

[MOLL] - "E-Ami": Co-designing a mobile health approach to PTSD prevention and peer support with Ontario public safety personnel

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Priority Research Area: Workplace mental health, including building mental wellness, promoting mental health literacy, and reducing stigma in the context of work

Relevant PSP Population(s): Police, Fire, Paramedics and Corrections workers

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What is the issue? Public safety personnel, including paramedics, firefighters, police, and correctional officers play a critical front-line role in ensuring the health and safety of our communities. Unfortunately, this group of workers has an elevated risk of Post-Traumatic Stress Injury (PTSI) due to the high-stress and potentially disturbing nature of their work. The focus in this project is on early intervention and support as a strategy to prevent the development of symptoms, build resilience, connect to peer support and promote recovery.

What was the aim of the study? In order to facilitate early intervention and support for this vulnerable group, a multi-pronged approach is needed, including: a) education to build awareness (mental health literacy) of PSP regarding prevention strategies as well as when and how to seek help; b) an approach that reduces the stigma associated with seeking help; and c) increased access to resources and peer supports that are relevant, timely and evidence-based. The overall purpose of this project is to co-design and pilot test the value of a mobile health application (m-health app) designed to promote early intervention and peer support, and thereby reduce the risk and impact of post-traumatic stress injury (PTSI) among public safety personnel in Ontario.

How was the study conducted? A multi-phase, mixed-methods approach was adopted, informed by best practice principles of co-design, digital development and evaluation. In Phase 1, Interviews were conducted with a purposive sample 10 key stakeholders who support front-line workers from the fire, police, EMS or corrections communities, followed by a series of focus groups with 51 front-line PSP from across Ontario. Participants identified key touchpoints related to psychological health and safety, followed by identification of preferred app features and identification of potential pathways within the app to address the priority touchpoints. Phase 2 focused on design/development, linking with a national initiative led by DRDC, CIPSRT and RCMP to develop a peer-to-peer communication tool.

What did the study find? Transcripts from the interviews and focus groups were reviewed to identify key design principles, and touchpoint issues for each of the four target groups. Touchpoints, or work stressors, included traumatic events (death, violence), system issues (unrelenting stress, inflexible rules), negative workplace culture, and impact of job on family. Although there were common issues, there were also distinct differences across each PSP group, as well as generational differences. Key design principles included an emphasis on confidentiality, customization for the PSP group, and ensuring that the app is accessible and simple/easy to use. Priority features included access to peer support, a personal safety or wellness plan, self-assessment, and peer wisdom videos.

Storyboarding in the focus group highlighted the need for validation, practical strategies to cope and links to trusted sources of support. Subsequent prototype development focused on design of a peer support matching feature.

What are the implications of this study? Although many of the PSP groups identified similar issues and touchpoints related to their roles, they emphasized how they were distinct, and the importance of customization and choice. The co-design process was important to build trust; participants emphasized the importance of ensuring that the app was designed by them and for them. The study findings will be used to inform technical design and development of the content and app features. Links to peer support will be a key feature of the final product.

What are the key messages? There are unique workplace challenges faced by PSP that increase their risk for operational stress injury. An app has the potential to provide 24/7 access to peer support and resources that are customized to their needs. The diversity and complexity of the needs of PSP groups across the country and regional differences in peer support services, however, present unique design challenges.

Provide a list of potential target audiences for this research: Frontline public safety personnel across Canada, peer support providers as well as other service providers who support this community.

[GROLL] Understanding the Prevalence of Mental Health Disorders in Provincial Correctional Officers – A National Study

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Priority Research Area: 1. Data collection, analysis and/or reporting on the incidence and prevalence of PTSD in PSP, which may also include information on relevant co-morbidities and health determinants;

2. Biological, clinical and social characteristics of PTSD, including differences that contribute to the risk for developing PTSD and measures/characteristics that may be associated with better treatment outcomes and resilience among PSP.

Relevant PSP Population(s): Correctional Services

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What is the issue? Data examining the impact of PTSD on mental health outcomes among PSP groups and their occupational environments remains limited in Canada, and there is currently limited, if any, information on the prevalence of PTSDs in provincial and territorial correctional services. Correctional staff work in institutions, and in the community, with prisoners and those released into the community on parole/probation. They work in environments where they are at risk of direct or indirect (or both) exposure to potentially psychologically traumatic events and we lack data explicating how these events as well as organizational and operational stressors and occupational experiences impact correctional worker mental health and well-being.

What was the aim of the study? Findings from the current study will lead to research and applied innovations that can serve to help improve the mental wellness and resilience of Canada's provincial and territorial correctional workers. By obtaining critical baseline information on the mental health of COs in Canada, our aim in the research is to:

1. Determine the prevalence of mental disorders and PTSIs among provincial and territorial correctional workers.
2. Identify characteristics (clinical, social, and biological) that are associated with PTSIs among correctional workers.
3. Identify characteristics (clinical, social, and biological) that are associated with resiliency or positive mental health outcomes among correctional workers in the provincial or territorial systems.

