# Peers Supporting Peers in Workplace Reintegration after Occupational Stress Injuries:

## A Mixed-Methods Pilot Study Evaluating the Edmonton Police Service Reintegration Program Facilitator Training

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## Executive Summary

### Background

The demands and stressful nature of police work, unpredictability of the calls to which officers respond, and exposure to traumatic events in the line of duty can contribute to the development of operational stress injuries (OSIs)[1], including post-traumatic stress disorder (PTSD), depression, and anxiety. Challenges with substance abuse, anger, relationships, and workplace absenteeism can also arise.[2] Officers impacted by work-related injuries can find themselves needing both time off work and support reintegrating back into the workforce.


Work reintegration programs, inclusive of a peer support component, have been introduced in Public Safety Personnel (PSP) organizations to support those aiming to return-to-work. One such peer-led workplace reintegration program (RP) was created in 2009 by members of the Edmonton Police Service (EPS). The primary goal of EPSRP is to help officers return to work as soon as possible following a critical incident, illness, or injury, while diminishing the potential for long-term psychological injury. The EPSRP is delivered by peers through three interrelated components: 1) Reintegration Program Facilitator Training (RPFT) Program; 2) a short-term Critical Incident RP; and 3) a long-term RP.

Studies related to return-to-work initiatives for police officers and other PSP remain scarce.[2] This highlights the need for further research, including high quality reintegration program effectiveness studies that incorporate strong study designs to determine long-term effectiveness.[2]

### Purpose

This study aimed to (1) evaluate the effectiveness of the 5-day EPS RPFT course on influencing mental health knowledge and attitudes of PSP attendees, (2) explore the experiences and learnings of PSP attendees of the RPFT course; (3) describe the perceived needs, barriers, facilitators, and recommendations for workplace reintegration and overall workplace culture in police organizations; and (4) vision the potential future of peer-led RPs.

## Methods

A mixed methods cohort pilot project was initiated in April 2019 with fifty-seven participants from the RPFT program. Participants included Alberta-based PSP (e.g., RCMP, police, EMS, fire, sheriffs) and clinicians (psychologists and occupational therapists). Data was collected pre/post training via outcome measures, open-ended survey questions, and a World Café. Quantitative data was statistically analyzed, qualitative data was thematically analyzed, and all data triangulated.


## Results

The majority of the study participants (n=60) were men (n=44) from municipal policing agencies (n=14) or RCMP (n=12). Of the participants, 32 reported that their home organization had already established an RP. A statistically significant change in scores on the pre/post outcome measures demonstrated that the 5-day RPFT course was successful at improving mental health knowledge and attitudes in the PSP attendees. Qualitatively, four complimentary themes emerged related to: (1) skills and personality traits of an ideal reintegration facilitator (RF); (2) holistic and complementary team and treatment; (3) necessary features of a reintegration program; and (4) cultural-specific considerations.

## Recommendations

The recommendations stemming from this study have direct applicability to the EPS RPFT and are likely generalizable to other PSP peer-support and work RPs. These recommendations include: (1) developing and supporting strong reintegration facilitators, (2) fostering clear communication among stakeholders, including the multidisciplinary clinical team, (3) establishing clear and simplified policies and procedures related to the reintegration process, (4) developing individualized approaches to peer-support, (5) establishing research initiatives and collaborations, (6) standardizing reintegration training and education, (7) utilizing implementation science to ensure sustainability of RPs, and (8) engaging all levels of PSP organizations in RPs.

## Conclusions and Future Directions

The current study demonstrated that a 5-day RPFT can improve mental health knowledge and literacy, and improve workplace mental health attitudes amongst PSP. Study participants shared a common vision of support for injured PSP, desire to develop peer-supported work RPs, and hope for reduced mental health challenges in PSP organizations. Improving workplace mental health knowledge and literacy within a positive workplace culture may reduce stigma and increase workplace productivity, morale, safety, and satisfaction.

Member-centred, culturally-specific, precision-tailored programming was seen as central to the success of RPs and recovery of PSP with OSIs. Participants highlighted the value of having trained peer supporters available to PSP to assist them in their return-to-work efforts. While RPs hold much promise, and interest in peer support in PSP organizations is growing, it is essential that a standardized evidence-base incorporating best practices be used to guide both RF training and RP uptake. More research is also required to evaluate the efficacy and effectiveness of the RP and demonstrate correlation with long term return-to-work outcomes for PSP who have sustained an OSI. As outcomes of the EPSRP and the RPFT are promising, careful widespread implementation of this type of programming may benefit PSP, their families, communities, and organizations.

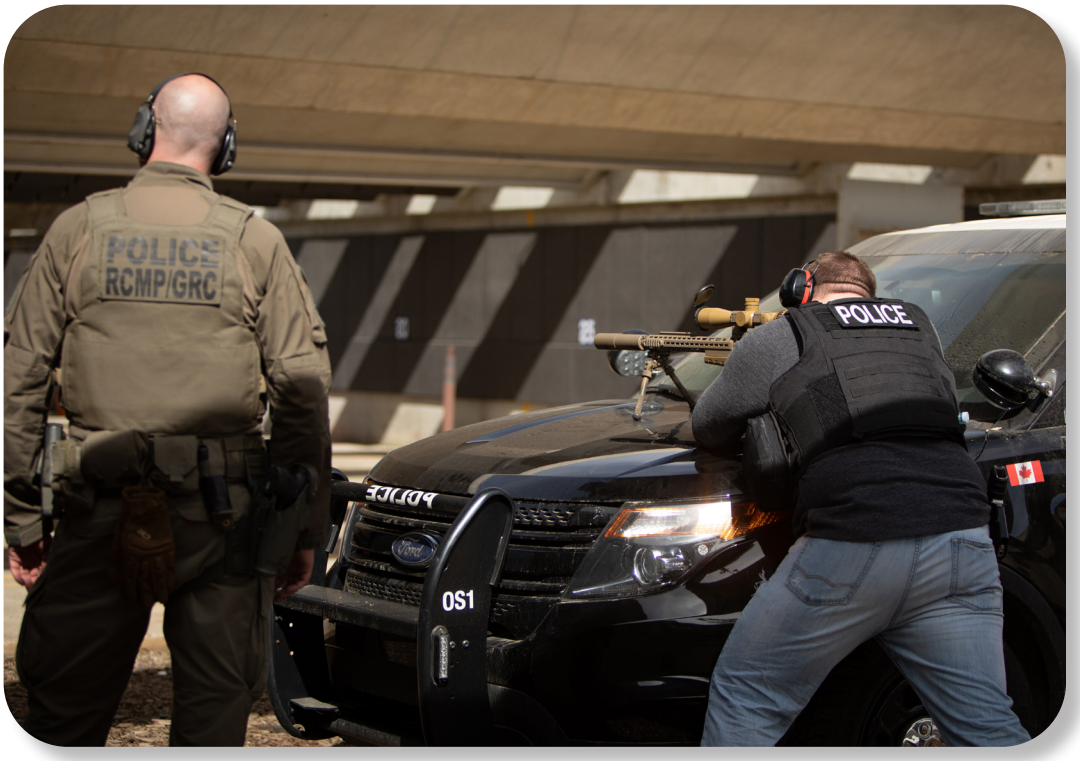
## Occupational Stress Injuries and Public Safety Personnel

The demands and stressful nature of police work, unpredictability of the calls to which officers respond, and exposure to traumatic events in the line of duty can contribute to the development of operational stress injuries (OSIs).[1] OSIs include a broad range of conditions including mental disorders and broader behavioural or psychosocial conditions that interfere with daily functioning in social, work, or family activities.[3] Police officers have been found to be at an increased risk of developing OSIs including post-traumatic stress disorder (PTSD), major depressive disorder, generalized anxiety disorder, and increased anger, aggression or hostility, which can lead to other challenges such as substance abuse, relationship difficulties, and workplace absenteeism.[2] A 2016 study found that 36.7% of surveyed Canadian police officers screened positive for a mental health condition — primarily PTSD.[4] Such injuries can leave officers unable to return to work in their previous capacity or at all.[4] Even with extensive multidisciplinary rehabilitation, only a minority of public safety personnel (PSP; police officers, firefighters, dispatchers, emergency medical workers, corrections officers, etc.) return to pre-OSI work levels and PSPs frequently require ongoing wage replacement benefits.[5]


Facilitating workplace reintegration among PSP who have experienced post-traumatic stress injuries (PTSIs) and OSIs is a primary concern for PSP, their families, and their organizations. While interventions offered in clinical health or workers' compensation settings to address PTSIs and OSIs may be effective in reducing psychological distress and improving daily function, they may have a limited ability to help PSP constructively engage with real-world occupational stressors given that they are offered outside of the PSP service environment.[6] As a result, peer support interventions and programs have become more common within military and PSP organizations as an adjunct to clinical evidence-based interventions and a support to work reintegration.

