Extinguishing Stigma: An Examination of Firefighter Stress, Social Supports, and Attitudes Towards Psychological Help for Behavioural Health

by

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BMT, Capilano University, 2012

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE DEGREE OF

MASTER OF ARTS

in

THE FACULTY OF GRADUATE AND POSTDOCTORAL STUDIES

(COUNSELLING PSYCHOLOGY)

THE UNIVERSITY OF BRITISH COLUMBIA

(VANCOUVER)

April 2018

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Extinguishing Stigma: An examination of Firefighter Stress, Social Supports, and Attitudes Towards Psychological Help for Behavioural Health

submitted by Gemma Isaac in partial fulfillment of the requirements for

the degree of Master of Arts

in Counselling Psychology

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Abstract

Firefighters are exposed to high stress environments, often witnessing multiple traumatic events throughout their careers. Due to a number of recent suicides, unknown deaths, and line of duty deaths in the fire service, a call to examining firefighters’ psychological support and accessibility has become a priority in occupational health and safety. The primary objectives of this study were to investigate firefighter occupational stress, peer supports, and attitudes towards psychological help for behavioural health. Findings from the data collected from 254 firefighters from a large fire department in the Lower Mainland of British Columbia show that disruption of sleep, isolation from family due to work demands and stress, and upsetting thoughts about past runs were the top occupational stressors for firefighters. However, data suggest that these occupational stressors were mitigated by the levels of peer support received; that is, those who reported higher levels of peer support also reported lower levels of occupational stress. Survey data revealed firefighters are in support of seeing professional psychological help for behavioural health. Qualitative data provided insight on what firefighters deemed as helpful or challenging variables when connecting with support, while also providing suggestions for effective mental health supports. Implications of and recommendations from these findings are discussed.
Lay Summary

After a growing number of suicides in the firefighter departments in the Lower Mainland, a call to action to lifting the stigma and supporting firefighters’ mental health has become a major focus within firefighter organizations. Therefore, we aim to identify firefighter occupational stress, their perceived supports, and attitudes and preferences towards psychological help for their behavioural health. The findings of this study will form the basis for creating effective programs in supporting firefighter behavioural health.
Preface

This thesis is an original intellectual product of the author, G. Isaac. All data were collected and analyzed by G. Isaac under the supervision of Dr. Marla Buchanan. The thesis was approved and covered under the University of British Columbia’s Behavioural Research Ethics Board Certificate number H18-00032.
Table of Contents

Abstract ................................................................................................................................. iii
Preface ................................................................................................................................. v
Table of Contents ................................................................................................................ vi
List of Tables ....................................................................................................................... ix
List of Figures ...................................................................................................................... x
Acknowledgments .............................................................................................................. xi
Dedication ........................................................................................................................... xiii
Chapter 1: Introduction and Background ........................................................................... 1
Chapter 2: Literature Review .............................................................................................. 5
  Firefighter Stressors ........................................................................................................... 5
  Firefighter Occupational Stress ....................................................................................... 6
  Critical Incidents as Sources of Stress ........................................................................... 8
  Post-Traumatic Stress Disorder (PTSD) .......................................................................... 9
  Theory of Stress ............................................................................................................. 11
  Theories of Trauma ........................................................................................................ 12
  Theory of Support .......................................................................................................... 14
  Post Traumatic Growth ................................................................................................. 15
  Psychological Services for Firefighters in BC ................................................................. 16
    Critical Incident Stress Management (CISM) .............................................................. 17
    Fire Fighters Resiliency Program .............................................................................. 18
    Resilient Minds .......................................................................................................... 19
    IAFF Peer Support Training ...................................................................................... 20
Chapter 3: Hypothesis ........................................................................................................ 21
  Purpose ........................................................................................................................... 21
  Research Questions and Hypotheses .............................................................................. 21
    Research question 1 .................................................................................................... 22
    Hypothesis 1 ............................................................................................................... 22
    Research question 2 .................................................................................................... 22
    Research question 3 .................................................................................................... 22
    Hypothesis 2 ............................................................................................................... 22
    Research question 4 .................................................................................................... 22
    Research question 5 .................................................................................................... 22
    Hypothesis 3 ............................................................................................................... 23
    Research question 6 .................................................................................................... 23
    Hypothesis 4 ............................................................................................................... 23
    Hypothesis 5 ............................................................................................................... 23
Chapter 4: Methods ............................................................................................................ 24
  Research Design and Methodology ................................................................................ 24
  Sample ............................................................................................................................ 24
  Procedure ....................................................................................................................... 25
  Measures ......................................................................................................................... 26
    Sources of Occupational Stress (SOOS-14). .............................................................. 26
    Firefighter Social Support Scale (SSS-FF) ................................................................. 26
    Attitudes Toward Seeking Professional Psychological Help Short Form (ATSPPH-SF) .... 27
Mental health service provider preference ................................................................. 27
Reasons for peer or professional support ...................................................................... 28
Demographic data ........................................................................................................... 28
Data Analysis .................................................................................................................. 29
Ethics ............................................................................................................................... 29
Chapter 5: Findings ......................................................................................................... 30
Demographics ................................................................................................................. 31
Firefighter Stress .............................................................................................................. 32
Research question 1: What are the major occupational stressors identified in this firefighter population? .................................................................................................................. 32
Hypothesis 1: It is expected that firefighters with little experience (0–5 years of service) and extensive experience (15+ years of service) will report the highest levels of stress as measured by the SOOS-14 (Kimbrel et al., 2011, 2015) .................................................................................................................. 33
Peer Support .................................................................................................................... 36
Research question 2: How much support do firefighters feel they receive from fellow firefighters? ......................................................................................................................... 36
Research question 3: Is there a correlation between the amount of occupational stress reported to the amount of peer support reported? ................................................ 37
Attitudes Towards Seeking Professional Mental Health Services .................................. 38
Research question 4: What attitudes do firefighters hold towards seeking mental health services as measured by the Attitudes Towards Seeking Professional Psychological Help Short Form (Fischer & Farina, 1995)? ........................................................................................................ 38
Provider Preference ...................................................................................................... 41
Research question 5: In which situations would firefighters prefer to access peer support versus a mental health professional? ................................................................. 41
Hypothesis 3: It is expected that firefighters will prefer peer support for unique situations relevant to the job (critical incident, occupational stress) and a mental health professional for private issues (relationships, finances). ................................................................................... 42
Reasons for Peer or Professional Support ..................................................................... 45
Research question 6: What are the deciding factors for a firefighter to see a professional psychological practitioner versus a peer support? ................................................................. 45
Hypothesis 4: It is expected that confidentiality will be a top priority whether seeing a peer support or professional support .......................................................................................... 46
Hypothesis 5: If there is a preference to see a mental health provider, the preference will be that the professional have training in occupational awareness ......................................................................... 48
Chapter 6: Thematic Analysis .......................................................................................... 49
Definitions of Primary Themes, Subthemes, and Supporting Quotations ....................... 50
Theme 1: Access and support (32/44 responses) ............................................................ 50
Theme 2: Education and cultural awareness (27/44 responses) ..................................... 55
Theme 3: Stigma: Thoughts and attitudes (13/44 responses) ........................................ 59
Theme 4: Operational guidelines, policy & procedures (11/44 responses) .................... 60
Theme 5: Attitudes, bullying and lack of trust within the department (9/44 responses) .... 62
Theme 6: Exposure to trauma: Multiple traumas and PTSD (8/44 responses) .............. 62
Chapter 7: Discussion ...................................................................................................... 64
Overview of the Results ................................................................................................. 64
Implications for Mental Health Practitioners (or Counsellors) ....................................... 65
Future Research Directions .................................................................................................................. 66
Limitations ........................................................................................................................................... 67
Recommendations for Firefighter Organizations ................................................................. 68
Recommendation 1: Firefighter departments should consider reviewing their extended health benefit plans with their employers with a goal of including registered clinical counsellors in addition to registered clinical psychologists .................................................................................................................. 68
Recommendation 2: Firefighter organizations should consider reviewing their extended health benefit plans with a goal of adding group counselling .......................................................................................................................... 68
Recommendation 3: Provide education both theoretical and experiential (ride-along, hall visits, table talks) for mental health providers on the occupational awareness of firefighters. .................................................................................................................................................. 69
Recommendation 4: Continue to conduct psychoeducational training (i.e., Resilient Minds) on firefighter stress and coping mechanisms throughout a firefighter’s career ........................................................................................................... 69
Recommendation 5: Provide education for firefighter spouses and close family members (parents or siblings) at various stages of a firefighter’s career ...................................................................................................................... 69
Recommendation 6: Provide a transition program for retiring firefighters ......................... 69
Recommendation 7: Educate supervisors (Chiefs, Captains, Lieutenants) on signs and symptoms to look out for within their subordinates ......................................................................................................................... 70
Recommendation 8: Adequately screen, staff, and train Critical Incident Stress Management (CISM) peer support teams ............................................................................................................................................................ 70
Recommendation 9: Educate Worksafe BC and back to work employers on mental health and occupational awareness ........................................................................................................................................ 71
Recommendation 10: Organizations should maintain an up-to-date list of psychological service providers with occupational awareness covering a variety of geographical locations based on where firefighters are living ...................................................................................................................... 71
Recommendation 11: Consider implementing mandatory counseling sessions every one to two years for active firefighters ......................................................................................................................... 71
Recommendation 12: Consider adopting the Canadian National Standard for psychological health in the workplace ............................................................................................................................................................. 72
References .............................................................................................................................................. 73
Appendix A: Participant Consent Letter ......................................................................................... 85
Appendix B: Debrief Statement ......................................................................................................... 86
Appendix C: Sources of Occupational Stress Questionnaire ................................................................. 87
Appendix D: Social Support Short Form–Firefighters ........................................................................ 88
Appendix E: Attitudes Towards Seeking Professional Psychological Help .................................. 89
Appendix F: Mental Health Provider Preference Questionnaire ................................................... 90
Appendix G: Reasons for Peer or Professional Support .................................................................. 91
Appendix H: Demographics .............................................................................................................. 92
Appendix I: Thematic Analysis Map ............................................................................................... 93
List of Tables

Table 1 Demographics ........................................................................................................32
Table 2 Top 5 Occupational Stressors ..................................................................................33
Table 3 Occupational Stress Means by Years of Service .........................................................35
Table 4 Social Support Short Form Firefighters Means .........................................................37
Table 5 Total Attitudes Towards Seeking Professional Psychological Help by Years of Service 39
Table 6 Service Provider Preference for Items Related to Workplace Stress ..................43
Table 7 Service Provider Preference for Items Affecting Personal Life ............................44
Table 8 Thematic Analysis Themes and Response Rate .....................................................50
List of Figures

Figure 1. Bar chart illustrating mean scores for Occupational Stress as compared by different levels of Years of Service using a scale of 2.00 between 26 and 36. ..................................................34

Figure 2. Scatter chart indicating that the greater the Social Support reported; the less occupational stress experienced........................................................................................................38

Figure 3. Attitudes towards seeking professional psychological help and years of service. ........39

Figure 4. Attitudes towards seeking professional help with illustrating the somewhat to strongly agreement for support from mental health professional. .................................................................41

Figure 5. A comparison graph illustrating hypothetical situations when peers support is preferred (red) and when a professional mental health worker (blue) is preferred. Please note the Hypothetical Situations are listed as the theme of the question not the actual question. The questionnaire is listed in Appendix E. .................................................................42

Figure 6. Graph illustrating firefighters’ reasons for contacting peer support for behavioural health related issues. .................................................................................................................................45

Figure 7. Graph illustrating firefighters’ reasons for contacting a Mental Health Professional for behavioural health issues. .................................................................................................................................46

Figure 8. Graph illustrating firefighters’ most helpful department initiative post critical incident.47

Figure 9. Graph illustrating firefighters’ attitudes towards accessibility with professional mental health support. ........................................................................................................................................48
Acknowledgments

I owe enduring gratitude to my thesis supervisor Dr. Marla Buchanan for her time, knowledge, guidance, and encouragement, and to my research committee members Dr. Marvin Westwood and Dr. Norman Amundson who have been great alliances and inspiration in my work, both in theory and practice.

Special thanks are owed to Retired Chief E. Vogel and M. Fournier for connecting me with the BCPFFA Mental Health Task Force, and to the BCPFFA Burn Camp Family for bringing to light and inspiring my work towards the need of behavioural support for first responders.