How was the study conducted? Data were collected through an online survey, available in French and English, of correctional workers in the provinces of Newfoundland and Labrador, Nova Scotia, New Brunswick, Ontario, Manitoba, and Saskatchewan, as well as one territory. The survey administered in each province/territory is supported by the respective department and union. The surveys are approximately 300 questions long and contained validated self-report mental health symptom assessment tools. After COVID-19, the survey will be administered in all remaining provinces and territories that are agreeable to participation.

What did the study find? Data analysis continues currently (with data collection being interrupted by Covid-19). Analysis of data from provincial correctional services in Ontario show that positive screens for all mental health disorders increased with age. Correctional workers in the 40-49 year old group had the highest number of positive screens. The more years of occupational tenure also equated to an increased likelihood that the correctional service provider would screen positive for a disorder. Employees working in institutional wellness (e.g., nurses, social workers) were less likely to screen positive for mental health disorders than correctional officers and probation officers. Prevalence rates for different mental health disorders in the total sample included: 30.7 % PTSD, 37% MDD, 30.5% GAD, 14.1% PD, 6.7% AUD. Correctional officers were most likely to screen positive for mental disorders. We also found staff experience organizational and occupational stressors that negatively impact their well-being.

What are the implications of this study? As the first, and currently only, study of provincial and territorial correctional workers, our findings will form the baseline for all future comparative studies in these populations. The information is critical for policy development, not just to improve the mental health and wellbeing of correctional service providers, but to put into place structures and practices to mitigate the impact of carceral work on employee mental health and well-being. The current study provides the benchmark against which any changes in policy or procedures to improve the health and well-being of staff can be measured, the impact of which cannot be understated.

What are the key messages? Correctional service providers screen positive for mental disorders at rates much higher than the general population. Moreover, they feel unheard and voiceless despite their concerns. Correctional service providers experience occupational stress, and at times feel organizational pressures (e.g., workload) impair their ability to do all they can for those under their supervision. More needs to be done to improve staff wellness.

Provide a list of potential target audiences for this research: Our results will be of interest to policy makers, clinicians, and community and institutional correctional service audiences as well as unions, government departments or ministries tied to public safety, and stakeholders. Knowledge mobilization will continue to target these audiences.

[MCCARRON] *Research 101 for Public Safety Personnel: Course Development and Pilot Testing*

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Priority Research Area: N/A

Relevant PSP Population(s): All PSP service areas, particularly those in leadership positions

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What is the issue? Public Safety Personnel (PSP) leadership are faced with challenging decisions when trying to support PSP mental health. There is considerable confusion and debate about current mental health training and treatment options due to the limited available research. This issue is compounded by the problem that academic publications are generally not written with layperson audiences in mind, making the available evidence less accessible to decision-makers. Nevertheless, PSP leaders are frequently asked to facilitate research participation among their members, adopt treatment or training programs, and to comment on or make decisions regarding established and novel interventions to support PSP mental health.

What was the aim of the study? The aim of this study was to develop and pilot test a novel, interactive, online “Research 101” course specifically geared towards PSP leadership. This course was designed with the goal of equipping PSP leaders with the knowledge of how to interpret and critically appraise research results. Feedback about content (e.g., scope, clarity of descriptions), ease of use, relevance, understanding/knowledge acquisition, and engagement from participants in this pilot course will inform further development and refinement of this educational resource. Ultimately, the goal is to equip PSP leadership with foundational knowledge in research methodology and to demonstrate how to use this information to critically assess the quality of published literature, grey literature reports, research proposals/requests for participation, and requests they may receive to adopt training or intervention programs to support PSP mental health.

How was the study conducted? An 8-module online course has been developed to equip PSP leaders to use research to inform decision making. Feedback on a beta version of the course will be obtained from a focus group (n= 4-6) of knowledge users across multiple PSP sectors. Feedback will be incorporated into revisions, following which PSP leaders in Saskatchewan (n=30) will be enrolled. An online pre-course assessment of research knowledge/comprehension will be conducted and repeated post-course, along with questions to evaluate course content/presentation. Additional feedback and recommendations will be solicited via one-on-one interviews. These recommendations will be reviewed with members of the initial focus group.

What did the study find? The study is still currently underway. Availability of identified PSP knowledge users to provide focus group feedback on the beta version of the course, and for PSP leaders to complete an 8-week online course has been limited due to shifting priorities arising from the COVID-19 pandemic.

What are the implications of this study? This study is expected to increase PSP leaders’ knowledge and understanding of research concepts and in turn, to facilitate informed decision-making about PSP mental health programming and research. By equipping decision-makers with information about research concepts and encouraging application of these concepts through a process of critical appraisal of published literature, we hope that PSP leaders will feel more confident in their understanding of research findings and will be inclined to use their skills and knowledge to make informed decisions about participation in/endorsement of research projects and adoption of PSP mental health initiatives.

What are the key messages? Given the plethora of mental health programming options for PSP available in Canada, it is essential that PSP leaders feel confident in their ability to evaluate the merits of the programs that are proposed to them. Furthermore, PSP are increasingly being asked to participate in research; by providing leaders

with more in-depth information about research funding models and the life cycle of a research project, as well as the tools to critically evaluate proposed methods and existing literature, PSP leaders can make better informed decisions about the commitments they are being asked to make.

Provide a list of potential target audiences for this research: PSP (multi-sector)

Senior PSP leadership and policy-makers