A number of PSP peer support programs with varying aims, purposes and formats across diverse PSP organizations exist globally. Peer support is a benevolent relationship that is based on a shared lived experience, such as similar employment and/or exposure to a traumatic event. A peer supporter may provide emotional, spiritual, and/or social support.[7] Peer support programs may be associated with critical incident stress debriefing, critical incident stress management, peer support, psychological first aid, and trauma risk management.[8] Such programs are delivered in community, clinical, and workplace contexts in both group and one-to-one formats.[7] Peer support programs may also be introduced prior to, during or upon conclusion of clinical interventions and a person's return to work, and may be the first step a person takes towards recovery.[7]

The peer-support process is also thought to be effective at reducing psychological distress. A key aspect to the efficacy and "buy-in" of peer support programs is believed to be the manner in which peer team members maintain trust, confidentiality and anonymity. This enables police officer peers who are seeking assistance to share private information without feeling judged and experience a sense of community.[9,10] Peers with similar experiences are often valued for their authenticity as they can relate to the challenge and may have seen success with their own recovery.[7] As a result, peers may be more likely to trust one another and disclose information that they would not share with healthcare professionals, friends or family. It is estimated that three out of four police officers would prefer speaking with another police officer over a mental health therapist.[11] Early identification and referral by peer supporters of those at risk of developing PTSD can result in timely treatment for those experiencing trauma.[12] Once engaged in interventions, police officers preferred to seek mental health services from professionals who belonged to police organizations rather than from those who worked outside of the organization.[10]




Evidence for the effectiveness of peer support programs, although scarce, is noteworthy. Pre-

vious research has found that peer support programs are a way to promote mental health literacy, health seeking behaviours and are effective in reducing stigma.[9,10,13] In a recent scoping review, it was reported that peer-based or peer-led interventions that included peer-group debriefings led to significant reductions in trauma-related absenteeism.[14] Early interventions in a group format found that peer support facilitated recovery. Social support and cohesion were found to be supportive of the psychological processing of traumatic experiences, normalizing emotions and reactions,[14] and potential reintegration into the workplace.[13] When offered in a group format, peer support was found to facilitate individual recovery and made for a better experience thus highlighting the role of social support and social cohesion in the psychological processing of traumatic experiences.[14] Peer-support may also bridge care gaps when geography or organizational security requirements are barriers to care (e.g., while clinicians are unable to access PSP environments that require specialized training, certification, and security clearance). In such circumstances, peers can support the therapeutic process within PSP-specific environments, provide a more nuanced understanding of specific occupational stressors and triggers, and help to support or develop creative occupational specific coping strategies. While these findings suggest there are many benefits to peer support programs, the importance of standards and governance along with investigation into the efficacy of such programs has been emphasized in order to ensure risk management and best practices.[13]

## Edmonton Police Service Workplace Reintegration Program

In 2009, the Edmonton Police Service (EPS) identified a need to assist police officers who were off work following a critical incident such as an officer-involved shooting.[6] Initially, workplace reintegration efforts after critical incidents involved providing officers with peer supported assistance to help them regain confidence with firearms and staged policing-specific activities that could not be accomplished within a clinical setting. Over time, the EPS Reintegration Program (EPSRP) evolved, became inclusive of peer support and supported police officers who were off work due to an OSI. Today, the primary goal of EPSRP is to help officers return to work as soon as possible following a critical incident, illness, or injury, while diminishing the potential for long-term psychological injury.[6]

Since the program's inception, 185 EPS officers as well as 200+ Alberta Health Services (AHS) emergency services staff and Royal Canadian Mounted Police (RCMP) K-Division officers have participated in the RP. In Ontario, Ottawa Police Service (OPS) and RCMP O-Division are actively utilizing the RP with participants, while the London Police Service (LPS), the Ontario Provincial Police (OPP), and the Niagara Police Service (NPS) are in the process of implementing the RP.[15] The program has also received international attention as Wellington, New Zealand is also interested in implementing it into their police service. Evidence relating to the effectiveness of the EPSRP is evolving. Findings from a 2018 internal study by EPS indicated a 70 percent reduction in days lost following introduction of the program.[14] A further analysis conducted by AHS comparing two cohorts of emergency services employees demonstrated promising numbers, with 50 percent more work-days lost in the cohort without the RP compared to the cohort with access to it.[15]

The EPSRP is delivered by peers through three interrelated components: 1) Reintegration Program Facilitator Training (RPFT) Program; 2) a short-term Critical Incident RP; and 3) a long-term Critical Incident RP.[6] Components of the RP include relationship-building, reintroduction to equipment, skill-building, exposure therapy, and street exposures. The participating individual is guided by a trained peer PSP Reintegration Facilitator (RF) through a step-by-step process that addresses the unique stressors the officer may have experienced.[6] The pace, scope, depth and goals of the program are determined by the individual and cleared with their clinicians. EPS's short-term reintegration program includes an initial meeting with the officer, physical dexterity of firearm, acclimation to gunfire, live fire, officer-directed training, reintroduction, and follow up.[14] To assist officers who have been off work for an extended period, the long-term reintegration program provides them with support and training to return to the work setting. Supports offered by the RFs are complementary to traditional therapies, but outside the scope of what officers receive from their health care providers (i.e., psychologists, social workers, or occupational therapists).[6]

A 5-day EPS Reintegration Program Facilitator Training (RPFT) course was developed and implemented to prepare PSP peers to deliver the EPS RP to colleagues who seek to reintegrate to work following an OSI, and to increase the spread of the RP across PSP organizations. EPS offers the 5-day RPFT program on an annual basis for PSP who are interested in becoming RFs and/or implementing an RP within their organization. The training includes both psychoeducational and experiential components. Examples of psychoeducational topics include the physiological effects of trauma, basic neuroanatomy and physiology, mental health disorders, specific counselling drills, and interpersonal skills such as active listening. Examples of hands-on graded activities that may be utilized include firearms exposures on the firing range for police, mock interrogations for border patrol personnel, donning of equipment for firefighters, and specific scenarios in an ambulance for paramedics.

Although the anecdotal reports and current literature regarding peer supported initiatives are promising, the EPSRP has yet to be rigorously studied. Moreover, research and services related to return-to-work initiatives for police officers and other PSP remain scarce.[2] In Canada, a key recommendation of the landmark 'Blue Paper' report was to: "Participate in research studies and ongoing evaluations examining the effectiveness of peer support or crisis-focused psychological intervention programs with appropriate sample sizes, empirically supported outcome measures, and using methodologically rigorous designs, such as randomized controlled trials and longitudinal studies. First Responder organizations should seek to have such research conducted with independent, established researchers who have been appropriately vetted by, and are currently explicitly supported by, established and accredited research organizations" (p. 8).[2] Caution must therefore be used as to date there is little to no empirical evidence for peer-lead RPs, which leaves conclusive decisions about their use difficult to make.[2] As a result, such programs require higher quality RP effectiveness studies that incorporate stronger study designs, rigor, validity, reliability, and determination of their long-term effects are required, along with assessing potential risk of harm to the participants and facilitators.[2]

## Purpose

This pilot study aimed to (1) evaluate the effectiveness of the 5-day EPS Reintegration Program Facilitator Training (RPFT) course on influencing mental health knowledge and attitudes of PSP attendees, (2) explore the experiences and learnings of PSP attendees of the RPFT course; (3) describe the perceived needs, barriers, facilitators, and recommendations for workplace reintegration and overall workplace culture in police organizations; and (4) vision the potential future of peer-led RPs.

# Methods

## Study Design

This mixed-methods cohort pilot project, initiated in April 2019 with participants participating in the RPFT program, employed a convergent parallel design. Qualitative and quantitative data was collected concurrently pre/post training via outcome measures, open-ended survey questions, and a World Café. Quantitative data was statistically analyzed, qualitative data was thematically analyzed, and all data was triangulated after the entirety of data collection and analysis. This study received ethical approval from the University of Alberta Research Ethics Board and was supported by the EPS.

## Recruitment and Sampling

Participants (n=60) included Alberta-based public safety personnel (PSP) (e.g., RCMP, police, EMS, fire, sheriffs) and clinicians (psychologists and occupational therapists) working with PSPs who attend the RPFT. The participants voluntarily signed up to attend the 5-day RPFT course and had attained approval to participate from their employer. All RPFT attendees were invited to participate in this research study. Upon registering in the RPFT, attend-

ees were asked by the Reintegration Coordinator if they are interested in participating in the study. Those interested were enrolled, and prior to commencing the RPFT, provided written and verbal consent.

## Outcome Measures

Questionnaires administered pre/post-training captured descriptive data (e.g., age, gender, role), along with information about participant knowledge, skills and attitudes, mental health literacy (health knowledge survey; MAKS),[16] work reintegration, mental health stigma, and workplace attitude (Open minds survey of workplace attitudes; OMSWA).[17]

The MAKS was developed from the theoretical underpinning that stigma is comprised of 3 constructs: knowledge (ignorance), attitudes (prejudice), and behaviour (discrimination).[16] The MAKS is a 12-item self-report questionnaire designed to measure mental health literacy and stigma.[16] Items are rated on a five-point Likert scale measuring level of agreement ranging from 1 (strongly disagree) to 5 (strongly agree).[16] Psychometric data support the internal consistency and test–retest reliability of the measure[16] and the measure appears sensitive to changes in participant responses based on interventions.[18] The OMSWA is a 23-item self-report questionnaire designed to measure mental health stigma and workplace attitudes. Items such as "*I would be upset if a co-worker with a mental illness always sat next to me at work*" are rated on a five-point Likert scale ranging from 1 (Strongly disagree) to 5 (Strongly agree).[18] There is some psychometric data to support the internal consistency of this outcome measure and it is commonly utilized by the Mental Health Commission of Canada.[19]


As well, a pre/post mental health knowledge questionnaire developed specifically for the EPS RPFT was trialled based on the RPFT curriculum goals and objectives. This questionnaire employed a 5-point Likert scale ranging from 1 (not at all true) to 5 (very true) for 2 sections: (1) Understanding of Concepts, "*I have an excellent understanding of…*", and (2) Skills, "*I have excellent skills to…*" A third section required the respondent to rate their level of agreement from 1 (strongly disagree) to 5 (strongly agree) regarding statements related to workplace mental health knowledge, stigma, and attitudes.