I am grateful for the encouragement and motivation from the BCPFFA Mental Health Task force: President G. Ditchburn, S. Farina, T. Shierling, D. Burns, M. Johnston, B. Currie, D. Vissers, Dr. D. Shields, and Dr. D. Kuhl. Thank you to S. Fraser for helping endorse this study among the members and to S. Young for your time, insight and detailed feedback on this study providing culturally appropriate and relevant language used in the revised questions for firefighters.

This work would not have been possible without the incredible support and participation of IAFF Local 18 members, thank you. I would also like to extend my gratitude to Vancouver Fire and Rescue Services Chief Darrell Reid and IAFF Local 18 President Rob Weeks for recognizing and supporting the importance of behavioural health within the department and endorsing this study to your members.
**Firefighter’s Prayer**

*When I am called to duty, God,*

*wherever flames may rage,*

*give me strength to save a life,*

*whatever be its age.*

*Help me embrace a little child*

*before it is too late,*

*or save an older person from*

*the horror of that fate.*

*Enable me to be alert,*

*and hear the weakest shout,*

*quickly and efficiently*

*to put the fire out.*

*I want to fill my calling,*

*to give the best in me,*

*to guard my friend and neighbor,*

*and protect his property.*

*And if according to Your will*

*I must answer death's call,*

*bless with your protecting hand,*

*my family one and all.*

by Firefighter A. W. “Smokey” Linn
Dedication

To the men and women who have chosen a career in risking their lives every day so that their communities are a safer place to live, contributing to the well-being of their neighbours even after the call of duty through volunteer work and payroll deductions for local charities.

To their families who share them with the rest of the community, forgoing countless holidays and family events.

My heart is forever grateful for the commitment and sacrifices you have all given so that your communities can be safe and to know help is never too far. This is for you. It takes a village.

For mom, my first teacher, guiding me through lessons about love, sacrifice, education, and resilience, to whom I owe so much, thank you

For dad, modelling that life is one big learning opportunity.

For my family, praying together, stronger together.

For Michael, my rock and comic relief.

For my self-care . . . my loves, Ciaran and Eoghan.
Chapter 1: Introduction and Background

In times of emergency and imminent danger when the most common response is to run away, there are men and women whose job it is to run towards the danger to serve and protect their community. These are the first responders; firefighters, police, and paramedics, who put their lives on the line daily and are exposed to high occupational stress, seeing things that cannot be unseen, hearing unbearable sounds, and smelling insufferable odors. In addition to the everyday stressors that most people face, firefighters experience job related stressors and exposures that have a significant impact on their physical and psychological well-being. So, who helps the helpers?

Traditionally, firefighter culture emphasizes and promotes strength and emotional composure, yet carries the stigma of mental health issues as a weakness of character. After a growing number of suicides in the firefighter departments in the Lower Mainland, a call to action to lifting the stigma and supporting firefighters' mental health has become a major focus within the organization. In 2015, the BC Professional Firefighters Mental Health Task Force was established made up of various fire service leaders and mental health professionals working towards addressing the mental health issues that have become an epidemic for firefighters. Through the task forces efforts of program creation and educational awareness, there has been a positive yet slow shift in the traditional firefighter culture attitudes towards mental health injuries. If the stigma of mental health issues were to be lifted, perhaps firefighters would no longer suffer in silence. By seeking support either peer or professionally they may begin to process the daily stressors and traumas they face both in and out of uniform allowing them to function optimally in their daily lives.
Firefighters are exposed to insurmountable amounts of stress including the stress of a single traumatic event, the stress of repeated or cumulative trauma, the stress of their role as a helper (Raphael, 1986), as well as the stress of working in a culture that discourages emotional responses. The majority of the research on firefighters’ traumatic stress reactions do not consider the cumulative effects of continued exposure to stressful or traumatic events rather they focus on event-specific incidents or catastrophic disasters such as 9/11, Oklahoma City bombings, extensive bush fires in Australia, and bombings in the United Kingdom (Beaton, Murphy, Johnson, Pike, & Corneil, 1998; Brown, Mulhern, & Joseph, 2002). Trauma-related symptoms of first responders include recurrent dreams, feelings of detachment, dissociation, anger, irritability, depression, memory and concentration impairment, physical ailments and other somatic disturbances, alcohol and substance use, guilt about surviving, and re-experiencing symptoms when exposed to trauma stimuli (Regehr, Hill, Knott, & Sault, 2003). Given the list of these symptoms, it is not surprising that it is frequently concluded that that severe emotional reactions are normal responses to traumatic events experienced in the line of duty (Regehr et al., 2003).

Locally, the BC Professional Firefighters Association Mental Health Task Force is creating programs currently being piloted facilitating firefighter peer and professional mental health support and are receiving accolades and positive feedback from participants. However, participant recruitment for workshop attendance is often faced with slow enrolment given the presence of mental health stigma within the firefighter culture. This research hopes to shed light on firefighter attitudes towards mental health professionals and peer supports to better engage firefighters into behavioural health programs.

Current literature on firefighter occupational stress has a tendency to focus exclusively on PTSD symptoms that may limit our understanding of the complexity of the impact on
individual’s lives (Harris, Baloğlu, & Stacks, 2002; Jeannette & Scoboria, 2008; Meyer et al., 2012). PTSD has been found to be up to 85% accompanied by another disorder such as major depression, an anxiety disorder, or substance abuse (Kulka, 1990; McFarlane & Papay, 1992). As such, the view taken in this study is that trauma related behavioural health symptoms in firefighters go beyond the mental health diagnostic criteria of PTSD and include general distress, disturbances in interpersonal relationships, other mood and anxiety disorders, and substance abuse. For that reason, a survey enquiring about firefighters’ attitudes towards psychological help for *behavioural health* rather than mental health alone ensures inclusivity of a number of stress related issues such as depression, poor sleep, and substance abuse affecting overall health.

The study of behavioural health injury as a trauma is a relatively young discipline for first responders. Traditionally it hasn’t been acceptable for firefighters to say that they are negatively impacted by the trauma they experience in the line of duty. Although these individuals are typically regarded as highly resilient, many firefighters will experience a wide variety of traumatic stress reactions. Failure to acknowledge the potential impact on their mental and behavioural health can have significant and lasting consequences on firefighters as well as on their family members. Beaton and Murphy (1995) have suggested that the consequences of not attending to the problems of being exposed to or involved in traumatic incidents include short-term and long-term emotional and physical disorders, difficulties within interpersonal relationships, substance abuse, burnout, as well as career difficulties and disruptions.

Current literature on the topic of firefighter occupational stress, mental health, and resilience have been quantitative in nature, revealing that exposure to acute traumatic incidents are associated with higher levels of symptomatic distress (Brown et al., 2002; Carey, Al-Zaiti, Dean, Sessanna, & Finnel, 2011; Fullerton, McCarroll, Ursano, & Wright, 1992; van der Kolk,
McFarlane, & Weisaeth, 1996). Few studies have explored the cumulative impact of firefighting on mental health functioning. Qualitative literature on the topic has been scarce in nature investigating the impact of fire-fighting on individuals’ mental health (Kitt, 2009) perhaps it is due to the embedded firefighter culture to disclose personal stories of trauma and “weakness.” This study will add an additional qualitative question to provide participants an opportunity to disclose their thoughts regarding occupational stress and psychological supports.

The focus of this study will be on the relationship between occupational stressors and perceived social support in an attempt to see if there is a correlation to better coping strategies when peer, family or friends supports are present. With numerous programs being created to support first responder mental health, it is integral to ensure there is a bridge that will get the firefighters buy-in to participating in these programs. Therefore, it also is essential to study what the attitudes of firefighters in seeking psychological help for behavioural health. As such, a second focus of this research involves how attitudes towards seeking psychological help on either a peer or professional mental health provider could influence individuals’ response in seeking support.
Chapter 2: Literature Review

Firefighter Stressors

Firefighting was named 2017’s second most stressful job in the U.S. following enlisted military personnel (CareerCast.com, 2017). Physical demands, travel, hazards, the possibility of death, deadlines, and competition were a few factors in determining how stressful the occupation is. Evidence suggests that, in general, firefighters are at higher risk of psychological problems due to the high and constant exposure to highly traumatic events during the course of their work (Bacharach, Bamberger, & Doveh, 2008; Brown et al., 2002; Carpenter et al., 2015; Gist & Taylor, 2008; Harris et al., 2002; Henderson, Hasselt, Leduc, & Couwels, 2016; O’Neill & Rothbard, 2017; Robinson Kitt, 2009). In addition to the psychological traumas, the CDC-National Institute for Occupational Safety and Health (2014) has identified high rates of deaths in firefighters are due to heart attacks, various forms of cardiac disorders, cancer, and suicide.

Since most of this literature pulls from firefighter populations outside of Canada, it can be assumed that there are similarities in the shared occupational stressors of firefighters’, however, it would be important to have insight on the temperature of Canadian firefighter populations being supported towards behavioural health. In British Columbia, the BC Professional Firefighters Association created a Mental Health Task Force in 2015 to address mental health issues for firefighters (British Columbia Professional Fire Fighters Association, 2018). Only in the past year has mental health become a module in training new firefighting recruits in one of the advancing larger departments in BC’s Lower Mainland. Many of the other departments still do not cover mental or behavioural health in the training of new firefighter recruits. This missing component in firefighter training is integral to preparing a firefighter recruit given it is well documented that firefighters encounter a wide range of job demands that
have a significant impact on their physical and psychological well-being (Beaton et al., 1999; Henderson et al., 2016; Norwood & Rascati, 2012).

Firefighter rates of suicide ideation, plans, and attempts during their careers, is exceedingly higher, almost two folds, than those found in the general populations (Nock et al., 2008; Stanley, Hom, Hagan, & Joiner, 2015; Stanley, Hom, & Joiner, 2016). Important components of suicide prevention efforts are connecting at-risk individuals with mental health services. Although research has shown that a majority of suicide fatalities had contact with health care providers in the year prior to death, mental health problems often remain unidentified, representing a missed intervention opportunity (Ahmedani et al., 2014; Hom, Stanley, Ringer, & Joiner, 2016). Studies showing that traditional masculinity definitions and negative stigma towards mental health services results in the underutilization of mental health services in the professional and personal realms (Berger, Levant, McMillan, Kelleher, & Sellers, 2005; Bulala, 2014) provide valuable information when considering program creation for dominant masculine culture occupations such as firefighting.

**Firefighter Occupational Stress**

Over the last three to four decades, the number of actual fire calls have decreased, as a result of the drastic improvements in fire codes, prevention, and construction (Henderson et al., 2016). Consequent to this improved technology, the fire service expanded its previous role of mainly suppressing fires to taking on new responsibilities including emergency medical services such as motor vehicle accidents, overdose calls, heart attacks, shootings, stabbings, and incidents involving hazardous materials, water rescue, and confined space rescue. These additional daily tasks that firefighters are regularly involved in, place them in high stress, high demand situations, in which difficult decisions must be made quickly, and with only partial information available.
These stressful situations place firefighters at increased risk for physical injury and psychological injuries such as PTSD, anxiety, and depression (Woodall, 1999).

Additionally, firefighters are at an increased risk for respiratory disease, coronary artery disease, and cancer, due to the dangers associated with emergency medical and hazardous material incidents (National Fire Protection Association, 2007). Stress exertion, and other medically related issues that result in heart attacks or other sudden cardiac events; continue to be the leading cause of fatal injury. These occupational stressors are what most first responders such as firefighters face daily in addition to the everyday stressors most of the general public experience.

Exposure to daily occupational stress, such as being aware that one is in constant danger and conflicts with management, has the potential of decreasing one's natural ability to cope with a traumatic incident (Brough, 2004; Moran & Colless, 1995). Everyday operational work experiences such as constant alarms going off, missing meals, and dealing with the public, have an impact on the psychological health of this sample, through increased levels of anxiety and worry, and decreased concentration. Operational stressors were rated as more common and caused more distress, specifically, social difficulties for the firefighters. Although organizational demands such as paperwork, poor equipment, and incompetent colleagues were predictors of job satisfaction, they did not predict psychological strain (Brough, 2004).

