewan Polytechnic through internal seed funding provided by the Centre for Health Research, Innovation and Scholarship and the Office of Applied Research and Innovation.

CONFLICT OF INTEREST DISCLOSURES

The authors have no conflicts of interest to declare.

ETHICAL APPROVAL AND INFORMED CONSENT

Ethical approval was obtained from the University of Saskatchewan (Beh 3011). Informed consent was obtained from all individual participants included in the study.

AUTHOR AFFILIATIONS

*Saskatchewan Polytechnic, Saskatoon, Canada; †Royal Canadian Mounted Police (Retired), Ottawa, Canada; ‡University of Saskatchewan, Saskatoon, Canada.

REFERENCES

Andersen, J. P., Papazoglou, K., Nyman, M., Koskelainen, M., & Gustafsberg, H. (2015). Fostering resilience among police. *Journal of Law Enforcement, 5*(1). Retrieved from http://hdl.handle.net/1807/73820

Anshel, M. H. (2000). A conceptual model and implications for coping with stressful events in police work. *Criminal Justice and Behavior, 27*(3), 375–400. https://doi.org/10.1177/0093854800027003006

Auditor General of Ontario. (2021). *Annual report 2021: Ontario Provincial Police – Health and well-being of OPP members.* Office of the Auditor General of Ontario. Accessed July 26, 2025, from https://www.barrietoday.com/ontario-news/opp-officer-ptsd-contributing-to-staffing-shortages-auditor-general-4817295

Bahji, A., Di Nota, P. M., Groll, D., Carleton, R. N., & Anderson, G. S. (2022). Psychological interventions for post-traumatic stress injuries among public safety personnel: A systematic review and meta-analysis. *Systematic Reviews, 11*(1), 255. https://doi.org/10.1186/s13643-022-02112-1

Barry, B., Ricciardelli, R., & Cramm, H. (2023). "We are unique": Organizational stressors, peer support and attitudes toward mental health treatment among airport firefighters. *Health Promotion and Chronic Disease Prevention in Canada: Research, Policy and Practice, 43*(10–11), 450–459. https://doi.org/10.24095/hpcdp.43.10/11.03

Bikos, L. J. (2020). "It's all window dressing:" Canadian police officers' perceptions of mental health stigma in their workplace. *Policing: An International Journal, 44*(1), 63–76. https://doi.org/10.1108/PIJPSM-07-2020-0126

Boechler, R. (2025). *Shaping tomorrow's leaders: Exploring the Moose Jaw police service promotional process to address the leadership needs and challenge within modern policing.* [Master's thesis, Royal Roads University, British Columbia, CA].

Braun, V., & Clarke, V. (2021). *Thematic analysis: A practical guide.* Sage.

Burns, C., & Buchanan, M. (2020). Factors that influence the decision to seek help in a police population. *International Journal of Environmental Research and Public Health, 17*(18), 6891. https://doi.org/10.3390/ijerph17186891

Carleton, R. N., Afifi, T. O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D. M., Sareen, J., Ricciardelli, R., MacPhee, R. S., Groll, D., Hozempa, K., Brunet, A., Weekes, J. R., Griffiths, C. T., Abrams, K. J., Jones, N. A., Beshai, S., Cramm, H. A., Dobson, K. S., …

Asmundson, G. J. G. (2018a). Mental disorder symptoms among public safety personnel in Canada. *Canadian Journal of Psychiatry, 63*(1), 54–64. https://doi.org/10.1177/0706743717723825

Carleton, R. N., Korol, S., Mason, J. E., Hozempa, K., Anderson, G. S., Jones, N. A., Dobson, K. S., Szeto, A., & Bailey, S. (2018b). A longitudinal assessment of the road to mental readiness training among municipal police. *Cognitive Behaviour Therapy, 47*(6), 508–528. https://doi.org/10.1080/16506073.2018.1475504

Chiefs of Ontario and Ontario First Nations Policing Agreement (OFNPA). (2025). *Mental health review final report*. Chiefs of Ontario. Accessed July 26, 2025, from https://chiefs-of-ontario.org/wp-content/uploads/2024/11/OFNPA-Mental-Health-Review-FINAL-REPORT.pdf

Chopko, B. A., Palmieri, P. A., & Adams, R. E. (2015). Critical incident history questionnaire replication: Frequency and severity of trauma exposure among officers from small and midsize police agencies. *Journal of Trauma Stress, 28*(2), 157–161. https://doi.org/10.1002/jts.21996

Clark, R. D., Distelrath, C., Vaquera, G. S., Winterich, D., & DeZolt, E. (2015). Critical-incident trauma and crime scene investigation: A review of police organizational challenges and interventions. *Sociology, 32*. Retrieved from https://collected.jcu.edu/soc-facpub/32?utm_source=collected.jcu.edu%2Fsoc-facpub%2F32&utm_medium=PDF&utm_campaign=PDFCoverPages