## Table 1: EPS RPFT Specific Questionnaire

| | |
|---|---|
| 1. I have an excellent understanding of: | • Workplace reintegration<br>• Occupational Stress Injury (OSI)<br>• The purpose of the short-term reintegration program<br>• Whom the short-term reintegration program is designed for<br>• Short-term reintegration process<br>• The physiological effects of a critical incident<br>• The psychological effects of a critical incident<br>• Interaction Training<br>• Post-Traumatic Stress Disorder (PTSD)<br>• Symptoms of PTSD<br>• Effect of PTSD on the Brain<br>• The purpose of the long-term reintegration program<br>• Whom the long-term reintegration program is designed for<br>• Long-term reintegration process<br>• Resilience<br>• How to build trust with participants of a workplace reintegration program<br>• The unique strengths and challenges of various public safety personnel<br>• The role of healthcare clinicians in mental health<br>• Exposure Therapy<br>• Psychotherapeutic techniques for those affected by trauma<br>• Subjective units of distress scale (SUDS)<br>• Mental Health First Aid<br>• Empathy<br>• Post-Traumatic growth |
| 2. I have excellent skills to: | • Support colleagues in workplace reintegration<br>• Identify strengths and challenges in reintegration processes<br>• Build trust with participants in the reintegration process<br>• Communicate with participants in the reintegration process<br>• Address Mental Health Stigma in the workplace |
| 3. Please indicate your level of agreement with the following statements: | • I understand how mental health problems present in the workplace.<br>• I plan to seek help for my own mental health problems if needed.<br>• When I am concerned, I ask my colleagues how they are doing.<br>• I think about mental health issues as freely as physical health issues.<br>• I understand management practices that promote the mental well-being of all.<br>• I will be a better leader now that I have completed the EPS Reintegration Trainer Training.<br>• I will have better mental health now that I have completed the EPS Reintegration Trainer Training.<br>• I will use the skills I have learned in the EPS Reintegration Trainer Training to be part of a pee-supported workplace reintegration program within my organization. |

***Table 1. EPS RPFT Specific Questionnaire. Section 1 and 2: 5-point Likert scale ranging from 1 (not at all true) to 5 (very true). Section 3: 5-point Likert scale ranging 1 (strongly disagree) to 5 (strongly agree).***

## Data Collection

After providing written and verbal consent, and prior to commencing the RPFT, participants were provided a participant number by the lead researcher along with a blank envelope containing the pre-course surveys. This allowed for participants to be reassured that participant employers were unaware of who participated in the study, their responses, and that the study was being conducted externally by independent researchers. Participants were asked to complete the outcome measures and immediately return the envelope to the research team. This process was also completed at the conclusion of the RPFT. Data was then manually entered into SPSS software by the research team for analysis.


Qualitative data collection occurred throughout the RPFT from 3 mediums: (1) daily satisfaction surveys, (2) open-text questions on the pre-post RPFT Specific Questionnaire, and, (3) a World Cafe on the fifth day of training (Table 2). A World Cafe was hosted to facilitate authentic and collaborative conversations, explore targeted questions, collect diverse information, cross pollinate ideas, and grow insight.[20] To facilitate the World Cafe, participants moved between Cafe tables at ten minute intervals, responding to a different question at each table and building on answers provided by each previous group. The conversations of the World Cafe were transcribed in real time and later analyzed by a research team member. The study purpose, together with the associated survey and World Cafe questions, are listed in Table 2.

## Table 2: Study Purpose, Open-Ended Survey Questions, and World Cafe Questions

| Study Purpose | Survey Questions | World Cafe Questions |
|---|---|---|
| 1. Evaluate the effectiveness of the 5-day EPS Reintegration Program Facilitator Training (RPFT) course on influencing mental health knowledge and attitudes of PSP attendees<br><br>2. Explore the experiences and learnings of PSP attendees of the RPFT course | • List 3 medical professionals who may be involved in a Reintegration participant's mental healthcare team.<br>• How can a Critical Incident affect the body and brain immediately after? In the long term?<br>• List 3 mental health symptoms that a participant in the RP may be experiencing.<br>• How could the above mental health symptoms limit one's ability to return to work as a PSP?<br>• What strategies can be used to help a PSP reintegrate into work following a Critical Incident?<br>• What are your 2-3 key takeaways?<br>• Does your workplace currently have a Workplace RP?<br>• What component of the day did you find enhanced your knowledge of the Short- and Long-Term RP the most/least? | **1. Contextualizing the Reintegration Program**<br><br>How can you:<br><br>• Tailor the RPFT to your organization, division, and unit?<br>• Bring it to life in the context of your unit/life? (Practices, approaches, activities, resources, etc.) |
| 3. Describe the perceived needs, barriers, facilitators, and recommendations for workplace reintegration and overall workplace culture in their respective police organizations; | | 2. **Shifting Workplace Culture**<br><br>What will you do to:<br><br>• Shift workplace culture to reduce mental<br>• Health stigma and support colleagues who are returning to work? |
| 4. Vision the potential future of peer-led RPs | • What are the skills and/or personality traits of an ideal Reintegration Trainer? | 3. **Skill Development**<br><br>What skills will be:<br><br>• The most challenging to implement and why?<br>• The easiest to implement and why? |

***Table 2. World Cafe and Open-Ended Survey Questions organized by study purpose.***

Field notes were also taken during the course of the RPFT by the researchers. These were later organized into a narrative that would assist with the organization of recommendations and discussion around future research after discussion with the EPS RP stakeholders.

## Data Analysis

### Quantitative

Demographics of the sample were calculated for each of the measures as well as total scores for each dependent variable pre- and post-RPFT. Quantitative data was analyzed using IBM SPSS statistical software with sample t-tests and Wilcoxon sign-rank tests. Two-level multilevel modeling analyses were conducted for each repeated measure analysis in the study. Time was coded into two time points: (1) baseline, and (2) post-intervention. Each model included one of the dependent variables (i.e., MAKS, OMSWA) at each time point (level one) nested within participants (level two). Baseline differences in scores among individuals was accounted for by including both a fixed and random intercept in the model. Each final model included the fixed effect of time as the primary predictor variable. All models were computed using the maximum likelihood estimation. All hypothesis testing was conducted using one-tailed tests at a $\alpha$ level of .05. Cohen's d effect sizes were computed for all models by standardizing each outcome measure and rerunning the resulting Z-scores in each model. All models were bootstrapped to generate robust probability values and corresponding confidence intervals. A sample of n=30 or higher was required for power=0.8 and an attrition rate of 20% was predicted. An exploratory factor analysis was utilized to evaluate the initial validity of the EPS RPFT Specific Questionnaire.

### Qualitative

Braun and Clark's (2006) method of thematic analysis (deductive and inductive) was utilized to analyze the open-ended survey questions and the World Cafe data. A thematic analysis provides a flexible method for identifying, analyzing, and reporting themes in rich detail.[21] An audit trail allowed the research team to review and examine decision making around themes, as well as maintain credibility and rigor. Informed by the study purpose, data analysis began with all research team members reading and discussing the World Cafe transcripts and open-ended survey responses. Initial open codes were then developed using an inductive approach. The codes were combined into preliminary themes that focused on similarities and differences within and between the World Cafe and qualitative survey questions. Preliminary themes underwent a secondary round of collective analysis by all the authors, with differences resolved through discussion. Final themes aimed to reflect a more nuanced and rich understanding of the data.

## Results

### Quantitative

The demographics of the PSP sample is displayed in Figures 1 and 2. The sample was largely composed of men (n= 44) which is common in PSP professions. PSP in policing professions, including municipal policing (n=14) and RCMP (n=12), were the most common amongst the sample. Of the participants, 32 reported already having an established RP within their home organization.