Other occupational stressors include shift work, in which a firefighter lives at the firehouse for usually two days and two nights on followed by five days off, rapidly changing levels of stimulation throughout a single shift, inadequate training and equipment, time constraints, and the dangers associated with the job are all considered stressful aspects of firefighter work (Brough, 2004; Haslam & Mallon, 2003). Firefighters often identify sleep
disturbances as their primary stressor (Carey et al., 2011). Due to extended periods of off-time
duty and modest wages, many firefighters are employed part-time at second jobs, with estimates
ranging from 32% to 58% of firefighter samples reportedly being employed at one or more off-
shift second jobs (Boxer & Wild, 1993; Murphy et al., 1999). Although this sample is drawn
from an American sample, it is anecdotally noted to be reflective of Canadian firefighters.
Working a second job, adds to the balancing act that firefighters must maintain between their
work and family responsibilities, which may heighten the risk of stress these firefighters
experience.

The term *compassion fatigue* is generally used only in regard to the negative
psychological states experienced by professionals. Mental health professionals working with
traumatized victims, such as in the Lower Mainland’s Downtown Eastside where a fentanyl
crisis has ensued, are at greater risk for experiencing compassion fatigue, as was supported in
Boscarino, Figley, and Adams’ (2004) study. The authors suggest that degree of exposure,
personal history, social support, and environmental factors are important factors in predicting
compassion fatigue, and that these factors can be applied to the psychological burden
experienced by other caregivers of trauma victims.

**Critical Incidents as Sources of Stress**

A large amount of the stress that firefighters experience is due to emergency responses
referred to as critical incidents. Critical incidents are defined as any event that has a stressful
impact sufficient enough to overwhelm the usually effective coping skills of either an individual
or group. They are considered highly aversive experiences, such as the real or perceived threat of
injury or death while on duty, the loss of fellow firefighters while on duty, dismemberment, and
exposure to dead bodies of victims. A majority of the research regarding distress symptoms in
Firefighters have focused on critical incidents (Beaton et al., 1998; Fullerton et al., 1992; Haslam & Mallon, 2003; McFarlane, 1988; Regehr & Hemsworth, 2001; Wagner et al., 1998), due to the psychological risks associated with the profession.

Additionally, this type of stress has been associated with the development of PTSD (McFarlane, 1989; Moran & Colless, 1995). Other traumatic events relevant to firefighting include serious fires, explosions, bombings, serious accidents, such as, motor vehicle, plane crash, and exposure to natural disaster, such as, flooding or brushfires. Haslam and Mallon’s (2003) study illustrates difficulty sleeping and rumination over a similar event happening to their families as common firefighter symptoms of distress following an incident.

Bacharach et al. (2008) found a relationship between the intensity of firefighters' involvement in critical incidents and drinking to cope, with distress mediating this relationship. The authors state that adequacy of unit-level resources has an effect on firefighters' psychological responses to critical incidents, with those who have less adequate resources being more vulnerable to job-based distress, maladaptive coping, and increased distress-related behavior, such as drinking to cope. This is why it is important to consider creating department led peer programs that tend to the overall behavioural health of a firefighter covering psychological injuries and maladaptive behavioural coping skills. This study assessed firefighters’ preference of peer-led support groups to professional mental health providers.

**Post-Traumatic Stress Disorder (PTSD)**

As a result of their high exposure to trauma, it is typical for firefighters to experience feelings of fear, anxiety, anger or sadness, after a traumatic incident. Although these are considered to be normal reactions following a traumatic incident, PTSD is a much more acute and debilitating reaction to traumatic stress. PTSD is a severe negative reaction to a traumatic
event, in which there is persistent re-experiencing of the event (e.g., nightmares, flashbacks), avoidance of stimuli related to the event (e.g., places or conversations), and hyper arousal (e.g., feeling jumpy, irritable). Traumatic events involve either actual or threatened death, serious injury, or threats to physical integrity that can be either experienced or witnessed by the individual. Additionally, negative reaction can occur months to years after the event occurred (American Psychiatric Association, 2013; Antonellis & Thompson, 2012).

Common reactions reported by firefighters that are symptoms of PTSD include rumination, trouble falling or staying asleep, nightmares, avoidance of thoughts and feelings, flashbacks, feelings of guilt and helplessness, feeling emotionally upset when reminded of the event, detachment, somatic complaints, physical symptoms of distress (e.g., physical exhaustion, muscle tension, tension headaches, nausea, and gastrointestinal problems), and hyper arousal, such as a heightened sense of smell (e.g., burnt flesh; Bacharach et al., 2008; Beaton et al., 1998; 1999; Boxer & Wild, 1993; Chen et al., 2007; Fullerton et al., 1992; Hartsough, 1985; Haslam & Mallon, 2003; McFarlane, 1998b, 1988c; Murphy et al., 1999; North et al., 2002; Slottje, 2008; Wagner et al., 1998).

Firefighters experiencing PTSD also have a decreased quality of life, increased alcohol use, reduced job satisfaction, high levels of work strain, criticism due to work performance (e.g., responding to emergencies in time), functional impairment in various life spheres, lack of organizational support, lessened social support, interpersonal relationship difficulties, restricted range of affect, depressed mood, and social dysfunction (Bacharach et al., 2008; Chen et al., 2007; Corneil, Beaton, Murphy, Johnson, & Pike, 1999; Murphy et al., 1999; North et al., 2002, 2002b; Regehr et al., 2003; Wagner et al., 1998). Reliance on emotion-focused coping strategies,
which are passive and avoidant (e.g., denial, mental and behavioral disengagement), increases the chances of firefighters developing PTSD (Dudek & Koniarek, 2003).

Support networks have been associated with minimizing the severity and development of stress symptoms, thereby, decreasing the likelihood of firefighters developing PTSD (Jeannette & Scoboria, 2008; Stephens, Long, & Miller, 1997). These supports include: feeling like one is a part of the team, support from management and the union, reassurance of worth from supervisors, seeking social support through debriefing sessions and/or talking to one's colleague and/or spouse, and using humor among fellow firefighters as a way of relieving stress and coping with difficult incidents (Corneil et al., 1999; Fullerton et al., 1992; Haslam & Mallon, 2003; Regehr et al., 2003; Varvel et al., 2007). These studies support the hypothesis that the greater the perceived support, the better the coping resources to decrease occupational stressors.

**Theory of Stress**

Stress theories can be divided into two categories, interactional and transactional. Interactional theory focuses on the person’s interaction with their work environment while transactional theory focuses on the psychological mechanisms underpinning that interaction (Deppa & Saltzberg, 2016). Lazarus and Folkman’s (1987) “Transactional Theory of Stress and Coping” described stress as a constant appraisal of the environment to the one’s internal resources to meet specific needs of the current situation. This process is broken down into two main stages, primary and secondary appraisal. During the primary stage, a person is noticing the cue in the environment and making a basic determination of whether there is a threat or not. If there is no threat, then there is no stress. If there is a perceived threat, then a secondary appraisal occurs. At this stage, a person appraises whether they have the internal resources to deal with the threat. If an individual believes they have the resources, then the situation can be seen as a
challenge creating positive stress. On the other hand, if a person feels that they cannot meet the demand, then they become negatively stressed. This is an ongoing process and involves continual re-appraisal of the environmental cues. Numerous factors such as personality and emotional state, contribute to the process. Nonetheless, the side effects of negative stress can be both physical and psychological health issues (Deppa & Saltzberg, 2016; Lazarus & Folkman, 1987). Understanding this theory lends to the concept that stress appraisal is complex and is unique to each individual’s psycho-social-behavioural resources.

Although there is a growing amount of literature around the topic of firefighters suffering from PTSD (Bonanno et al., 2016; Harris et al., 2002; Meyer et al., 2012; Stanley et al., 2016) it should be noted that PTSD is highly comorbid with other psychological problems, including depression, dissociation, other anxiety disorders, substance abuse, personality disorders and severe social and occupational impairment (Kitt, 2009). Therefore, focusing exclusively on PTSD to describe firefighters who suffer does not capture the reality of their experience, nor does it do justice to the complexity of what is going on for them. Research needs to be inclusive of other psychological problems that create the unique stressful situation for each individual.

**Theories of Trauma**

When considering the occupation of first responders, such as firefighters, who have high exposure to trauma, the very nature of the job contributes in part to the development of potentially debilitating psychological conditions, such as PTSD. However, literature also supports that not everyone who experiences a traumatic event goes on to develop psychological distress and that many firefighters are resilient to the job’s demand (Joseph, Williams, & Yule, 1995). Various personality and social psychological factors have been hypothesized to be
important in determining who does, and who does not, go on to develop psychological distress (Joseph et al., 1995; Williams, Joseph, & Yule, 1994).

It was not until 1980 that clinicians advocated for psychological trauma and PTSD to be included in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM-III; American Psychiatric Association, 1980) as a result of returning war veterans presenting severe “shell shock” symptoms. The DSM addresses the symptoms of PTSD; however, it does not describe causality of the disorder. Early trauma theories include Herman’s (1995) theory of “Complex PTSD” and van der Kolk’s (2005) theory of Developmental Trauma Disorder. Herman posited that multiple origins of trauma such as early childhood or life traumas present disruption in long term social and professional functioning such as the inability to self-regulate or self-organize (Courtois, 2004; Ford & Courtois, 2009). Van der Kolk’s (2005) theory of developmental trauma disorder builds on this theory that these traumas affect the neurological development of young children affecting their abilities to process information, regulate emotions, and categorize experiences. These multiple exposures to childhood traumas such as abandonment, betrayal, assaults or witnessing of domestic violence would negatively throughout the individual’s life (Ringel & Brandell, 2012).

Van der Kolk (2014) posited that multiple traumatic stressor can be understood as occurring on a continuum; that a threat turns into trauma when we can neither fight nor flee, rather are trapped, and the stress is turned against the self. Therefore, trauma is when the past inhabits the body and mind in the present, and that the mind has adapted or evolved to be on a constant high alert in order to manage the trauma. As a protective measure, individuals learn to distance themselves from others. In theory, firefighters’ exposure to multiple traumas on the job, and not having the necessary breaks in between calls or shifts to process these “trapped traumas,”
may result in the build-up of trauma. This continuum also carries over onto their personal lives right after their work shift, making it a challenge for even the most resilient firefighter to overcome PTSD.

**Theory of Support**

Social support is not the same as merely being in the presence of others. The critical issue is reciprocity: being truly heard and seen by the people around us, feeling that we are held in someone else’s mind and heart. For our physiology to calm down, heal, and grow we need a visceral feeling of safety. (van der Kolk, 2014, p.81)

A meta-analytic review on the relation of perceived and received social support to mental health among first among first responders conducted by Prati and Peitranoni (2010) provides a succinct overview of the theories, many that support the protective role of social support in the aftermath of critical incidents among first responders. These theories include arguments that social support can (1) broaden one’s pool of available resources and replace or reinforce other resources that have been lacking (Hobfoll, 1989); (2) promote the assimilation of the traumatic information (Horowitz, 1974); (3) influence the appraisal of the event and may promote adaptive coping strategies (Williams et al., 1994); and (4) promote adaptation directly and indirectly through its effect on appraisal and coping strategies (Moos & Schaefer, 1993; Prati & Pietrantoni, 2010).

However, some theories point to social support following a traumatic event can exacerbate distress, creating an over exposure to the trauma there are some theoretical arguments that suggest a negative effect of social support in the aftermath of potentially traumatic events (Hobfoll & London, 1986; Stephens et al., 1997).
A study looking at Social Support, Stress, and Suicidal Ideation in Professional Firefighters (Carpenter et al., 2015) examined 334 professional firefighters who completed the self-report questionnaires. Firefighters were given The Sources of Occupational Stress Scale-14 (SOOS-14), a 14-item self-report measure adapted from Beaton and Murphy’s (1995) Sources of Occupational Stress scale designed to assess occupational stressors in firefighters and paramedics, the Firefighter Social Support Scale (SSS-FF; Gulliver et al., unpublished measure) a 9-item self-report measure based on the Social Support scale of the Deployed Risk and Resilience Inventory, the Interpersonal Support Evaluation List, a 40-item self-report measure of the perceived availability of social support and Beck Depression Inventory–II (BDI-II) and Beck Depression Inventory for Primary Care (BDI-PC) to assess suicidal ideation. The study found a positive correlation between stress and suicidality; however, stress appeared to have a different relationship to suicidal ideation depending on levels of social support. A higher level of social support appeared to be protective against suicidality when high occupational stress was present. In contrast, when social support was low and stress levels were high, suicidal ideation was elevated. After contacting the Dr. Kimbrel, an author on this study, the SOOS-14 and SSS-FF measures seemed to be appropriate to use on the current research to determine firefighter occupational stress and peer support.

