

**[MOLL] - "E-Ami": Co-designing a mobile health approach to PTSI 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, 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.