## Figure 1: Profession of the Participants in the EPS RPFT Pilot Study

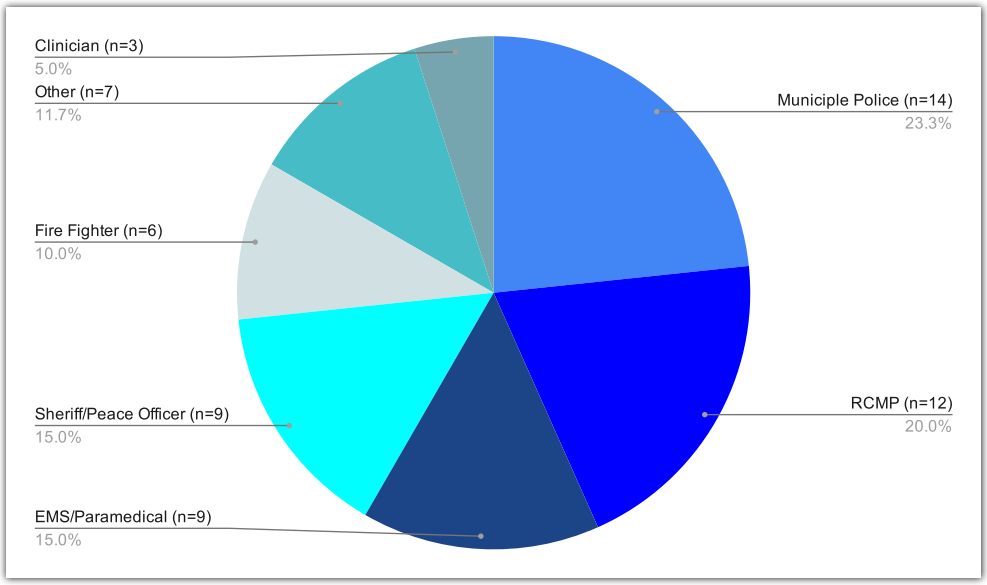



*Figure 1. Professions of the participants in the EPS RPFT pilot study. RCMP = Royal Canadian Mounted Police, EMS = Emergency Medical Services.*

## Figure 2: Gender of the Participants in the EPS RPFT Pilot Study

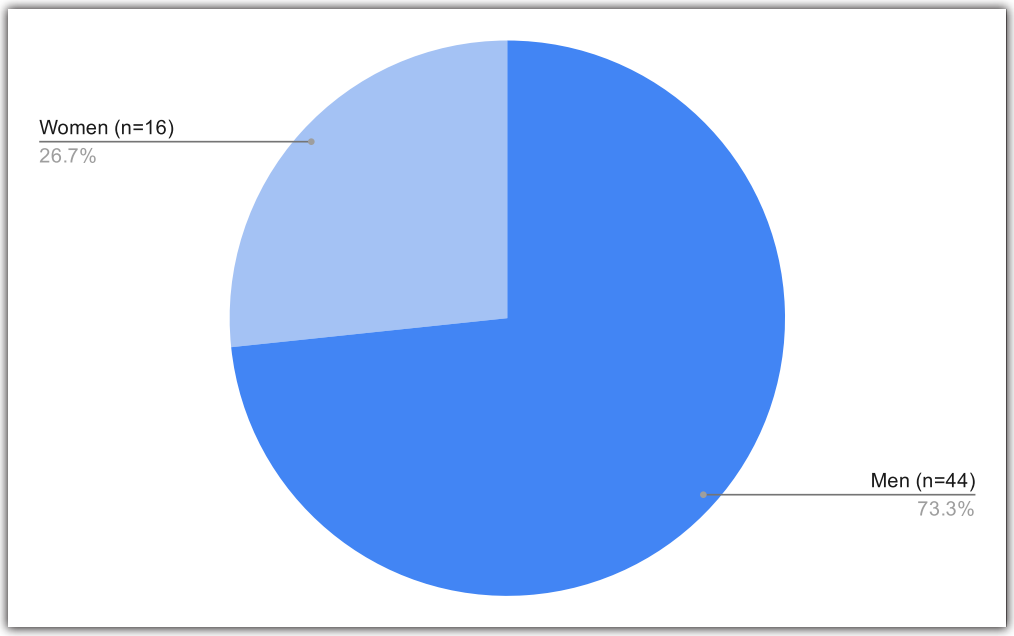



*Figure 2. Gender of the Participants in the EPS RPFT Pilot Study*

Statistically significant changes in pre- to post-intervention scores were noted for the overall sample with the MAKS (pre-intervention Mean = 48.70, SD = 3.688) and post-intervention ((Mean = 50.70, SD = 3.452) ($t_{50}$= -3.373, p= 0.001)) which is displayed in Figure 2. The OMSWA also showed statistically significant pre-intervention ((Mean = 38.01, SD = 9.830) and post-intervention ((Mean = 33.18, SD = 7.362) $t_{49}$= 3.692, p= 0.001)) changes (Figure 3). This would indicate that amongst the entire PSP sample, mental health knowledge, literacy, and workplace attitudes towards mental health increased while mental health stigma decreased. The sample was further broken down to analyze the significance of changes on the MAKS and OMSWA by gender and profession (Tables 3 to 9).

**Figure 3: Pre/Post Changes in Mean Outcome Measure Scores of Sample**

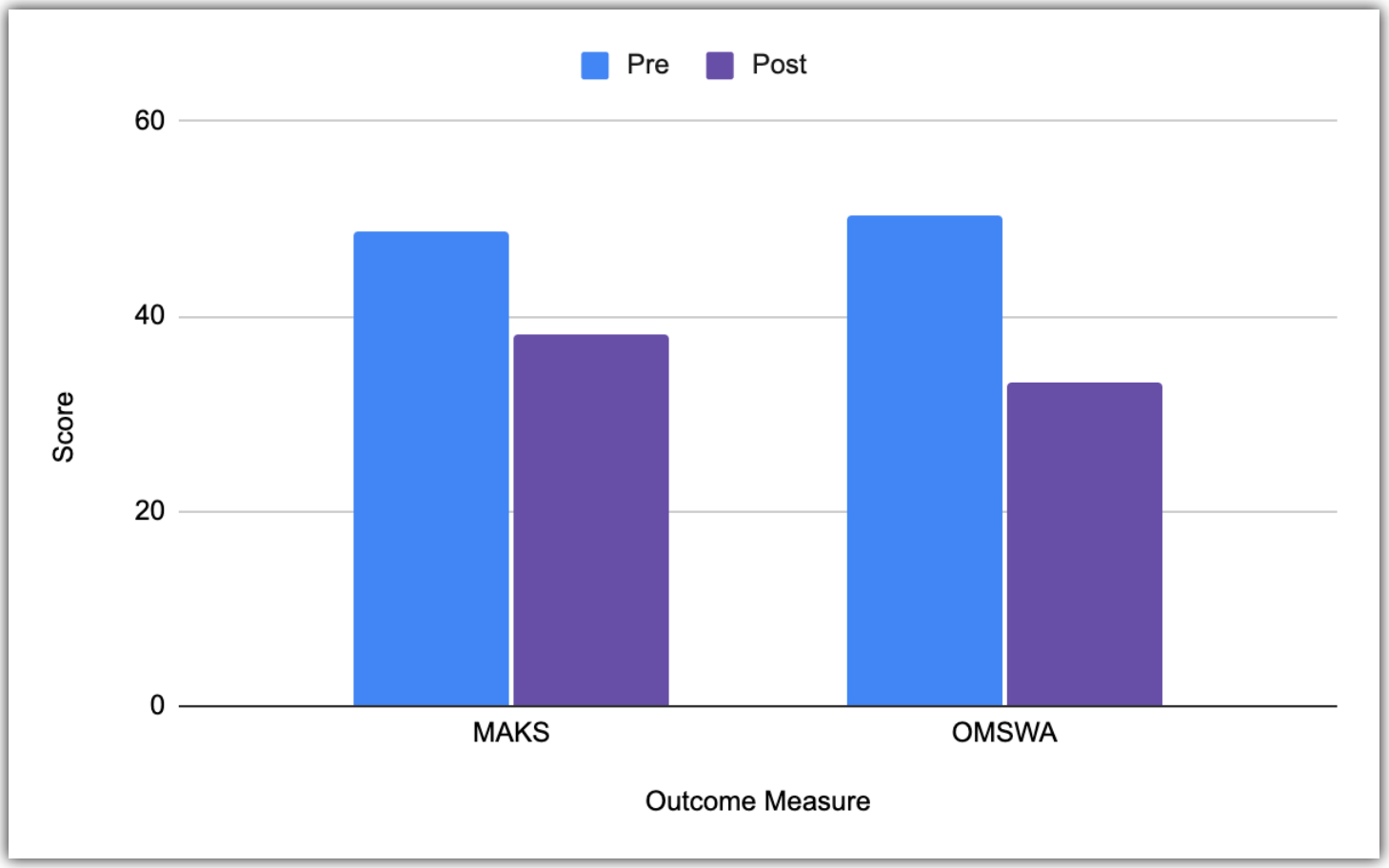



***Figure 3: Pre/Post Changes in Mean Outcome Measure Scores of Sample (n=57) Figure 3. Mean scores on the Mental Health Knowledge Survey (MAKS) and Open Minds Survey of Workplace Attitudes (OMSWA) showed statistically significant changes pre/post RPFT.***

The scores of participants who identified as women (n=15) were compared on the pre and post MAKS using the Wilcoxon sign rank test (Table 3). Female participant scores post training (M= 20.07; SD= 1.32) were lower than pre training (M= 20.93; SD = 1.02). The Wilcoxon signed-ranks test indicated that the median post-training ranks on the MAKS were not statistically significantly lower than the pre-training ranks on the MAKS (z= -1.67, p =.95).

The women's scores were compared on the OMWA pre and post the work reintegration training. The women's scores post training (M= 31.3; SD= 1.75) were lower than pre-training (M= 36.4; SD = 2.68). However, the Wilcoxon signed-ranks test indicated that the median post-training ranks on the OMWA were not statistically significantly lower than the pre-training ranks on the OMSWA (z= -1.50, p =.13).