**Post Traumatic Growth**

Since this study seeks to provide insight on promoting behavioural health and wellness to support firefighters, it was important to not only look at the challenges of firefighter occupational traumas and PTSD but also provide insight on the potential of post-traumatic growth (PTG). Post-traumatic growth is a potential consequence of the cognitive effort to redefine those beliefs and to rebuild the assumptive world (Calhoun & Tedeschi, 2006).
A study by Armstrong, Shakespeare-Finch, and Shochet (2014) examined 218 Australian firefighters who had all reported experiencing a traumatic event through their work role with the purpose to identify predictable variables in PTSD and PTG. The participants were 98.6% were male, 84% were married, 56.4% were over 45 years old, and 55.5% reported trauma in only work context while the 44.5% reported trauma from both work and personal context. Results indicated that firefighters who experienced multiple sources of trauma, higher levels of organisational and operational stress, and utilised cognitive reappraisal coping were all significant predictors of PTSD symptoms. PTG were predicted by experiencing trauma from multiple sources and the use of self-care coping. There currently is a major gap in literature looking at factors, which support PTG for firefighters.

Another study looking at first responders, mainly police officers, investigated the relation between mindfulness (using the Kentucky Inventory of Mindfulness Skills) and posttraumatic growth (using the Posttraumatic Growth Inventory) among 183 police officers (Chopko & Schwartz, 2009). Results showed that effort toward spiritual growth was positively correlated, and accepting events without judgment was negatively correlated, with posttraumatic growth. The author provides insight on how spirituality in the context of PTG can simply refer to a greater sense of universal presence in supporting post-traumatic growth and healing.

**Psychological Services for Firefighters in BC**

Given the intensity and frequency of traumatic exposures firefighters are faced with, it would seem likely that their mental and behavioural health would be supported by the employers extended health care benefits, yet the current collective agreement with one of the largest departments in BC and their city employers only covers $600 per year for a clinical psychologist. These limited resources leaves firefighters dependent on making an appointment with a their
family doctor and then waiting for the referral to get through. Often this task is too tedious and lengthy for someone who may be experiencing distress.

In 2015, the British Columbia Provincial Firefighters Association (BCPFFA) created a Task Force that brought together various fire service leaders and mental health professionals to address the mental health issues that have become an epidemic for first responders countrywide. Since then they have maintained providing and endorsing a number of resources and programs supporting firefighters’ behavioural health. In addition to the noted programs, BCPFFA also provides a list of occupation[ly aware mental health providers and family support handouts, in addition to hosting spousal nights to support firefighters’ partners through education.

**Critical Incident Stress Management (CISM).** CISM is a comprehensive, integrated, multi-component, program of crisis intervention utilized at the fire departments following a critical incident. CISD protocols were developed by Jeffrey Mitchell in the 1970s in an effort to aid recovery for first responders after large-scale events or traumatic incidents. CISDs involved a trained facilitator leading a psychoeducational workshop for a group of emergency workers who had been exposed to a traumatic incident, in the hopes of reducing psychological distress. Its purpose is to provide education, support, assessment and intervention to emergency service personnel who work under stressful conditions and situations and are often exposed to and/or affected by the critical incidents. CISM was born out of emergency services standardized by the International Critical Incident Stress Association (ICISF). The goal when applying any of the CISM components is to assess, educate, and intervene when necessary, and return individuals to work with the tools and support needed to reduce the effects of a critical incident.

The benefits of a CISM intervention include reduction in symptoms of post-traumatic stress, quicker return to normal productive functioning, increased job satisfaction, reduced
WorkSafe claims, reduced absenteeism, reduced errors, enhanced group cohesion, increased personal confidence, and extended longevity. Although CISDs are typically reported by participants as helpful, research outcomes of its effectiveness have been mixed. Jeanette and Scoboria (2008) suggested that CISDs may even be harmful for participants.

It must be noted that participation in CISM interventions are voluntary; however, one of the most positive benefits following a critical incident is group intervention that promotes a stronger cohesion amongst the participants, as everyone’s experiences and contributions to the process can provide support for others within the group.

In 2008, survey was conducted with 142 members (54%) of an urban fire and rescue service in southwestern Ontario, Canada (Jeannette & Scoboria, 2008). Firefighters were provided with five scenarios of varying traumatic intensity, for which they rated desirability of four voluntary post-incident interventions: CISD, individual debriefing, informal discussion, and no intervention. Firefighters expressed interest in working with post-event reactions within their peer group for all events, and an increasing interest in formal intervention as event severity increased. Individual debriefing was preferred to CISD in scenarios of low to moderate intensity. For scenarios of high intensity, ratings for all interventions were high. The authors concluded that CISD provided an essential role of informal peer-support, and the desire for meaningful intervention in severe situations for this firefighter population.

**Fire Fighters Resiliency Program.** In 2017 Wounded Warriors Canada donated to the BCPFFA to fund the Fire Fighters Resiliency Program (FRP). The FRP is a peer-based pilot program designed to help firefighters regain and maintain resiliency while dealing with the daily operational stress of their work. The FRP is a collaboration between the BCPFFA Mental Health Task Force and UBC Faculty of Medicine professors, Dr. Duncan Shields and Dr. David Kuhl.
The program was designed with the knowledge that first responders prefer to be supported by their peers, who understand them best, and building the connections and skills that support real-world resiliency.

The FRP brings together 8 to 10 fire fighter peers in a three-day residential retreat to work together as a team, hear each other’s experiences, pick up tools for self-care, and help them to better support their peers. They are guided by two expert facilitators throughout the program, providing them with the most up-to-date evidence on the mechanisms and impact of operational stress on the brain, body and on relationships, and learn evidence-based tools to maintain resiliency.

**Resilient Minds.** In 2017, a partnership between The Canadian Mental Health Association (CMHA) and the BCPFFA provided an 18-month project for mental health training to firefighters across the province. Approximately 1,200 firefighters will benefit from CMHA’s Resilient Minds course, a comprehensive, four-module prevention program designed specifically for first responders to support them in areas of psychological trauma and workplace stress.

The Resilient Minds course educates first responders about trauma so they know how to recognize signs of illness so that they can get support sooner. The program is unique in that it is co-delivered by a CMHA trainer and a firefighter. The collaborative approach is key to its success. Previous participants in the training described it as some of the best training they had received. Knowledge about the problems facing firefighters in British Columbia is supported by recent unpublished survey conducted jointly by CMHA and BCPFFA which have revealed the following:

- 95.5% think learning about mental health challenges will be helpful in their work;
- 69.5% report that they have not received training on psychological trauma; and
• 76% had received no resiliency training.

In 2017, 80 firefighters will be trained to become Resilient Minds trainers. These ‘train the trainer’ sessions will take place in the Lower Mainland, Prince George and Kelowna. Vancouver Island has already committed to train approximately 40 trainers to serve their region. Each of these trainers will then train a minimum of 15 firefighters in local halls around British Columbia. The BCPFFA and Worksafe BC will be providing funding to support the provincial roll out of this training.

**IAFF Peer Support Training.** The International Association of Firefighters offers a two-day peer support training for fire service personnel of any rank and position and members who are already providing peer support are welcome to participate in the IAFF Peer Support Training. After completing the IAFF training, members will become IAFF Trained Peer Supporters and have the necessary knowledge and skills to provide support to their peers; educate brothers and sisters about behavioural health (e.g., PTSD and resilience); serve as a bridge to behavioural health programs and community resources; and build or enhance their peer support programs. The IAFF Peer Support Training curriculum focuses on active listening skills, suicide awareness and prevention, crisis intervention, referrals to local resources and relationships with local behavioural health providers. Participants also learn how to build an effective peer program.
Chapter 3: Hypothesis

Purpose

The purpose of this mixed method study is to gain information about occupational stressors identified in the firefighter’s population that involves a single fire department in the Lower Mainland of British Columbia. Inviting firefighters to identify occupational stressors and support systems in addition to their attitudes about seeking psychological help will provide a rare vantage point in the goal of connecting firefighter’s psychological and emotional wellness with both peer and professional mental health programs supporting behavioural health.

A goal of this study is to help extinguish the stigma of mental health and normalize it so that open and frank conversations about occupational psychological injuries within the department can be treated. With anticipation, the knowledge gained from this study will also contribute to understanding more about how to shift the firefighter culture to promote behavioural health and wellness. By evaluating firefighter culture including its history in paramilitary training and male “macho” culture (Cox et al., 2014; Kent, 2012; Shields, Kuhl, & Westwood, 2017; Westwood & Wilensky, 2005) we can improve our understanding of which psychological services firefighters may find most acceptable. With this knowledge, interventions that appeal to their preferences can be initiated. More broadly, this study seeks to add to the literature on firefighters’ attitudes towards seeking psychological help for behavioural health from the perspective of a single large firefighter department in Canada.

Research Questions and Hypotheses

Literature supports that the ability to communicate about workplace and family stress to others whom one deems as a positive social support leads to resilience (Deppa & Saltzberg, 2016;
Gist & Taylor, 2008; Kent, 2012). Therefore, it is important to identify the following research questions and hypotheses.

**Research question 1.** (1a) What are the major occupational stressors identified in this firefighter population? (1b) What is the relationship between years of service with levels of occupational stress?

**Hypothesis 1.** It is expected that firefighters with little experience, (0–5 years of service) and extensive experience (20+ years of service) will report the highest levels of stress as measured by the SOOS-14 (Kimbrel et al., 2015; Kimbrel et al., 2011).

**Research question 2.** (2a) How much support do firefighters feel they receive from fellow Firefighters? (2b) What is the relationship between levels of stress and level of perceived support?

**Research question 3.** Is there a correlation between the amount of occupational stress reported to the amount of peer support reported?

**Hypothesis 2.** The greater the perceived peer support, the less occupational stress one will experience.

**Research question 4.** What attitudes do firefighters hold towards seeking mental health services as measured by the Attitudes Towards Seeking Professional Psychological Help Short Form (Fischer & Farina, 1995)?

**Research question 5.** (5a) In which situations would firefighters prefer to access peer support versus a mental health professional? (5b) Is occupational awareness an important factor in choosing a mental health professional for support? (5c) Is confidentiality an important factor when reaching out for support?
**Hypothesis 3.** It is expected that firefighters will prefer peer support for unique situations relevant to the job (critical incident, occupational stress) and a mental health professional for private issues (relationships, finances).

**Research question 6.** What are the deciding factors for a firefighter to see a professional psychological practitioner versus a peer support?

**Hypothesis 4.** It is expected that confidentiality will be a top priority whether seeing a peer support or professional support.

**Hypothesis 5.** If there is a preference to see a mental health provider, the preference will be that the professional have training in occupational awareness.
Chapter 4: Methods

Research Design and Methodology

The present is a mixed method study of active firefighter members in a department in the Lower Mainland of British Columbia. The quantitative method provided the researcher the ability to reach a wide range of participants, use standardized questions and responses, while providing a high degree of anonymity. Aside from providing greater anonymity, the survey method also allows for ease of coding information. The closed ended questions with pre-categorized proposed answers greatly reduce the potential of interviewer’s misinterpretation of responses. However, there was one qualitative open-ended question at the end of the survey that was analyzed using thematic analysis (Braun & Clarke, 2006); a method for identifying, analysing, and reporting patterns (themes) within data to aid in interpretation.

This researcher looked for patterns that link firefighter occupational stress with perceived supports and firefighter attitudes towards psychological help for behavioural health. It was hoped that results from the present study would serve as the foundation for future qualitative research and information on program development for firefighters’ behavioural health. With this in mind, surveys served as the basis of the research methodology, while qualitative data in the form of firefighter comments provided contest to support interpretations of the data.

Sample

This study used a self-selected sample of one large firefighting department with 600 or more members in the Lower Mainland British Columbia. These firefighters are men and women who respond to a wide variety of emergency and non-emergency incidents, including fires, motor vehicle accidents, and other medical situations.
Procedure

Participants were recruited in a two-step process: first, an organization recruitment letter, followed by an email recruitment letter from the organization to its members (see Appendix A). A recruitment letter was sent via email to a firefighter chief and union president of the department explaining the goals of the study, potential risks and benefits, the level of confidentiality, and that participation is completely voluntary. The email also contained a link to the electronic version of the research survey, and a request that if the organization consented, to forward to its membership. After completing the research survey, a debriefing statement was presented which included contact information to reach the researcher or supervisor with any questions, or to request a copy of the findings (see Appendix B).