Crank, J. P., Regoli, B., Hewitt, J. D., & Culbertson, R. G. (1993). An assessment of work stress among police executives. *Journal of Criminal Justice, 21*(4), 313–324. https://doi.org/10.1016/0047-2352(93)90016-G

Darensburg, T., Andrew, M. E., Hartley, T. A., Burchfiel, C. M., Fekedulegn, D., & Violanti, J. M. (2006). Gender and age differences in posttraumatic stress disorder and depression among Buffalo police officers. *Traumatology, 12*(3), 220–228. https://doi.org/10.1177/1534765606296271

Dellazizzo, L., Potvin, S., Luigi, M., & Dumais, A. (2020). Evidence on virtual reality–based therapies for psychiatric disorders: Meta-review of meta-analyses. *Journal of Medical Internet Research, 22*(8), e20889. https://doi.org/10.2196/20889

Dougherty, M., O'Leary, M., & Mumford, E. A. (2025). Binge drinking, job stressors, and resilience in a nationally representative sample of law enforcement officers. *The Police Journal, 98*(1), 129–146. https://doi.org/10.1177/0032258X241244612

Drew, J. M., Bartels, S. & Herrington, V. (2023). *Leadership for wellness: A strategy for developing police and public safety leaders* (Leadership Development White Paper). A Collaboration between Griffith Criminology Institute, Griffith University and AIPM.

Drew, J. M., & Williamson, H. (2025). Trauma, critical incidents, organizational and operational stressors: The relationship between harms and psychological outcomes for police. *Police Quarterly, 28*(3), 287–312. https://doi.org/10.1177/10986111241275048

Eddy, A., Bergman, A. L., Kaplan, J., Goerling, R. J., & Christopher, M. S. (2021). A qualitative investigation of the experience of mindfulness training among police officers. *Journal of Police Criminal Psychology, 36*(1), 63–71. https://doi.org/10.1007/s11896-019-09340-7

Elliot-Davies, M., & Houdmont, J. (2016). Officer demand, capacity, and welfare survey. Initial Report–Descriptive Results. Police Federation of England and Wales. Retrieved from https://www.polfed.org/media/14070/welfaresurveymentalhealth-summaryreport-25-01-2017-v1.pdf

Faulkner, B., Fuss, S., & Couperthwaite, L. M. Z. (2020). PTSD and other operational stress injuries among police officers: Empirical findings and reflections from clinical practice. In K. Papazoglou and D. M. Blumberg (Eds.), *POWER: Police officer wellness ethics and resilience* (pp. 129–168). Academic Press. https://doi.org/10.1016/B978-0-12-817872-0.00009-4

Foley, J., Hassett, A., & Williams, E. (2022). 'Getting on with the job': A systematised literature review of secondary trauma and post-traumatic stress disorder (PTSD) in policing within the United Kingdom (UK). *The Police Journal: Theory, Practice and Principles, 95*(1), 224–252. https://doi.org/10.1177/0032258X21990412

Heber, A., Testa, A., Groll, D., Ritchie, K., Tam-Seto, L., Mulligan, A., Sullo, E., Schick, A., Bose, E., Jabbari, Y., Lopes, J., & Carleton, R. N. (2023). Glossary of terms: A shared understanding of the common terms used to describe psychological trauma, version 3.0. *Health Promotion and Chronic Disease Prevention in Canada, 43*(10/11), S1–S45. https://doi.org/10.24095/hpcdp.43.10/11.09

Karaffa, K. M., & Koch, J. M. (2015). Stigma, pluralistic ignorance, and attitudes toward seeking mental health services among police officers. *Criminal Justice Behavior, 43*(6), 759–777. https://doi.org/10.1177/0093854815613103

Kop, N., Euwema, M., & Schaufeli, W. (1999). Burnout, job stress and violent behaviour among Dutch police. *Work and Stress, 13*(4), 326–340. https://doi.org/10.1080/02678379950019789

Kyprianides, A., & Bradford, B. (2025). Policing and mental health: A rapid evidence assessment of the patterning of police activity. *The Police Journal: Theory, Practice and Principles, 98*(4), 684–705. https://doi.org/10.1177/0032258X251318210

Lamb, V., & Tarpey, E. (2019). "It's not getting them the support they need": Exploratory research of police officers' experiences of community mental health. *The Police Journal: Theory, Practice and Principles, 92*(4), 277–295. https://doi.org/10.1177/0032258X18812006

Lovibond, S. H., & Lovibond, P. F. (1995). *Manual for the depression anxiety stress scales*. Psychology Foundation.