The scores of those participants who identified as men were compared on the MAKS pre and post using a paired sample t-test (Table 4). The men's scores post training (M= 21.17; SD= .82) were lower than pre training (M= 23.57; SD = .82). This improvement was statistically significant ($t_{34}$= 4.09 , p=.000). The men's scores were compared on the OMWA pre and post the work reintegration training. Male participant scores post training (M= 34.37; SD= 1.24) were lower than pre training (M= 41.06; SD = 1.69). This improvement was statistically significant ($t_{35}$= 3.11, p=.004).

**Table 3: Pre/Post Outcome Measure Scores by Gender: Women**

| Measure and time point | Mean | N | Standard deviation |
|---|---|---|---|
| OMWA Pre | 36.40 | 15 | 2.68 |
| OMWA Post | 31.33 | 15 | 1.75 |
| MAKS Pre | 20.93 | 15 | 1.02 |
| MAKS Post | 20.93 | 15 | 1.32 |

***Table 3. Median post-training ranks on the MAKS were not statistically significantly lower than the pre-training ranks on the MAKS (z= -1.67, p =.95). Median post-training ranks on the OMWA were not statistically significantly lower than the pre-training ranks on the OMSWA (z= -1.50, p =.13).***

**Table 4: Pre/Post Outcome Measure Scores by Gender: Men**

| Measure and time point | Mean | N | Standard deviation |
|---|---|---|---|
| OMWA Pre | 41.06 | 35 | 1.69 |
| OMWA Post | 34.37 | 35 | 1.24 |
| MAKS Pre | 23.57 | 35 | 0.82 |
| MAKS Post | 21.17 | 35 | 0.82 |

***Table 4. The men's post RPFT scores on the MAKS (M= 21.17; SD= .82) were lower than pre training (M= 23.57; SD = .82). This improvement was statistically significant (t(34)= 4.09 , p=.000). Scores on the post training OMSWA (M= 34.37; SD= 1.24) were lower than pre training (M= 41.06; SD = 1.69). This improvement was statistically significant (t(35)= 3.11, p=.004).***

Municipal police were the most likely to demonstrate a change in the pre/post OMSWA (Z= -1.97, p= 0.049) demonstrating improvements in workplace attitudes after the RPFT (Table 5). The RCMP showed the most significant changes on the MAKS (Z= -2.37, p= 0.018) which demonstrated an increase in mental health knowledge (Table 8).

## Table 5: Pre/Post Outcome Measure Scores for Municipal Police

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentiles 25th | 50th (Median) | 75th |
|---|---|---|---|---|---|---|---|---|
| OMWA Pre | 14 | 40.0000 | 11.19066 | 23.00 | 59.00 | 30.7500 | 39.0000 | 47.5000 |
| MAKS Pre | 14 | 23.2143 | 5.29410 | 16.00 | 33.00 | 18.7500 | 21.0000 | 28.0000 |
| OMWA Post | 13 | 35.0000 | 7.89515 | 23.00 | 46.00 | 27.5000 | 35.0000 | 43.0000 |
| MAKS Post | 13 | 21.8462 | 4.05886 | 15.00 | 29.00 | 18.5000 | 22.0000 | 25.0000 |

***Table 5. Pre/Post Outcome Measure Scores for Municipal Police. Municipal police had a statistically significant reduction in the score on the OMSWA (Z= -1.97, p= 0.049; Median score pre = 39 and post = 35). A non-significant reduction was noted on the MAKS (Z= -1.33, p= 0.18; Median score pre = 21 and post = 22).***

## Table 6: Pre/Post Outcome Measure Scores for Firefighters

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentiles 25th | 50th (Median) | 75th |
|---|---|---|---|---|---|---|---|---|
| OMWA Pre | 7 | 42.8571 | 12.38855 | 27.00 | 63.00 | 34.0000 | 41.0000 | 55.0000 |
| MAKS Pre | 7 | 22.0000 | 3.05505 | 19.00 | 28.00 | 19.0000 | 22.0000 | 23.0000 |
| OMWA Post | 7 | 37.4286 | 8.26352 | 24.00 | 49.00 | 33.0000 | 38.0000 | 44.0000 |
| MAKS Post | 8 | 20.8750 | 4.96955 | 14.00 | 29.00 | 17.0000 | 21.0000 | 24.5000 |

***Table 6. Pre/Post Outcome Measure Scores for Firefighters. Non-significant reductions were observed for both the OMSWA (Z= -.59, p= 0.55; Median score pre = 41 and post = 38) and MAKS (Z= -1.21, p= 0.26; Median score pre = 22 and post = 21).***

## Table 7: Pre/Post Outcome Measure Scores for EMS/Paramedics

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentiles 25th | 50th (Median) | 75th |
|---|---|---|---|---|---|---|---|---|
| OMWA Pre | 9 | 32.2222 | 6.51494 | 23.00 | 45.00 | 27.5000 | 32.0000 | 35.5000 |
| MAKS Pre | 9 | 22.0000 | 4.03113 | 17.00 | 29.00 | 18.0000 | 23.0000 | 25.0000 |
| OMWA Post | 10 | 28.8000 | 2.93636 | 23.00 | 32.00 | 26.0000 | 29.5000 | 31.2500 |
| MAKS Post | 9 | 19.4444 | 3.24465 | 16.00 | 26.00 | 16.5000 | 19.0000 | 21.5000 |

***Table 7. Pre/Post Outcome Measure Scores for EMS/Paramedics. Non-significant reductions were observed for both the OMSWA (Z= -1.68, p= 0.093; Median score pre = 32 and post = 29) and the MAKS (Z= -1.55, p= 0.121; Median score pre = 23 and post = 19).***

Table 8: Pre/Post Outcome Measure Scores for Royal Canadian Mounted Police (RCMP)

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentiles 25th | 50th (Median) | 75th |
|---|---|---|---|---|---|---|---|---|
| OMWA Pre | 12 | 38.5000 | 10.90871 | 25.00 | 62.00 | 27.7500 | 39.0000 | 46.7500 |
| MAKS Pre | 11 | 27.1818 | 6.77965 | 16.00 | 37.00 | 21.0000 | 28.0000 | 33.0000 |
| OMWA Post | 8 | 33.6250 | 6.36817 | 25.00 | 44.00 | 27.5000 | 34.5000 | 38.2500 |
| MAKS Post | 8 | 20.2500 | 6.96419 | 12.00 | 29.00 | 14.5000 | 17.5000 | 28.5000 |

***Table 8. Pre/Post Outcome Measure Scores for Royal Canadian Mounted Police (RCMP). RCMP had a statistically significant reduction in the score on the MAKS (Z= -2.37, p= 0.018; Median score pre = 28 and post = 17.5. A non-significant reduction was noted on the OMSWA (Z= -1.54, p= 0.123; Median score pre = 39 and post = 34.5).***

## Table 9: Pre/Post Outcome Measure Scores for Sheriff/Peace Officers

| | N | Mean | Std. Deviation | Minimum | Maximum | Percentiles 25th | 50th (Median) | 75th |
|---|---|---|---|---|---|---|---|---|
| OMWA Pre | 9 | 41.3333 | 11.68332 | 28.00 | 59.00 | 29.5000 | 40.0000 | 51.5000 |
| MAKS Pre | 9 | 22.0000 | 5.29150 | 15.00 | 32.00 | 17.5000 | 21.0000 | 26.0000 |
| OMWA Post | 9 | 35.2222 | 7.96520 | 23.00 | 43.00 | 27.5000 | 38.0000 | 42.0000 |
| MAKS Post | 8 | 19.8750 | 6.05776 | 13.00 | 27.00 | 15.2500 | 17.0000 | 27.0000 |

***Table 9. Pre/Post Outcome Measure Scores for Sheriff/Peace Officers. Non-significant reductions were observed for both the OMSWA (Z= -1.60, p= 0.109; Median score pre = 40 and post = 27.5) and the MAKS (Z= -.98, p= 0.326; Median score pre = 21 and post = 17).***

An exploratory factor analysis was utilized to evaluate the EPS RPFT Specific Questionnaire. The factorability of the 33 items was explored. The initial eigen values indicated that the first three factors explained 16%, 12% and 11% of the variance. The fourth, fifth, sixth and seventh factors had eigen values over 1, and each explained approximately 9% of the variance. A total of 12 items were eliminated because they did not contribute to a simple factor structure and failed to meet a minimum criteria of having a primary factor loading of .4 or above, and no cross-loading of .3 or above. However, we must be cautious in the interpretation, as the sample size is 50. A larger sample size is required to appropriately validate the scale.

Four complimentary themes emerged from the qualitative data: (1) skills and personality traits of an ideal RF; (2) holistic and complementary team and treatment; (3) necessary features of a reintegration program; and (4) cultural-specific considerations (Table 10). Themes are substantiated with supporting quotes in the discussion that follows and summarized in Table 10.