The online survey link consists of the informed consent form, the Sources of Occupation Stress Scale, SOOS-14 (Kimbrel et al., 2011), the Social Support Questionnaire Short Form for Firefighters, SSS-FF (Gulliver et al., unpublished measure as used by Carpentar et al., 2015), The Attitudes Towards Seeking Professional Psychological Help Short Form, ATSPPH-SF (Fischer & Farina, 1995), Mental Health Provider Preference Questionnaire (adapted from Karaffa & Tochkov, 2013; Wlodyka, 2017), and four additional survey questions on Reasons for Peer or Professional Support (adapted from Karaffa, 2012, Wlodyka, 2017). The final questionnaire is a demographics questionnaire that collected information on the type of respondent according to groupings of age, rank, education, gender, relationship statues, and years of service. These instruments are discussed more fully in the next section. Informed consent forms were attached to front the online survey package and the participant must indicate consent by selecting yes in order to access the survey. Should they have selected no, they were directed to the end of the survey page thanking them for their time. All contents of the package were
coded numerically. The numerical coding provided a way to track the number of surveys distributed and received, and ensured that multiple surveys were not completed by a single firefighter. A one-night stay at a hotel in Whistler was drawn for participants who submitted their emails at the end of the survey. Participants did not need to complete the survey package to participate in the raffle. The raffle winner was contacted based on the email address information they provided on the invitation to enter the raffle page and all the emails were deleted once the draw was completed.

Measures

The study consisted of seven questionnaires and one open ended question for additional commentary. A copy of each scale is included in Appendices C to H.

Sources of Occupational Stress (SOOS-14). The first questionnaire measures the different sources of occupational stress faced by firefighters, and it is self-administered. Sources of occupational stress faced by firefighters was measured using the revised 14-item version appropriately titled the SOOS-14 by Kimbrel et al. (2011), which was revised from Beaton and Murphy’s (1993) 57-item self-report measure, the Sources of Occupational Stress scale (SOOS). Kimbrel et al.’s (2011) study examined the psychometric properties of the Likert-based version of the Sources of Occupational Stress-14 (SOOS-14) scale. Internal consistency for the SOOS-14 ranged from 0.78–0.84. The SOOS-14 has been used in a recent studies with a similar sample of firefighters and has been psychometrically validated with a Cronbach’s alpha reliability was found to be .90 (Carpenter et al., 2015).

Firefighter Social Support Scale (SSS-FF). Social support was assessed with the Firefighter Social Support Scale (SSS-FF; Gulliver et al., unpublished measure) a nine–item self-report measure that assess the amount of social support participants receive from their co-
workers over the past four months. The SSS-FF was adapted from the Social Support scale of the Deployed Risk and Resilience Inventory (King, King, Vogt, Knight, & Samper, 2006) by Carpenter et al. (2015) to include only the items relevant to firefighters. Carpenter et al. utilized this measure in reports; the Cronbach’s alpha for their SSS-FF was .81.

Attitudes Toward Seeking Professional Psychological Help Short Form (ATSPPH-SF). The measure employed to examine the firefighters attitudes towards seeking mental health services is Fischer and Farina’s (1995) revised Attitudes Toward Seeking Professional Psychological Help Short Form (ATSPPH-SF). The measure was revised from the Fischer and Turner (1970) 29-item measure of Attitudes Toward Seeking Professional Help for Psychological Disturbances and is the only psychometrically valid measure in use. This ATSPPH-SF is made up of 10-items. For purposes of this study, scale attributes were modified slightly from the ATSPPH-SF and the direction of presentation reversed for clarity. That is, the attribute agree is modified to strongly agree, partly agree is modified to agree, partly disagree is modified to disagree, and disagree is modified to strongly disagree. The option “strongly disagree” is presented to the far left and “strongly agree” is presented to the far right. Because of its brevity, the ATSPPH-SF is better suited for this research population. The ATSPPH-SF demonstrates strong psychometric properties (Elhai, Schweinle, & Anderson, 2008; Fischer & Farina, 1995).

Mental health service provider preference. In order to build on the ATSPPH-SF and determine what type of mental health service firefighters prefer, a short 14-item Mental Health Provider Preference Questionnaire was revised from a police officer measure devised originally by Karaffa (2012) and more recently by Wlodyka (2017) to fit the firefighter population. This survey included statements relating to common work-related, interpersonal, and personal issues
that firefighters could experience in the course of their careers. Items referred to marriage and family issues, physical symptoms of stress, substance abuse, depression, organizational stress, task-oriented concerns, post-traumatic and critical incident stress, and suicide. The goal of this component was to assess firefighters’ preferences for peer support versus a mental health professional for various issues regarding behavioural health. The survey asks to respond according to the degree in which they would prefer to contact a professional mental health provider or a peer supporter in each hypothetical situation. In order to maintain a consistent scoring throughout all questionnaires in this research, items were revised from their 0–3 score values to being scored 1 to 4 on a four-point scale. Higher scores reflected a greater preference for a professional provider (1 = *strongly prefer peer*, 2 = *prefer peer*, 3 = *prefer professional*, 4 = *strongly prefer professional*).

**Reasons for peer or professional support.** Additionally, a four-item questionnaire also revised from Karaffa (2012) and Wlodyka (2017) was added to assess firefighters’ reasons for seeking either peer or professional support and their thoughts about frequency of seeing a professional. A section for further comments was created for this survey for participants to remark on anything they would like to say on the subject of firefighter stress and accessing peer and mental health support.

**Demographic data.** The final questionnaire was designed to capture demographic information, and was also self-administered. It has been developed specifically for this study. The content of the 6-item covers age, gender, level of education, years in firefighter service work, relationship status, and rank. Together, these seven questionnaires constitute the survey portion of the study. The data that they generate were analyzed separately and together to detect patterns and relationships.
Data Analysis

Research was conducted using secure online software Qualtrics, and analyzed with SPSS. Descriptive statistics including means and standard deviations are reported for all measures. Analysis of variance (ANOVA) was used to determine the significance of differences between groups among reported operational stressors, as well as within their reported attitudes towards seeking psychological help. Pearson's product-moment coefficient correlational analysis was used to illustrate the relationship between attitudes towards seeking professional psychological help with various demographic factors. Descriptive analysis identifies the most frequently mentioned stressors, and further subcategorized by length of service groups. The one open-ended request for any firefighters’ comments provided qualitative data to aid in interpretation and reported by themes using Braun and Clarke’s (2006) six steps of thematic analysis.

Ethics

Completing the survey may have resulted in the triggering of unprocessed traumatic events. Participants were given a list of mental health service providers electronically at the end of the survey. Anonymity was a major contributing factor of the research design. Firefighter culture does not promote openly discussing personal issues such as stress or coping. Firefighters may fear the loss of reputation or worry about career implications if identifying information was made available to management. Confidentiality was strictly maintained and only the researcher and supervisor had access to the data in a secure location at the university of British Columbia and password locked online.
Chapter 5: Findings

In the following chapter an analysis of the quantitative and qualitative action research study is presented which sets out to answer the primary research questions:

1. What are the major occupational stressors identified in this firefighter population?
2. How much support do firefighters feel they receive from their fellow firefighters?
3. Is there a correlation between the amount of occupational stress reported to the amount of peer support reported?
4. What attitudes do firefighters hold towards seeking mental health services as measured by the Attitudes Towards Seeking Professional Psychological Help Short Form (Fischer & Farina, 1995)?
5. In which situations would firefighters prefer to access peer support versus a mental health professional?
6. What are the deciding factors for a firefighter to see a professional psychological practitioner versus a peer support?

The aim was also to explore four further subsidiary questions (a) What is the relationship between years of service with levels of occupational stress? (b) What is the relationship between levels of stress and level of perceived support? (c) Is occupational awareness an important factor in choosing a mental health professional for support? and (d) Is confidentiality an important factor when reaching out for support. The intention was to offer the field of first responder behavioural health supports a reliable frontline resource that could enable organizational managers, policy makers, counsellors to translate concepts of change for behavioural support into action in an occupationally aware way.
The study ran for two weeks from the end of February to early March 2018. In this period a survey link was sent out to the Chief and Union President of the Vancouver Fire and Rescue Services to distribute to active firefighters of the Department. The survey link was sent out on a private Facebook group of 700 VFRS members, and a reminder was sent to the group to encourage participation over the two-week recruitment period. At the end of the two weeks, a total of 258 responded to the survey and 218 completed the survey in full. From the 218 respondents who took the survey in full, 44 participants submitted additional comments that were examined through a thematic content analysis.

### Demographics

Two hundred and fifty-eight online responses were received using the Qualtrics software. Two hundred eighteen of the respondents completed all measures. Ages were collected by groupings to avoid any potential of identifying specific participants. The age of the firefighters ranged from 19 years of age to over 59. The largest group consisted of 17% respondents in the 49 to 53 age group. Respondents were primarily male at 96%, with 4% of the sample being female, however, this is a good reflection of the actual 4% of female firefighters in the total Department. A majority of the firefighters reported being married or common-law at 81%, followed by 10% being single. Firefighting experience ranged from one year of service to over 20 years of service. The most common range of experience was 10 to 20 years of service and comprised 27% of the sample. One hundred forty-four firefighters reported a rank of Probationary Firefighter, EMT/Paramedic Firefighter, and Driver Engineer while 74 were ranked Lieutenant, Captain, or higher (see Table 1).
Table 1

Demographics

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| Gender             |    |         |
| Male               | 208| 95.9    |
| Female             | 9  | 4.1     |

| Education          |    |         |
| High school or equivalent | 11 | 5.0 |
| Some post-secondary | 81 | 37.2 |
| Trades/Apprentice Certification | 55 | 25.2 |
| Bachelors degree or equivalent | 52 | 23.9 |
| Some graduate school | 11 | 5.0 |
| Graduate school or higher | 8  | 3.7 |

| Rank               |    |         |
| Probationary FF    | 8  | 3.7     |
| Firefighter/EMT    | 81 | 37.2    |
| Firefighter/ Paramedic | 22 | 10.1 |
| Driver Engineer    | 33 | 15.1    |
| Lieutenant         | 32 | 14.7    |
| Captain            | 37 | 17.0    |
| Battalion Chief    | 5  | 2.3     |

| Relationship       |    |         |
| Single             | 23 | 10.6    |
| Separated          | 5  | 2.3     |
| Divorced           | 6  | 2.8     |
| Common law         | 31 | 14.3    |
| Married            | 144| 66.4    |
| Partner            | 7  | 3.2     |
| Other              | 1  | 0.5     |

| Variables          |    |         |
| Service Ranges 0-5 years | 51 | 23.6 |
| 5-10 years         | 44 | 20.4    |
| 10-20 years        | 69 | 31.9    |
| 20+ years          | 52 | 24.1    |

Firefighter Stress

Research question 1: What are the major occupational stressors identified in this firefighter population? Firefighter occupational stress was measured using the modified SOOS-14 (Kimbrel et al., 2011). The measure included 14 items using a five-point scale from 1 (not stressed at all) to 5 (extremely stressed). Internal consistency for the study was measured with Cronbach’s alpha and found to be 0.83.

The top five reported occupational stressors are reported as follows; disruption of sleep ($M = 3.41, SD = 1.12$), feelings of isolation from family due to work demands and stress ($M = 2.58, SD = 1.09$), thoughts about past run(s) that have been particularly upsetting/disturbing ($M = 3.20, SD = 1.06$), anger about working conditions and access to support services ($M = 2.81, SD = 1.11$), and the potential for chronic fatigue and burnout from the job ($M = 2.69, SD = 1.13$).
2.56, $SD = 1.10$), observing negative effect of stress on coworkers, such as illness, alcohol abuse, and burn out ($M = 2.56, SD = 1.04$), and working with a substandard co-employee on emergency incidents or situations ($M = 2.50, SD = 1.21$; see Table 2).