Maia, D. B., Marmar, C. R., Metzler, T., Nobrega, A., Berger, W., Mendlowicz, M. V., Coutinho, E. S. F., & Figueira, I. (2007). Post-traumatic stress symptoms in an elite unit of Brazilian police officers: Prevalence and impact on psychosocial functioning and on physical and mental health. *Journal of Affective Disorders, 97*(1–3), 241–245. https://doi.org/10.1016/j.jad.2006.06.004

Migoya-Borja, M., Delgado-Gómez, D., Carmona-Camacho, R., Porras-Segovia, A., López-Moriñigo, J.-D., Sánchez-Alonso, M., García, L. A., Guerra, N., Barrigón, M. L., Alegría, M., & Baca-García, E. (2020). Feasibility of a virtual reality-based psychoeducational tool (VRight) for depressive patients. *Cyberpsychology, Behavior and Social Networking, 23*(4), 246–252. https://doi.org/10.1089/cyber.2019.0497

Nisar, S. K., & Rasheed, M. I. (2020). Stress and performance: Investigating relationship between occupational stress, career satisfaction, and job performance of police employees. *Journal of Public Affairs, 20*(1), e1986. https://doi.org/10.1002/pa.1986

Patterson, G. T., Chung, I. W., & Swan, P. W. (2014). Stress management interventions for police officers and recruits: A meta-analysis. *Journal of Experimental Criminology, 10*(4), 487–513. https://doi.org/10.1007/s11292-014-9214-7

Purba, A., & Demou, E. (2019). The relationship between organisational stressors and mental wellbeing within police officers: A systematic review. *BMC Public Health, 19*(1), 1286. https://doi.org/10.1186/s12889-019-7609-0

Regehr, C., Carey, M. G., Wagner, S., Alden, L. E., Buys, N., Corneil, W., Fyfe, T., Matthews, L., Randall, C., White, M., Fraess-Phillips, A., Krutop, E., White, N., & Fleischmann, M. (2021). A systematic review of mental health symptoms in police officers following extreme traumatic exposures. *Police Practice and Research: An International Journal, 22*(1), 225–239. https://doi.org/10.1080/15614263.2019.1689129

Ricciardelli, R. (2018). "Risk it out, risk it out": Occupational and organizational stresses in rural policing. *Police Quarterly, 21*(4), 415–439. https://doi.org/10.1177/1098611118772268

Sanchez, J. C. (2021). *Trauma exposure, compassion satisfaction, burnout, and secondary traumatic stress in police officers*. [PhD dissertation, Grand Canyon University, Phoenix, AZ].

Savery, L. K., Soutar, G. N., & Weaver, J. R. (1993). Stress and the police officer: Some West Australian evidence. *The Police Journal: Theory, Practice and Principles, 66*(3), 277–290. https://doi.org/10.1177/0032258X9306600307

Spitzer, A. (2020). First responders and PTSD: A literature review. *Journal of Emergency Medical Services*. Retrieved from https://www.jems.com/mental-health-wellness/first-responders-and-ptsd-a-literature-review/

Stelnicki, A. M., Jamshidi, L., Fletcher, A. J., Carleton, R. N. (2021). Evaluation of before operational stress: A program to support mental health and proactive psychological protection in public safety personnel. *Frontiers in Psychology, 12, 511755*. https://doi.org/10.3389/fpsyg.2021.511755

Tacca, C., Kerr, B. A., McLamb, C., Ridgway, K. L., & Friis, E. A. (2024). Efficacy of a remote virtual reality and EEG enabled psychotherapy system for the treatment of depressive symptoms. *Frontiers in Virtual Reality, 5*, 1281017. https://doi.org/10.3389/frvir.2024.1281017

Treece, K. S. (2023). Female police officers: An exploration of the availability and utilization of mental health services. *The Police Journal: Theory, Practice and Principles, 97*(3), 458–472. https://doi.org/10.1177/0032258X231186948

Trombka, M., Demarzo, M., Campos, D., Antonio, S. B., Cicuto, K., Walcher, A. L., Garcia-Campayo, J., Schuman-Olivier, Z., & Rocha, N. S. (2021). Mindfulness training improves quality of life and reduces depression and anxiety symptoms among police officers: Results from the POLICE study—A multicenter randomized controlled trial. *Frontiers in Psychiatry, 12*, 624876. https://doi.org/10.3389/fpsyt.2021.624876

Weiss, D. S., Brunet, A., Best, S. R., Metzler, T. J., Liberman, A., Pole, N., Fagan, J. A., & Marmar, C. R. (2010). Frequency and severity approaches to indexing exposure to trauma: The Critical Incident History Questionnaire for police officers. *Journal of Trauma Stress, 23*(6), 734–743. https://doi.org/10.1002/jts.20576

Wilson, C., Janes, G., & Williams, J. (2022). Identity, positionality and reflexivity: Relevance and application to research paramedics. *British Paramedic Journal, 7*(2), 43–49. https://doi.org/10.29045/14784726.2022.09.7.2.43