**Table 10: Themes and Sub-themes Identified through Thematic Analysis**

| Themes | Sub-themes |
|---|---|
| 1. Skills and personality traits of an ideal reintegration facilitator | **1.1 Internal virtues**<br>*P1: Empathetic, Active Listener, Patient, Passionate*<br>*P4: Empathy, Humility, Lived experience (and growth)*<br><br>**1.2 External virtues**<br>*P28: Comes from the heart, not the hurt, Not self-serving*<br>*P42: Credibility, Observant, Discreet, Creative*<br>*P59: Trustworthy, Proper credentials*<br>*P26: Be genuine. Be a facilitator. Build trust*<br><br>**1.3. Not anyone will do**<br>*P20: Organizational credibility*<br>*P60: Organizationally credible* |
| 2. Holistic /Comprehensive Workplace Reintegration Approach | **2.1 Holistic/Comprehensive Workplace Reintegration Team**<br>*P3: Psych oversight Occupational Therapist Peer*<br>*P10: Occupational Therapist, Social workers, Psychologist, Counsellors, Psychiatrist, Nutritionists, Family Dr. / Other Dr., Paramedics*<br>*P19: Psychologist Occupational Therapist, Psychiatrist Medical Doctor*<br><br>**2.2 Comprehensive Psychoeducation**<br>*P1: Permanently changes neuro-pathways*<br>*P9: Chemical dump, Physiological response, Fight/Flight/Fawn, amygdala hijack, 'Zone in' on survival*<br>*P17: Body and brain may build barriers in future in an attempt to protect trauma from recurring. Adrenaline dump and coming down can bog down body. Brain may limit what it's taking in to help process* |

| | |
|---|---|
| 3. Necessary Features of a Reintegration Program | **3.1 Customized approach**<br>*P18: Let them be in control of their reintegration*<br>*P27: Peer support and reintegration team ready and willing to build a tailored plan to their needs. Build their trust, keep it, make them know they matter.*<br>*P1: Importance of relationship building it's member-focused - diving into what they need*<br>*P44: Everyone's hurdles will be different. You'll be surprised by what might be the hurdle for the member.*<br><br>**3.2 Necessary Oversight from Mental Health professionals**<br>*P2: Psych oversight of reintegration.*<br>*P38: Psych oversight*<br>*P16: The roles & functions of the reintegration team. Clinician (psychological services)' and graduated return to work - staying in their lanes but collaborating for benefit of client*<br><br>**3.3 Balanced by Peer Support**<br>*P27: Peer support and reintegration team ready and willing to build a tailored plan to their needs. Build their trust, keep it, make them know they matter.*<br>*P42: Peer support, Graduated exposure to stressors, Appropriate job placement*<br>*P57: Exposure, peer support/talking*<br><br>**3.4 Trauma Informed Care approach**<br>*P20: Trauma, stress, tension, PTSD*<br>*P29: Trauma processing*<br>*P45: Trauma in the brain, PTSD and stacked trauma* |
| 4. Cultural Considerations within PSP Organizations | **4.1 Performance culture (Stigma)**<br>*P20: De-stigmatize Make help available Short-term reintegration / long term too*<br>*P54: Becoming unconsciously competent*<br><br>**4.2 Barriers to implementation**<br>*P28: Without proper intervention and treatment they may be exposed to situations the cause overload activation which causes even further damage*<br>*P43: Decreased sense of safety Lack of trust with organization Decreased mental clarity Poor motor function*<br><br>**4.3 Facilitators to implementation**<br>*P2: Individually tailored program at their pace and direction.*<br>*P56: Work with psychologist (EMDR) Exposure therapy (within reintegration program), Confidence building on areas they may be feeling weak in* |

## Theme 1: Skills and Personality Traits of an Ideal Reintegration Facilitator

Participants identified specific skills and personality traits that make an individual an ideal RF, including the need for strong internal and virtues. They also clearly asserted that "*not anyone will do*" as an RF.

### Sub-theme 1: Internal Virtues

Participants described internal virtues of an ideal RF. These included being "*authentic*", "*genuine*" "*honest*" "*patient*", "*humble*", "*intelligent*", "*empathetic*", and "*kind-hearted.*" Participants felt that these virtues would need to be innate to the RF and could not be "*faked,*" as injured police officers would be able to sense whether their RF possessed these virtues or not. Participants starkly described situations in which these virtues were absent, the relationship between the RF and officer was perceived as less positive, and confidence in the RF's capacity to demonstrate compassion was diminished.

### Sub-theme 2: External Virtues

Participants also identified that potential RFs would need to have strong external virtues. In contrast to the needed internal virtues which are necessary for the RF to offer compassionate person-centered care, the focus of external virtues related to an RF's ability to engage in difficult work and at times do whatever was necessary to protect and support the returning member. Virtues such as "*confidence*", "*credibility*", "*strong*", "*courageous*", "*intelligent*", "*willing to learn*" and "*trustworthy*" were associated with external virtues. Participants spoke about how these virtues could impact communication, emphatically stating that RFs would need to be comfortable engaging in tough conversations while still being vulnerable; able to engage and build trust (rapport); be approachable, discreet, non-judgmental; able to advocate for the injured officer; and able to engage in conflict management when the needs of the injured member differ from organizational needs or policies. Participants described the RF role as effectively being a 'middle man' between the injured member and the organization. As a result, they indicated that it would be important for the RF to be able to effectively engage with both injured officers and PSP organizations.

### Sub-theme 3: 'Not Anyone Will Do'

The above two sub-themes strongly informed the final sub-theme that "*not anyone will do*" as an RF. Participants identified that, in contrast to how positions are normally filled in a paramilitary organization (i.e., seniority or chosen by management), the RF position needs to be filled exclusively on the basis of personal virtues and capacities. For example, participants repeatedly stated that the RF would need to have organizational credibility (e.g., have a strong positive reputation and be respected by peers) to help facilitate buy-in and reduction of fear and stigma. Participants noted the importance of RFs being motivated and driven by a desire

to help others, and ability to put aside their own ego to advocate for others, regardless of potential discomfort or consequences for themselves. They also noted that an RF needs to be someone who demonstrates self-awareness, positive lifestyle behaviours, and resilience and active listening skills. Participants highlighted that some potential RF candidates may think that supporting injured officers will be easy, not recognizing the cognitive, emotional, and personal load associated with the role.

## Theme 2: Holistic / Comprehensive Workplace Reintegration Approach

The second theme encompassed a holistic and comprehensive team approach to treatment. This includes recognition of both the physical, mental and spiritual health of individuals.

### Sub-theme 1: Holistic/Comprehensive Workplace Reintegration Team

Participants described the need for a team-oriented approach to workplace reintegration. In addition to the injured member and RF, a variety of healthcare professionals were identified as being essential to the team, including physicians, occupational therapists, psychiatrists, psychologists, physiotherapists, nutritionists, social workers, peer supports, Workers Compensation Board (WCB) case managers, staff from the Operational Stress Injury Clinic, and colleagues. Participants emphasized that each team member has a specific scope and knowledge that is an asset to workplace reintegration, and that it is important that each team member know their role, communicate with other team members, and '*[stay] in their own lane*' while working collaboratively. Participants placed great importance on the role of family physicians/medical doctors who have knowledge of injured officers predating the OSI. From the perspective of injured officers, attendees asserted that, '*I am not my mental/physical/spiritual health injury — I was someone who existed before.*' Participants anticipated that physicians would be in a good position to 'see and hear' injured officers from the perspective of prior to and following onset of an OSI. Team oversight was seen as a way to protect injured officers from organizational and WCB demands that may inadvertently impede successful work reintegration.

### Sub-theme 2: Comprehensive Psychoeducation

The second sub-theme includes the comprehensive and standardized psychoeducational components to treatment that addresses: 1) short and long-term neurological changes; 2) psychological responses and reactions; and 3) physical responses and reactions.

Standardization of the program's psychoeducational components was reported by participants as being essential to demystifying mental health issues and understanding the short- and long-term effects of the stressful and potentially traumatic events that injured officers experience. Improving RFs' mental health knowledge helped them connect physical health, symptoms, emotions, and thoughts to mental health concerns. This information has the potential to assist

participants in understanding the mechanisms that can precede a mental health diagnosis, and the interaction of personal, organizational, cultural, spiritual, and internal and external factors that may lead to officer disengagement from the workplace.

Participants were able to identify a number of areas regarding neurological change that they felt important to learn about within the RP. Specifically, individuals thought that psychoeducation should include information on changes in neurological pathways (e.g., basic brain structures, function, and effectiveness). Psychoeducation regarding short-term physiological and physical reactions was also found to be important. Participants appreciated gaining a better understanding of neurological shifts associated with mental health issues, shifting emotions, behaviour changes and discipline issues. Participants reported benefiting from learning about the mind body connection, how trauma can be physically manifested and held in the body, and the short- and long-term effects of prolonged mental health concerns on overall health, including pain, chronic medical conditions, and substance misuse.

## Theme 3: Necessary Features of a Workplace Reintegration Program

The third identified theme was in relation to the overall qualities of an RP. Participants identified the need for the PRFT to be individually tailored, overseen by mental health professionals, balanced by peer support, and trauma-informed.

### Sub-theme 1: Customized Approach

Participants indicated that an individually tailored RPFT would provide participants with a sense of control and be uniquely paced and directed based on their individual needs. An outcome of an individually-tailored RP would provide PSP with the sense that they matter and that their needs are being heard and responded to. Participants described this process, built on trust, as one of working with individuals on developing a personalized and graduated return to work plan. As a part of this pathway, individuals could discuss their opinions for the most appropriate job placement, wishes for a multi-faceted approach, and the integration of graduated exposure therapy.