Table 2

Top 5 Occupational Stressors

<table>
<thead>
<tr>
<th>Question</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Disruption of sleep</td>
<td>3.41</td>
<td>1.12</td>
</tr>
<tr>
<td>Feelings of isolations from family due to work demands and stress</td>
<td>2.58</td>
<td>1.09</td>
</tr>
<tr>
<td>Thoughts about past run(s) that have been particularly</td>
<td>2.56</td>
<td>1.10</td>
</tr>
<tr>
<td>Observing negative effect of stress on coworkers, e.g. Illness, alcohol abuse, and burn out</td>
<td>2.56</td>
<td>1.04</td>
</tr>
<tr>
<td>Working with a substandard co-employee on emergency incidents or situations</td>
<td>2.50</td>
<td>1.21</td>
</tr>
</tbody>
</table>

Hypothesis 1: It is expected that firefighters with little experience (0–5 years of service) and extensive experience (15+ years of service) will report the highest levels of stress as measured by the SOOS-14 (Kimbrel et al., 2015; Kimbrel et al., 2011). Findings indicate firefighters with 5–10 years of experience and with more than 20 years of experience reported the highest level of occupational stress, while firefighters with less than 5 years of experience or 10 to 20 years of experience reported the lowest level of occupational stress (see Figure 1).
Figure 1. Bar chart illustrating mean scores for occupational stress as compared by different levels of Years of Service using a scale of 2.00 between 26 and 36.

Items on the SOOS-14 means are listed in Table 3 according to categories of years of firefighter service. Items in bold indicate highest scores of means within the category range. The highest means for occupational stress is illustrated to be greatest in the 5–10 years of service and the 20 or more years of service. The values in bold confirm that firefighters on the job 5–10 years rated eight of the questionnaire stressors the highest, and firefighters on the job 20 years or over rated the other six stressors as the highest.
Table 3

*Occupational Stress Means by Years of Service*

<table>
<thead>
<tr>
<th>Stressor</th>
<th>0–5 years</th>
<th>5–10 years</th>
<th>10–20 years</th>
<th>20+ years</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Poor diet</td>
<td>1.98</td>
<td>2.18</td>
<td>1.78</td>
<td>1.98</td>
</tr>
<tr>
<td>2. Discrimination based on gender, ethnicity, or age</td>
<td>1.31</td>
<td>1.70</td>
<td>1.35</td>
<td>1.37</td>
</tr>
<tr>
<td>3. Exposure to anxious or overly demanding co-worker or administrator</td>
<td>2.04</td>
<td>2.55</td>
<td>2.10</td>
<td>2.40</td>
</tr>
<tr>
<td>4. Financial strain due to inadequate pay</td>
<td>2.41</td>
<td>3.09</td>
<td>1.93</td>
<td>1.83</td>
</tr>
<tr>
<td>5. Bothered by not being able to predict or control events</td>
<td>2.14</td>
<td>2.14</td>
<td>2.26</td>
<td>2.44</td>
</tr>
<tr>
<td>6. Concerns about not knowing the latest technology</td>
<td>2.22</td>
<td>2.36</td>
<td>2.35</td>
<td>2.65</td>
</tr>
<tr>
<td>7. Thoughts about past run(s) that have been particularly upsetting/disturbing</td>
<td>2.34</td>
<td>2.64</td>
<td>2.52</td>
<td>2.85</td>
</tr>
<tr>
<td>8. Observing negative effects of stress on coworkers, e.g., illness, alcohol abuse, and burn-out</td>
<td>2.06</td>
<td>2.80</td>
<td>2.63</td>
<td>2.87</td>
</tr>
<tr>
<td>9. Dislike of routine paper work</td>
<td>1.71</td>
<td>2.11</td>
<td>2.10</td>
<td>2.33</td>
</tr>
<tr>
<td>10. Working with a substandard co-employee on emergency incidents or situations</td>
<td>2.57</td>
<td>2.40</td>
<td>2.37</td>
<td>2.73</td>
</tr>
<tr>
<td>11. Conflicts with co-workers and team members</td>
<td>1.57</td>
<td>1.86</td>
<td>1.84</td>
<td>1.81</td>
</tr>
<tr>
<td>12. Disruption of sleep</td>
<td>3.20</td>
<td>3.73</td>
<td>3.30</td>
<td>3.63</td>
</tr>
<tr>
<td>13. Feeling of isolation from family due to work demands and stress</td>
<td>2.25</td>
<td>3.12</td>
<td>2.51</td>
<td>2.69</td>
</tr>
<tr>
<td>14. Concerns about serious personal injury/disablement/death due to work</td>
<td>1.88</td>
<td>2.52</td>
<td>2.06</td>
<td>2.42</td>
</tr>
</tbody>
</table>

* Items in bold indicate that it is the highest reported mean among the various service categories.
Peer Support

Research question 2: How much support do firefighters feel they receive from fellow firefighters? The SSS-FF (Gulliver et al., unpublished measure) assesses the amount of social support participants received from their co-workers over the past six months. The The SSS-FF was adapted from the 15-item self-report measure Social Support scale of the Deployed Risk and Resilience Inventory to include only the items relevant to firefighters and has previously been applied in a one similar study by Carpenter et al. (2015) and presented in a poster titled Self-Assessment of Mental Health and Social Support in Firefighters at the Society of Behavioural Medicine (Zal-Herwitz et al., 2009). In this study the SSS-FF was used to measure firefighter peer support as it has been useful in similar studies. Special permission from the authors of the test was granted for this study. Cronbach’s alpha for the SSS-FF was 0.79. Results show that firefighters generally felt supported by their peers. As shown in Table 4, the top two categories in which respondents felt the least amount of support were (1) You had problems that you could discuss with other firefighters (41.59%), and (2) You were carefully listened to and understood by firefighters you worked with (10.92%).
Table 4

Social Support Short Form Firefighters Means

<table>
<thead>
<tr>
<th>SSS-FF questions</th>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree nor disagree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>You were carefully listened to and understood by firefighters you worked with</td>
<td>2.94</td>
<td>7.98</td>
<td>14.71</td>
<td>63.45</td>
<td>10.92</td>
</tr>
<tr>
<td>Among your firefighter colleagues, there was someone who made you feel better when you were feeling down.</td>
<td>0.84</td>
<td>2.94</td>
<td>13.87</td>
<td>62.18</td>
<td>20.17</td>
</tr>
<tr>
<td>You had problems that you could discuss with other firefighters.</td>
<td>10.50</td>
<td>31.09</td>
<td>18.91</td>
<td>28.57</td>
<td>10.92</td>
</tr>
<tr>
<td>Among your colleagues, there was someone you could go to when you needed advice.</td>
<td>0.42</td>
<td>5.88</td>
<td>7.56</td>
<td>54.20</td>
<td>31.93</td>
</tr>
<tr>
<td>There were people in the fire service you could talk to about your experiences as a firefighter.</td>
<td>0.42</td>
<td>1.69</td>
<td>4.64</td>
<td>53.59</td>
<td>39.66</td>
</tr>
<tr>
<td>The firefighters you knew respected the fact that you were a firefighter.</td>
<td>0.42</td>
<td>0.84</td>
<td>16.03</td>
<td>54.85</td>
<td>27.85</td>
</tr>
<tr>
<td>You knew firefighters who would lend you money if you needed it.</td>
<td>0.84</td>
<td>3.78</td>
<td>25.21</td>
<td>49.16</td>
<td>21.01</td>
</tr>
<tr>
<td>If you had been unable to do your daily chores at work, there was someone in the firehall who would have helped you with these tasks.</td>
<td>2.94</td>
<td>2.94</td>
<td>5.46</td>
<td>55.04</td>
<td>33.61</td>
</tr>
<tr>
<td>If you had been ill, there were other firefighters who would have helped you.</td>
<td>0.84</td>
<td>0.84</td>
<td>3.38</td>
<td>35.86</td>
<td>59.07</td>
</tr>
</tbody>
</table>

Research question 3: Is there a correlation between the amount of occupational stress reported to the amount of peer support reported? Hypothesis 2: The greater the perceived peer support, the less occupational stress one will experience. A significant correlation
of <0.05 was found between firefighter reported occupational stress and peer support, confirming the hypothesis that those who reported higher levels of peer support also reported less occupational stress (see Figure 2).

Figure 2. Scatter chart indicating that the greater the Social Support reported; the less occupational stress experienced.

Attitudes Towards Seeking Professional Mental Health Services

Research question 4: What attitudes do firefighters hold towards seeking mental health services as measured by the Attitudes Towards Seeking Professional Psychological Help Short Form (Fischer & Farina, 1995)? The 10 items on the ATSPPH-SF were scored from 1 to 4, where a higher score indicated a more favorable attitude toward seeking mental health treatment. Therefore, scores on this scale could range from 10 to 40. An overall mean score of 29.63 (SD = 4.75) was computed for the Fischer and Farina (1995) ATSPPH-SF scale indicating that firefighters are in support of professional psychological help for behavioural health. Cronbach’s alpha for this measure was 0.81.
On the ATSPPH-SF, the reported means for the various service categories are as follows:

0–5 years ($M = 29.76, SD = 4.82$), 5–10 years ($M = 28.25, SD = 5.29$), 10–20 years ($M = 30.60, SD = 4.76$), 20 years or more ($M = 29.40, SD = 3.98$; see Table 5 and Figure 3).

Table 5

*Total Attitudes Towards Seeking Professional Psychological Help by Years of Service*

<table>
<thead>
<tr>
<th>Years of service</th>
<th>N</th>
<th>Mean</th>
<th>Standard deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>1–5 years</td>
<td>51</td>
<td>29.76</td>
<td>4.82</td>
</tr>
<tr>
<td>5–10 years</td>
<td>44</td>
<td>28.25</td>
<td>5.29</td>
</tr>
<tr>
<td>10–20 years</td>
<td>69</td>
<td>30.60</td>
<td>4.76</td>
</tr>
<tr>
<td>20 or more years</td>
<td>52</td>
<td>29.40</td>
<td>3.98</td>
</tr>
<tr>
<td>Total</td>
<td>216</td>
<td>29.50</td>
<td>4.72</td>
</tr>
</tbody>
</table>

![Attitudes Towards Mental Health and Years of Service]

*Figure 3.* Attitudes towards seeking professional psychological help and years of service.
Five items on the ATSPPH-SF were reversed scored to align with either a negative or positive score in attitude towards seeking professional psychological help. The data suggests that at least 70 percent of the respondents either somewhat or strongly agree to seek professional psychological help for support. The top three scoring hypothetical events for professional psychological help were (1) I would want to get psychological help if I were worried or upset for a long period of time (86.21%), (2) I might want to have psychological counselling in the future (77.06%), and (3) When working out his or her own problems, getting psychological counselling would be an option (76.83%).

An overall mean score of 29.63 ($SD = 4.75$) was computed for the Fischer and Farina (1995) ATSPPH-SF scale. Considering the continuous variable, which could range from 10 to 40, the middle value will be 25. Using a one-sample $t$-test the mean was compared to 25 and the mean ATSPPH-SF score of the firefighter sample was ($M = 29.63$ $SD = 4.75$) $t = 17.76$, $p < 0.0001$, indicating a positive attitude towards seeking professional psychological help. Results are shown in Figure 4.
**Figure 4.** Attitudes towards seeking professional help with illustrating the somewhat to strongly agreement for support from mental health professional.

**Provider Preference**

*Research question 5: In which situations would firefighters prefer to access peer support versus a mental health professional?* Service provider preferences between a peer supporter and mental health professional for a variety of work and personal issues was measured using the 14-item preference survey, which was scored 1 to 4 on a four-point scale. Higher scores reflected a greater preference for a professional mental health provider and a lower score suggested a stronger preference for peer or CISM support (1 = *strongly prefer peer/CISM*, 2 = *prefer peer/CISM*, 3 = *prefer professional*, 4 = *strongly prefer professional*). Firefighters were asked to select their first preference and were limited in that they did not have an option of choosing both a peer and a professional (see Figure 5).
Figure 5. A comparison graph illustrating hypothetical situations when peers support is preferred (red) and when a professional mental health worker (blue) is preferred. Please note the hypothetical situations are listed as the theme of the question not the actual question. The questionnaire is listed in Appendix E.

Hypothesis 3: It is expected that firefighters will prefer peer support for unique situations relevant to the job (critical incident, occupational stress) and a mental health professional for private issues (relationships, finances). Of the seven items related to workplace stress firefighters preferred or strongly preferred peer or Critical Stress Incident Management support on four out of the seven items: (1) “If I experienced distress after a critical
incident” \( (N = 133,82.43\%) \), “If I were frustrated with organizational politics, colleagues, or supervisors” \( (N = 170, 76.92\%) \), (3) “If I were dealing with stress related to a particular event in which I was involved” \( (N = 159, 72.28\%) \), and (4) “If I felt hopeless about the future of my career” \( (N = 123, 55.71\% \); see Table 6).