### Sub-theme 2: Necessary Oversight from Mental Health Professionals

Participants also discussed the importance of the RPFT being overseen by mental health professionals including psychiatrists and psychologists while encompassing physical, occupational, and trauma therapies. Participants articulated the need for therapy to be long-term to support individuals during their potential ups and downs over time. Additionally, they discussed the importance of the RP in normalizing mental health concerns in trauma-affected populations. Mental health professionals would also assist injured officers in developing self-care strategies to optimize their overall health and well-being.

### Sub-theme 3: Balanced by Peer Support.

Participants discussed the importance of peer support in RPs. Peer support, described as an extra yet essential network of support, was associated with empathetic listening, low level mental health support, identification of those who may be at risk to themselves, and facilitating professional help. Participants indicated that peer support can offer injured officers the opportunity to connect with someone with a shared experience and awareness of police culture. Doing so may help them overcome trust issues that they may have with the PSP organization, and increase their mental health literacy and health seeking behaviours.

### Sub-theme 4: Trauma Informed Care approach to Workplace Reintegration

Participants indicated that RPs need to utilize trauma-informed care principles. An approach that recognizes the wide prevalence of trauma and acknowledges that trauma affects people in different ways,[22] principles of trauma-informed care recognize that trauma is complex, specific to the individual, and involves many different experiences.[23] Trauma-informed care fosters physical and emotional safety, providing others with choice and control over decisions that affect them, and providing services that are appropriate to the needs of people affected by trauma.[23] It also recognizes the potentially cumulative nature of trauma which is a common occurrence in PSP with OSIs. Components of trauma-informed care deemed to be particularly important by the participants included safety, trustworthiness and transparency, peer support, collaboration and mutuality, empowerment and choice, and awareness of cultural and historical issues.

## Theme 4: Cultural Considerations within PSP Organizations

The final theme identified by participants related to the specific cultural and occupational considerations essential for a successful RP program. These included the culture and organizational role in mental health stigma, as well as the barriers and facilitators to successful and sustainable RP implementation within PSP organizations.

### Sub-theme 1: Performance Culture (Stigma)

Participants indicated that one of the primary challenges specific to policing is a culture that is incompatible with mental health help-seeking. This is associated with norms of hegemonic masculinity, authoritarianism, and emotional control. Participants reported that, while significant changes have occurred to address stigma associated with mental health, legitimate and perceived challenges remain. In particular, participants noted that reporting having a mental health challenge can result in a lack of privacy (given the small and insular nature of policing) and that there continues to be career implications associated with admitting to a need for help. A lack of trust in management support, specifically if a person needs a reduced or modified workload, was seen as a significant barrier. Participants acknowledged that this can be exacer-

bated by the paramilitary structure (i.e., hierarchy) in which there can be tension and conflict between the horizontal and vertical components of the structure.

### Sub-theme 2: Barriers to Implementation

Participants spoke to systemic organizational barriers which would need to be addressed in order for a RP to be successfully implemented within an organization. Practical challenges to successful implementation include geography (i.e., rural and remote areas), differing divisional geographic needs and experiences, over-taskings, procuring infrastructure for the RP program, and budgetary constraints (i.e., funding for program resourcing or other programs drawing from the same resources). Given current budgetary constraints on police forces, convincing senior leadership and management of the need to develop a RP might be extremely difficult. As such, participants shared that, prior to the commencement of an RP, confirmation of management and member buy-in would be crucial. Equally important would be building a strong business case for the program so as to improve functionality of the organization. This would involve gathering statistics and feedback from participants and establishing an evidence-base. Finally, participants noted that, even if the RP was implemented, there may be ongoing challenges related to finding the right people to act as RFs, as in the first theme, codifying instructor requirements, developing and retaining instructors, ensuring support for the RF, and releasing members to engage in RF positions. Participants also noted that new health and well-being programs are often implemented; however, programs can lose focus and support over time with changing leadership and organizational priorities.

### Sub-theme 3: Facilitators to Implementation

While participants acknowledged barriers to the implementation of an RP, they also acknowledged that there are a growing number of facilitators that would support the implementation of RPs. For example, participants shared that, despite the continued stigma and career implications of mental health, large public campaigns have been initiated within policing organizations to increase awareness of PSP-specific mental health challenges. Participants noted that there is greater availability of resources for health and wellness programming. Recently, greater access and support has been evident from provincial Occupational and Health and Safety, WCB, and reflected in individual police organization's health and safety strategic plans and priorities. Participants also noted that, as peer-lead RPs expand provincially, nationally, and internationally, there are opportunities for networking, partnerships and collaboration such that each police organization does not have to solely carry the resource weight of developing and implementing the RP. Sharing training manuals, awareness campaign resources, marketing and promotions material, and lessons-learned with one another can ease the burden of implementation. Finally, participants identified that one of most powerful facilitators would be the endorsement of individual police officers who had gone through and successfully completed the RP. The effectiveness and importance of their testimonials, feedback, and word-of-mouth recommendations and referrals cannot be under-stated nor under-estimated.

## Discussion

This mixed-methods pilot study was the first to evaluate the EPS RPFT from an evidence-based perspective. The purpose of the quantitative pre/post analysis was to (1) evaluate the effectiveness of the EPS RPFT course at influencing mental health knowledge and attitudes of PSP attendees, (2) explore the experiences and learnings of PSP attendees of the RPFT course, (3) describe the perceived needs, barriers, facilitators, and recommendations for workplace reintegration and overall workplace culture in their respective police organizations, and (4) vision the potential future of peer-led RPs.

The statistical results of the outcome measures, the MAKS, OMSWA, and EPS RPFT specific questionnaire, indicated that the 5-day course facilitated increased knowledge of mental health and improved workplace attitudes. The amount of change of the scores overall was statistically significant. It is well-accepted that improving mental health knowledge can produce a positive impact on stigma, facilitate help seeking, and contribute to a greater proportion of people with mental illness engaging in medical treatment.[16] If the EPS RPFT was successful at creating positive change in the level of mental health knowledge and improve workplace attitudes in 5 days, this may carry over into the PSP workplace culture and organizations with increased compassion, empathy, acceptance of those who may be experiencing mental health issues, and overall less stigma.

Further data analysis found that men were more likely to see a larger pre/post change in scores, as were municipal police and RCMP. It is hypothesized that the smaller number of women, as well as the smaller sub-samples being analyzed for differences between professions may reduce the sensitivity of the statistical analysis. Gender differences, however, may be important, with women in general having greater mental health knowledge or comfort expressing that knowledge than men.[24,25] The lack of change in scores, therefore, does not necessarily indicate that the RPFT program is not meeting its objectives. Rather, it may be indicative that some PSP professions, organizations and individual PSP had more baseline mental health knowledge upon entering the RPFT and, therefore, did not have as much threshold for change.

Additionally, the results of the exploratory factor analysis of the EPS RPFT Specific Questionnaire demonstrated that the constructs and questions relate to each other and measure the categories of knowledge, skills, and behaviours. The analysis allowed the researchers to identify which questions could be removed, changed, or reorganized for potentially better correlation with constructs. Twelve items scored below the acceptable loading values and will be adjusted in the next iteration of the questionnaire. These results must be interpreted with caution due to the lower sample size. With these modifications and future validation research, this questionnaire may have the potential to be developed into a more widely utilized outcome measure that may also be transferable to other mental health education initiatives.

It is also worth noting that 56% (n=32) of the sample were from PSP organizations that already had RPs established. It is possible that some of the other participants were enrolled in the RPFT

for their own personal growth and learning and did not intend to participate as RP facilitators after the training. As previously stated, improving mental health knowledge and attitudes can positively influence workplace culture. That said, it may also be beneficial to reserve the RPFT for those who have strong intentions of becoming RP facilitators and have additional separate learning opportunities for those who are gaining other benefits from the RPFT. It is also possible that some of these participants had plans to return to their respective organization to initiate a RP where one did not previously exist. It may be advantageous to provide information and guidance to this group on how to take steps to implement such a program.

Overall, the attendees of the RPFT program related that the 5 days of training provided them with valuable information that they could use in their respective organizations to fulfill the role of a RF or initiate a conversation around the potential implementation of a peer-led RP. The qualitative results indicated that the experience of the RPFT was quite positive, with responses provided demonstrating engagement, enthusiasm, empathy, insight ,and knowledge into the mental health challenges currently facing PSP. The triangulation of the qualitative and quantitative data would indicate the RPFT created positive change in perspectives and knowledge over the relatively short course duration.

Active steps that can be integrated into personal, cultural and organizational landscapes to improve overall mental health and facilitate workplace reintegration were also identified through the analysis. PSP from policing organizations found the short- and long-term EPS RP relevant to their specific workplaces due to the specificity to firearms, while other PSP felt that the long-term RP would be the most useful in their respective professions. Participants found value in both the psychoeducational (e.g.., mental health conditions, body-brain connection, support strategies) and experiential (e.g., specific drills and workplace exposures) components of the training. They were also able to consider needs, barriers, facilitators, and recommendations specific to workplace reintegration in their respective PSP organizations. While these were unique to each organization and profession, similarities were evident across PSP groups, professions and organizations.

Needs and barriers associated with RPs were identified by the participants. Mental health stigma and resource limitations were prominent barriers, regardless of PSP profession or the stage of RP implementation. Participants identified that a RP needs buy-in from organizational leaders and resource allocation (e.g., for highly-skilled RFs, infrastructure, time) to initiate or sustain this type of programming. For PSP organizations with vast geographic reach (e.g., RCMP, Canadian Border Services, and Alberta Health Services), distance from the RP and access to RFs was also identified as a barrier. These organizations would potentially require additional resources to effectively operationalize an RP that could be accessed by PSP in a timely manner. Participants also emphasized that stigma and stereotypes are significant barriers as they perpetuate workplace cultures that are not conducive to recovery and reintegration after an illness or injury.

Reported RP facilitators included media campaigns. These campaigns have improved men-

tal health knowledge, strengthened organizational awareness and priorities aimed at OSIs, changed workplace culture, and reduced mental health stigma in the workplace. As PSP RPs become increasingly common, the ability to share resources, anecdotes, and successes was seen as facilitative for implementing, sustaining, and spreading these types of programs. Participants also noted that the EPS RPFT course is a facilitator, and suggested that, with continued uptake of the program, the future of workplace reintegration following an illness or injury is bright.

## Recommendations

A number of recommendations from the thematic analysis may be more widely generalized to other PSP organizations who may be implementing peer-led RPs. These recommendations include: (1) developing and supporting strong reintegration facilitators, (2) fostering clear communication among stakeholders, including the multidisciplinary clinical team, (3) establishing clear and simplified policies and procedures related to the reintegration process, (4) developing individualized approaches to peer-support, (5) establishing research initiatives and collaborations, (6) standardizing reintegration training and education, (7) utilizing implementation science to ensure sustainability of RPs, and (8) engaging all levels of PSP organizations in RPs.

Integration of effective peer support initiatives requires the involvement of credible, appropriately trained personnel. The importance of having RFs who are authentic, have strong leadership qualities and abilities, and are recognized and respected within their organizations cannot be understated. They also need to have adequate knowledge and skills, and the ability to establish and maintain and build trust and rapport with peers and the multidisciplinary team. Peer support initiatives are more likely to succeed if stable, desirable, and rewarding RF positions are created that allow peer support leaders to engage in workplace reintegration as part of their work and not as a voluntary activity that is in addition to their regular duties.

Standardized RPFT training that can be measured and compared for efficacy and effectiveness would be beneficial. The RPFT ideally incorporates both experiential learning and comprehensive mental health education, and includes trauma-informed care principles, basic neuroanatomy and physiology, the role and scope of the RF and other members of the multidisciplinary team, and other information related to facilitating mental health and wellness. Standardization of the RPFT would facilitate increased program fidelity, allow for the sharing of validated RP resources, and streamline the RP implementation across organizations. Although standardization would be of benefit in some respects, it is also important that newly trained RFs have the flexibility to tailor the RP to the individual needs of PSPs with OSIs within the context of their profession and organizational culture and demands. It would be beneficial for RPFT training to foster divergent thinking and flexibility while also clearly defining a RFs' scope and role. It is also critical that the RP is member-centered while also being under the support and guidance of the multidisciplinary reintegration team.

Communication policies and practices among reintegration team members that respect the

confidentiality and privacy requirements of each profession and the RP participant must be established and adhered to. The reintegration team includes, but is not limited to, the multidisciplinary medical team, WBC, peer support program, and the participant. Ongoing communication between the mental health providers and the RF is especially critical to the success of the RP experience. Ensuring that personal information is not divulged to others within the employing organization is paramount to assuring trust among those in the RP program and avoiding potentially adverse impacts that disclosure of information could have on the person's reintegration plans.

Engagement at all organizational levels, in cooperation with external stakeholders, is recommended in order to develop and maintain evidence-based best practices for workplace reintegration. Buy-in must be facilitated, communicated, and modeled from the top down to influence sustainable cultural change throughout the ranks of the organization. PSP organizations would likely benefit from allocating resources to initiatives such as the RP. Doing so would assist with reintegrating ill and injured personnel into the workplace, improving workplace culture and attitudes around OSIs, and decreasing mental health stigma. External stakeholders, such as government organizations, may be able to assist with implementation practices and research initiatives, as well as knowledge mobilization and translation.

## Future Research on PSP Workplace Reintegration Programs

More research is needed to evaluate the effectiveness, efficacy and safety of peer-led workplace RPs and facilitator training programs. As emphasized in the Blue Paper, research conducted by external stakeholders could lead to the evidence-based validation of programs such as the peer-led EPSRP and RPFT program for PSP.[2] Study of organizational and cultural impact, cost benefit, implementation drivers and processes, and knowledge mobilization strategies is also warranted. Specifically, studies which employ larger samples would allow for more sensitivity to detecting change in pre/post scores. It is critical that future studies look at the long-term impact of the RPFT and if mental health competencies, knowledge, and attitudes are maintained over time. As this research expands, other populations at elevated risk of OSIs, such as military, veteran and healthcare professionals could also be included to examine the overall impact of peer-supported workplace reintegration initiatives. Future research could also explore the experiences of OSI-affected family members and family-specific needs. Favourable research findings would potentially pave the way for more widespread program adoption and integration. Use of effective implementation science approaches would best facilitate sustainable spread and scale, enabling more PSP with OSIs to be supported in recovery and return to work. Development and evaluation of population-specific workplace RP tools and resources (e.g., a repository of videos, apps, online resources, training material), as well as prevention and intervention strategies, would also be invaluable. Additionally, the pre/post EPS RPFT questionnaire would benefit from further validation studies to establish parametric data. It may be appropriate to use in future evaluations of other courses related to mental health knowledge and training.

## Strengths and Limitations

There were a number of strengths within this research project. As a foundational study on the EPS RP, the results answer the call from the Blue Paper[2] and provide initial data regarding a peer-led RP in Canada amongst PSP. This project was executed by researchers independent of PSP organizations which provided an objective evaluation of the RP. Findings will contribute to a broader evidence-base that can inform changes to the program, practices and policies, and inform decision-making. If demonstrated to be effective, consideration could be given to ways that the program might be applied, adapted, and contextualized to a broader range of PSPs who hope to return to positions they had left as a result of OSIs. This pilot study will also offer preliminary data that will inform future more expansive and rigorous longitudinal studies aimed at examining the effectiveness of the RPFT course, and the EPS RP more broadly. Further, if the program is found to be of benefit to study participants, consideration will be given to program spread, scale and sustainability. Study results will support knowledge translation and dissemination efforts to distribute the findings to interested populations and organizations. Findings might also support future funding for the initiative.


There were a number of limitations in this study that should be noted. The data collected in this study was from a single RPFT course specific to a workplace RP created by the EPS in Alberta, Canada. The specificity of the program and sample limits the generalizability of the findings. Due to the time, infrastructure, and human resource constraints during the RPFT, the World Cafe was one of the selected methods of qualitative data collection. Although engaging, the World Cafe does not allow for anonymity of the participants. This adds bias to the data as participants may not have been as open with their responses with their peers present. The hierarchical nature of PSP organizations means that rank and roles may also affect the participant's ability to discuss these topics openly. The stigma surrounding issues regarding mental health, reintegration, PSP culture (norms of hegemonic masculinity, authoritarianism, and emotional control), and organizational culture and policies may also hinder PSP's confidence in verbally sharing ideas and answering questions. Lastly, the sub-samples had a low number of participants which may reduce sensitivity of the statistical analysis for specific PSP and gender. As well, a small overall sample size was also a limiting factor for the exploratory factorial analysis

of the RPFT Specific Questionnaire. Validation of the questionnaire will require more studies with additional participants.

## Conclusion

The EPS RP is designed to assist PSP in workplace reintegration after a critical incident or long-term absence from the workplace due to mental or physical health conditions. Evidence-based, curriculum driven training within programs such as EPSRP may increase return-to-work success in PSP. The current study demonstrated that a 5-day RPFT can affect statistically significant and positive change on outcome measures designed to measure mental health knowledge, attitudes, and stigma amongst PSP. Study participants shared a common vision of support for injured PSP, desire to develop peer-supported work RPs, and hope for reduced mental health challenges in PSP organizations. Member-centred, culturally-specific, precision-tailored programming was seen as central to the success of RPs and recovery of PSP with OSIs. Participants highlighted the value of having trained peer supporters available to PSP to assist them in their return-to-work efforts. While RPs hold much promise, and interest in peer support in PSP organizations is growing, it is essential that a strong standardized evidence-base be used to guide both RF training and RP uptake. As outcomes of the EPS RP and the RPFT are promising, careful widespread implementation of this type of programming may benefit PSP, their families, communities, and organizations.

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## Heroes in Mind, Advocacy and Research Consortium: About the Authors

The Heroes in Mind Advocacy and Research Consortium (HiMARC) is a collaborative initiative and provincial hub led by the University of Alberta that aims to develop, evaluate, and help implement solutions to improve the resilience, readiness and growth, as well as health and well-being, of military members, Veterans, PSP (public safety personnel) and their families. HiMARC fosters multi-disciplinary collaborations across Alberta, Canada and beyond, and partnerships among committed individuals and stakeholders (e.g., PSP organizations, Canadian Armed Forces, Veterans Affairs Canada, RCMP, Royal Canadian Legion, Alberta Health Services). HiMARC also develops innovations and conducts research into evidence-based intervention that can be implemented in and translated across military, Veteran, PSP and civilian sectors.

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