Table 6

*Service Provider Preference for Items Related to Workplace Stress*

<table>
<thead>
<tr>
<th>Workplace items</th>
<th>Strongly prefer</th>
<th>Prefer CISM/peer support</th>
<th>Prefer mental health professional</th>
<th>Strongly prefer</th>
</tr>
</thead>
<tbody>
<tr>
<td>Career hopelessness</td>
<td>20.27</td>
<td>35.14</td>
<td>27.93</td>
<td>16.67</td>
</tr>
<tr>
<td>Organizational issues</td>
<td>28.05</td>
<td>48.87</td>
<td>16.74</td>
<td>6.33</td>
</tr>
<tr>
<td>Emotional dysregulation at work</td>
<td>17.12</td>
<td>33.33</td>
<td>36.94</td>
<td>12.61</td>
</tr>
<tr>
<td>Drinking alcohol affecting work</td>
<td>14.48</td>
<td>26.70</td>
<td>32.13</td>
<td>26.70</td>
</tr>
<tr>
<td>Critical Incident Stress</td>
<td>48.20</td>
<td>34.23</td>
<td>9.91</td>
<td>7.66</td>
</tr>
<tr>
<td>Workplace stress related to event with involvement</td>
<td>34.55</td>
<td>37.73</td>
<td>14.09</td>
<td>13.64</td>
</tr>
<tr>
<td>Experiencing PTSD symptoms</td>
<td>22.97</td>
<td>20.72</td>
<td>28.38</td>
<td>27.93</td>
</tr>
</tbody>
</table>

*Note. N = 222.*
Table 7 illustrates how firefighters preferred a professional mental health provider for all but one item presented affecting personal lives, that is, firefighters would rather see a peer support, “If I felt as if the demands of the department were interfering in my relationships with friends and family” ($N = 99, 55\%$); see Table 7 Conversely, the two items of workplace stress firefighters preferred a mental health professional over peer support were: (1) “If I were drinking alcohol excessively and this behaviour was negatively affecting my ability to do my job” ($N = 130, 58.83\%$), (2) “If I suffered flashbacks nightmares of feelings of helplessness after experiencing or witnessing an event that involved serious injury or death (or threat of serious injury of death)” ($N = 125, 56.31\%$). One item, “If I had a difficult time controlling my emotions on the job and it was affecting my performance” received 50.45% in favour of mental health support and 49.55% in favour or peers support.

Table 7

Service Provider Preference for Items Affecting Personal Life

<table>
<thead>
<tr>
<th>Personal items</th>
<th>Strongly prefer CISM/peer support member %</th>
<th>Prefer CISM/peer support member %</th>
<th>Prefer mental health professional %</th>
<th>Strongly prefer mental health professional %</th>
</tr>
</thead>
<tbody>
<tr>
<td>Relationship issue/ break-up</td>
<td>7.21</td>
<td>24.77</td>
<td>45.95</td>
<td>22.07</td>
</tr>
<tr>
<td>Difficulty sleeping</td>
<td>5.43</td>
<td>18.55</td>
<td>58.37</td>
<td>17.65</td>
</tr>
<tr>
<td>Drinking alcohol affecting personal life</td>
<td>12.16</td>
<td>25.68</td>
<td>35.59</td>
<td>26.58</td>
</tr>
<tr>
<td>Work interfering with family</td>
<td>14.55</td>
<td>40.45</td>
<td>30.00</td>
<td>15.00</td>
</tr>
<tr>
<td>Thoughts of suicide/ self-harm</td>
<td>10.45</td>
<td>12.73</td>
<td>27.73</td>
<td>49.09</td>
</tr>
<tr>
<td>Depression</td>
<td>6.36</td>
<td>29.55</td>
<td>44.09</td>
<td>20.00</td>
</tr>
<tr>
<td>Emotional dysregulation towards family</td>
<td>7.24</td>
<td>15.84</td>
<td>43.89</td>
<td>33.03</td>
</tr>
</tbody>
</table>

*Note. N = 222.*
Reasons for Peer or Professional Support

Research question 6: What are the deciding factors for a firefighter to see a professional psychological practitioner versus a peer support? Additionally, four questions labelled as Question 48-51 asked firefighters to select all that apply in relation to reasons for peer or professional support. The first two questions enquire about service provider preferences for mental health issues. A third question was asked in relation to choosing the most helpful department related initiative after a critical incident. The final questions asked firefighters about mental health accessibility.

Question 48: Firefighters were asked for what reasoning would you contact a CISM/Peer Support team member for mental health related issues based on a selection of 5-items. The top reason provided was, “They understand the issues” (81.19%). Of the six (2.75%) responses to “Other” four responded that they would not choose to see a peer or CISM member, and three of those responses highlighted that trust within the membership was an issue (see Figure 6).

Figure 6. Graph illustrating firefighters’ reasons for contacting peer support for behavioural health related issues.
Question 49: For what reasons would you contact a professional mental health provider for mental health related issues? The reason selected by the highest number of firefighters was “They have a higher level of training” (72.09%). The three who responded with “Other” specified, “They are not a co-worker,” “more broad-spectrum care, rather than fire related issues,” and as a “last resort” (see Figure 7).

![Graph illustrating firefighters’ reasons for contacting a Mental Health Professional for behavioural health issues.](image)

**Figure 7.** Graph illustrating firefighters’ reasons for contacting a Mental Health Professional for behavioural health issues.

**Hypothesis 4:** It is expected that confidentiality will be a top priority whether seeing a peer support or professional support. Peer “trust” received 67.43% responses as a reason to contact peer support, the second highest scoring reason next to peers “understand the issues.” “Confidentiality” received a response of 64.22%, the second highest reason to contact a mental health practitioner outside the department. Furthermore, the three “Other” responses stating that trust and confidentiality within the membership was an issue supports the hypothesis that confidentiality is a top priority when seeing a peer support or mental health practitioner.
Question 50: In your opinion, in terms of a department related initiative, what do you find most helpful after a critical incident? The top reported item was “CISM team support” \((N = 60, 82.57\%)\). Of the three who responded with others, they added “crew table talks” and “exercise” (see Figure 8).

![Graph illustrating firefighters’ most helpful department initiative post critical incident.](image)

Figure 8. Graph illustrating firefighters’ most helpful department initiative post critical incident.

Question 51: In your opinion, professional mental health help should be “made accessible to members at no cost when they feel they need it” \((N = 180, 82.57\%)\) and “accessible to members’ immediate family at no cost when they feel the need it” \((N = 161, 73.85\%)\). One “other” response added that, “Professional mental health assessment to me should be required as part of the hiring process to determine a baseline of their mental health” \((N2; \text{see Figure 9})\).
Figure 9. Graph illustrating firefighters’ attitudes towards accessibility with professional mental health support.

**Hypothesis 5:** If there is a preference to see a mental health provider, the preference will be that the professional have training in occupational awareness. Voted as the fourth priority regarding mental health accessibility, 36.24% of the 218 responses noted that they would like the mental health professional to be trained in firefighter occupational awareness.
Chapter 6: Thematic Analysis

Due to the volume of data collected, thematic analysis was used inductively, and coding and analysis were primarily at the semantic-level (Braun & Clarke, 2006). These choices reflect that the aim of the research was to identify patterns in what firefighters said about their experiences of occupational stress and peer supports, and their attitudes towards professional mental health providers. In some ways this approach to qualitative research and therapeutic practice are similar. Both acknowledge that people make sense of things in their own way, and so can view the same event quite differently, and that how people make sense of things is influenced by a range of factors, so their understanding is contextually bound. Although I have attempted to move beyond description to interpretation, the quantitative results were taken into consideration at the same time, so the reader can see the significance of patterns and their broader meanings and implications of the findings.

Analysis of the data collected revealed six broad themes: (i) Access and Support; (ii) Education and Cultural Awareness; (iii) Stigma: Thoughts and Attitudes; (iv) Operational Guidelines, Policy, and Procedures; (v) Attitudes, Bullying, and Lack of Trust Within the Department; and (vi) Exposure to Trauma: Compounded and PTSD. Themes were chosen not only because of their prevalence across the majority of participants, but also because they captured something important about the data in relation to the research questions (see Table 8).

Appendix I shows a table of the final thematic map illustrating these six themes, with the journey from the generating initial codes to the early thematic map. During the mapping process, it became evident that the comments could further be delineated by the tone of the comment. That is, they were separated into four additional categories within the theme; comments of praise.
or positive tone (blue), challenges or discontentment (red), proactive suggestions for change (green), and beliefs or attitudes (yellow).

Table 8

*Thematic Analysis Themes and Response Rate*

<table>
<thead>
<tr>
<th>Themes</th>
<th>Frequency</th>
<th>Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Theme 1: Access and support</td>
<td>32</td>
<td>72.73</td>
</tr>
<tr>
<td>Theme 2: Education and cultural awareness</td>
<td>27</td>
<td>61.36</td>
</tr>
<tr>
<td>Theme 3: Stigma: Thoughts and attitudes</td>
<td>13</td>
<td>29.55</td>
</tr>
<tr>
<td>Theme 4: Operational guidelines, policy, and</td>
<td>11</td>
<td>25.00</td>
</tr>
<tr>
<td>procedures</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theme 5: Attitudes, bullying and lack of trust</td>
<td>9</td>
<td>20.45</td>
</tr>
<tr>
<td>within the department</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Theme 6: Exposure to trauma: Compounded and PTSD</td>
<td>8</td>
<td>18.18</td>
</tr>
</tbody>
</table>

*Definitions of Primary Themes, Subthemes, and Supporting Quotations*

**Theme 1: Access and support (32/44 responses).** Theme 1, Access and Support, maps the participants’ positive and negative experiences with mental health access and support and describe participants expressed needs in this area where more can be done. Nine participants mentioned that they recognize the positive change in attitudes and programs supporting mental health in the department. They are recognizing that programs and trainings have been put into place to support firefighter mental health and wellness. Some of the comments are as follows:
• “Our job has come a long ways in dealing with the emotional stress involved in being a FF. Treatment and counseling is more accessible than ever. . . . I’m pleased to see PTSD is being identified as a real health concern for all first responders” (N18).

• “Current efforts for Mental Health in the fire service seems to be focused on prevention, which is good” (N21).

• “Firefighter stress is more of an issue than I believed a few years ago. . . . There is more of a culture of acceptance in mental health awareness and I am in full support of it” (N32).

• “[CISD is] a wonderful tool to have available for when truly terrible things are witnessed or dealt with professionally” (N13).

One comment in particular referred to peer support, praising the “brotherhood” for supporting each other on the floor, “The brotherhood are good at supporting each other during stressful times and are quick to supply CISM when needed” (N16). However, the participant added, “Department Chiefs that are tasked with the care of their employees’ mental health are inadequate” (N16).

This firefighter’s comment reflects that although there have been efforts by the department to bring awareness to mental health and encourage a strong peer support system, there are still many challenges to receiving effective mental health support. Additional statements of challenges have been categorized as Lack of Support, Access, and Mistreatment from Worksafe BC, Employer or Department \( (n = 13) \). The top word(s) repeated in this category was “Worksafe BC,” where it was deemed in four comments that there has been mistreatment from the agency regarding mental health support for firefighters. In order to have a better
understanding of the role of Worksafe BC with the wellness of firefighters, I searched the agencies mandate and found on its website,

to oversee a no-fault insurance system for the workplace. We partner with employers and workers in B.C. to do the following:

Promote the prevention of workplace injury, illness, and disease

• Rehabilitate those who are injured, and provide timely return to work
• Provide fair compensation to replace workers’ loss of wages while recovering from injuries
• Ensure sound financial management for a viable workers’ compensation system. (Worksafe BC, 2018, para. 2)


By comparing and contrasting Worksafe BC’s mandate with the comments provided by participants it seems that firefighters feel they are falling through the gap of Worksafe BC’s umbrella term of what it means to keep British Columbians safe from workplace injury and illness. This gap may be what Regehr and Bober (2005) described as the real or perceived threat of injury or death while on duty, the loss of fellow firefighters while on duty, dismemberment, and exposure to dead bodies of victims. Firefighters in this survey are saying that these psychological injuries and illnesses faced by firefighters are not given the legitimate thought and sensitive consideration for employee treatment and rehabilitation.

• “Worksafe treatment of me has been horrible . . . behave little concern for successfully treating PTSD” (N21).

• “[Need] better support from Worksafe . . . very stressful dealing with them” (N35).
• “Suffer in silence is better than being humiliated by a stranger” (N19).

In the quantitative survey section of the questionnaire, participants strongly agreed accessibility to professional mental health being made available to members and their immediate family members at no cost and no limit was a priority (see Figure 9). It was no surprise then to find commentary supporting the need for unlimited mental health access. Each firefighting department negotiates with its employers, usually the city in which it serves, a benefits package as part of its collective agreement. For this particular department surveyed in the research, which serves and protects an area with over 603,000 residents plus visitors and tourists, it receives a mere $600 per calendar year for clinical psychologist services. As one participant stated, “We live in Canada with ‘free’ healthcare but it seems we struggle to find the money to help those that help everyone, and witness some horrific scenes that would rival a war zone at times” (N43).

This statement paints a clear picture of the frustrations that the firefighters face when faced with the challenges of mental and behavioural health accessibility. Moreover, participants noted that of the current employment support they did receive, they felt it was subpar and either gave up due to frustration or humiliation. “Our extended medical plan does not cover nearly enough in terms of mental health support” (N12). Another noted, “Employee Assistance program . . . wasn’t easily accessible and was based back east. Didn’t really want to talk to someone on phone or via email or via Skype. Gave up on looking at any assistance provided by employer” (N14).

Despite the challenges of access and support to mental health, 10 statements provided proactive suggestions for better access and support. These suggestions ranged from simple suggestions of better signage at work on whom, and where to contact someone for support, and identifying areas of educational opportunities for all parties involved providing more effective
and efficient behavioural health supports for firefighters. In hindsight, I found it interesting that there was direct mention of co-workers, mental health professionals, work agencies such as Worksafe BC and the employer; however, there was no mention of family doctors as a source of support. It would be interesting for future investigation of firefighters’ relationships with their family general practitioners as a source of physical and behavioural health.

- “Make it easy as possible to access. Keep it confidential. . . . Mental Health providers should be brought in after a serious incident to perform group debriefings” (N15).
- “Better signage in worksite as to contact info etc.” (N17).
- “Have access to a list of professionals with Firefighter Occupational Awareness in each community where firefighters live” (N34).
- “Our extended health should be unlimited for counselling and not capped” (N30).

Suggestions also including more specific actions to be taken such as the kind of supports needed, as stated in these comments: “There need to be a much greater focus on treatment [of PTSD]” (N21), and “[We need] better support from Worksafe . . . and better awareness for city back to work coordinator” (N35).

Other suggestions were resourcing other departments who provide members with unlimited mental health support access and agencies such as the Veterans Affairs Canada. “The VAC (Veterans Affairs Canada) has a great system, probably not cheap but it has helped me greatly” (N43). One comment regarding accessibility, made me curious about what was meant by surviving if there are “no other options”, as the purpose of the research was to search for ways to best support firefighters through a number of available resources (peer support, CISM, or professional mental health). “We still should have to learn to deal with some mental stresses on our own so that we can still survive alone if there are no other options” (N32).
After much thought, this comment seems to point towards the stigma, or fear, of not knowing how to personally cope with mental stresses could be viewed as a sign of weakness. Therefore, there is an educational component that seems needed to inform firefighters about types of resources that are available and how a behavioural health professional can provide firefighters with tools they can use on their own to cope with both personal and occupational stressors.

**Theme 2: Education and cultural awareness (27/44 responses).** This theme represents a large umbrella encompassing both psychoeducational aspects for all players in the field of firefighter behavioural health (firefighter, employer, peers, Worksafe and back to work agencies, and psychotherapists) and the importance of cultural awareness across the board, especially with mental health counsellors. Comments included reasons for preferring peer support or professional mental health support and an educational piece for firefighters understanding the roles and the therapeutic relationships of a professional mental health supporter versus peer support. Three comments provided praise, appreciating peer support, and peer recommended counsellors because they understood the occupational stressors of a firefighter. Two of those comments are as follows:

- “To me, I like to talk to people who understand what it’s like to be put in those situations that create post incident stress” (N9).
- “Having counsellors that are recommended by fellow firefighters based on their personal helping experience is helpful” (N22).

The major challenges within the theme of education were participants feeling like the training they were receiving were being taught by inadequate teachers, causing undue occupational stress because they felt unprepared for tests. Furthermore, they felt as though
officers in superior ranks were also not trained sufficiently in supporting mental health issues and were therefore inefficient in their roles of supporting the crews. “Department Chiefs that are tasked with the care of their employee’s mental health are inadequate . . . in the position for a short period of time . . . making it difficult for them to be effective at the role” (N16).

Academic testing for promotions, the teachers are FF and not able to educate as well as professionals so to test students at the same level as the school tests is stressful, failures are common. . . . Introducing tele-staff computer program and still maintaining the program they are meant to replace adding to workload and ineffective use of the new program. Frustrating and poor training. (N36)

Despite the challenges around inadequate trainers, it was hopeful that there were at least 17 suggestions for effective learning opportunities both within and outside the department. The majority of these suggestions supported the importance of having counsellors with firefighter occupational awareness, such as “having counsellors that ‘get’ firefighters, their mentality and general outlook would be helpful” (22), and “Better support from Worksafe . . . and better awareness for city back to work coordinator. . . . [I] feel they really have no concept to mental health regarding first responders” (35).

Thankfully the BCPFFA Mental Health Task Force has rolled out a training program in the last year for counselling therapists to be trained in the occupational awareness of first responders, mainly firefighters. At the first of these trainings, which I attended, Worksafe BC did attend half of the workshop to also get an inside look at occupational awareness of firefighters. This was a promising gesture that the outside agencies in-charge of workers occupational health and safety is open to understanding the unique characteristics of their jobs.
Additionally, participants commented that there was also a great need for families and friends to become educated in signs to look out for to best support firefighters behavioural health. It was interesting to note that these comments were provided by firefighters who have been on the job for over 5 years, since in the past two or three years, a mental health component has been added to new recruit trainings that sends home information to firefighter families about signs of stress and PTSD. Therefore, it is important to note that the majority of firefighters currently out on the job, did not receive that psycho-education for themselves or their families when training at the beginning of their careers. “Resources need to be available for us and our families. Families need to be educated to warning signs and symptoms of PTSD” (N33).

One comment worth noting was a suggestion that more options should be provided for behavioural health other than “just mental health” (N7). Just as exercise was suggested as a helpful department initiative for post critical incidents in the quantitative section of the survey (see Figure 8), it is important to consider other methods of supporting firefighter behavioural health, such as physical, mental, spiritual, social, and cognitive domains. “Not every counselor and patient hit it off. . . . I did not know that I could leave the appointment in the middle of it when it was going so very bad for me” (N19).

This comment was striking as it introduced the idea of the potential that seeing a mental health professional could make someone feel worse than what they started off as. In my training as a counselling therapist, one of the first lessons I learnt was the importance of the therapeutic relationship. It became clear to me that this particular individual was uninformed about the importance of a therapeutic relationship within a counselling practice and that it may take a few “meet and greets” with a number of counsellors before an effective fit is found. It is no wonder then that the absence of knowing how to find a therapist, or what to expect or look for in an
effective counselling dynamic likely adds to the stigma of seeing a professional helper. Therefore, it would be important to consider this as a major educational piece when discussing with firefighters the process of finding an effective mental health professional, as with any type of health professional. As reported in the ATSPPH-SF measurement indicating that firefighters are in support of professional psychological help for behavioural health this participant’s comment confirms:

I am not a fan of CISM and peer support. If ever I had a problem I would seek professional help with people professionally trained in this. Firefighters are not trained professionals who have gone to school for over four years. (N27)

This participant did make a valid point as a big critique for seeing peer supports or CISM is the lack of trust and confidentiality within members. Where mental health professionals are trained and held accountable by a body of ethics to maintain confidentiality, the same accountability does not hold between firefighter peers volunteering as peer supports in any capacity. There is also the risk of dual relationships that therapists are trained to be aware of and to avoid when it creates and imbalance of power, which can narrowly be avoided when discussing personal items with a colleague. This is a major challenge within the peer led support initiatives within the department that provide the best intentions to provide support from others who “get it.” It seems that there is an educational piece defining the role of a peer support member versus a CISM member versus a professional mental health supporter provides to the firefighters. By providing firefighters with the information about roles and boundaries of the different kinds of supports available may allow them to make informed decisions on what type of help they require to sustain behavioural health.
Theme 3: Stigma: Thoughts and attitudes (13/44 responses). Items in this theme were coded if participants mentioned attitudes towards seeking behavioural health support, the actual mention of the word “stigma,” and any charged emotional words around judgment for asking for help. This thematic category presented only two types of commentary tones, positive acceptance and negative challenges. The acceptance comments state that given the nature of the job, it is expected to be exposed to trauma and that people cope differently and the fear of some co-workers taking advantage of claiming a false PTSD diagnoses and the effects it may have on the employment system.

There needs to be a level of expectation that one will see awful things when accepting firefighting as a career, and as such not everything warrants a CIS Debrief. That said, . . . it’s a wonderful tool to have available for when truly terrible things are witnessed or dealt with professionally. (N13)

What affects me may not affect a co-worker and vice-versa. My personal fear or skepticism will be people trying to abuse something that is a real mental health issue. . . I worry we will be inundated with PTSD claims . . . employers will be overwhelmed and people will be thought of as crying wolf. (N-25).

Since the purpose of this research was to shine light on extinguishing stigma, the 11 statements that directly discuss the challenges of the current temperature of stigma in the firefighting workplace were carefully considered as the major problems preventing change in the firefighting occupation. It should be noted that although this section does not provide any direct suggestions on how to overcome the stigmas and fears, comments from participants that provided suggestions did fall within access and support, education and cultural awareness, and, the upcoming theme of operational guidelines and policy and procedures.
• “With stigmas and the routine dominate setting of our careers, I feel very few would ever reach out for professional help if it were not mandated and provided” (N41).
• “Still a stigma to getting help” (N31).
• “People are afraid to speak up, because they will be isolated and targeted against at work. The officers . . . are the instigators” (N29).
• “Often being a new or Junior Firefighter, they do not want to say anything or show weakness, or will not say anything other than ‘it’s fine’ or ‘I’m ok with what I saw’” (N26).
• “Too often horrible calls go unnoticed. The reality is, if an officer asks, ‘Does anyone NEED a debrief?’ after a bad call, 99% will say no out of pride/fear of what others will think. We don’t want to be perceived as weak” (N24).

Given the male “macho” culture and paramilitary culture within the firefighting culture (Kent, 2012; Shields et al., 2017; Westwood & Wilensky, 2005), it is no surprise that many of the comments surrounding stigma is fear of being deemed weak amongst higher ranking officers and peers. Three unrelated comments noted a lack of experience so they felt they could not comment in access and support. In the next section of themes, we will discuss possible solutions to overcoming this archaic voting system so that firefighters will not be placed in a compromised situation of feeling judged or unsupported.

**Theme 4: Operational guidelines, policy, and procedures (11/44 responses).** In Theme 4, comments that mentioned challenges and suggestions regarding current operational guidelines, and policies and procedures, that were not being met or executed efficiently are presented. Two comments highlighted a major obstacle when it comes to firefighters’ occupational health and safety post critical incidents.
• “Senior officers . . . decide against CISM debriefing for their crews from incidents that fall under the mandatory criteria” (N4).

• “Introducing new tele-staff computer program and still maintain the program they are meant to replace adding to workload and ineffective use of the new program” (N13).

Despite these deficits, there were no shortages of suggestions on how to introduce change policies and procedures following critical incidents which shows that firefighters are ready for a change and seek the support from both peers and mental health professionals to support their behavioural health.

• “Debriefings should be made mandatory . . . Some of the worst calls in my career went unacknowledged because we were too proud to ask for help and a debrief was not initiated” (N24).

• “Senior officers that decide against CISM debriefing for their crews from incidents that fall under the mandatory criteria should be suspended without pay automatically” (N5).

• “Should be mandatory [professional mental health check-up] once a year or more to lessen the stigma and stay accountable” (N40).

• “Everyone in the fired department would benefit greatly, if not require, professional psychological counselling once a year” (N41).

• “Early and timely access is critical to a successful outcome” (N20).

• “If certain call type trigger automatic CISM debriefs, it wouldn’t require us to ask for help and it wouldn’t require firefighters to talk about the event and not let them bottle up inside” (N24).
Theme 5: Attitudes, bullying and lack of trust within the department (9/44 responses). All nine comments were noted to fall into the category of current challenges faced by firefighters, with feelings of frustration, lack of trust, and general discontent with getting workplace support. N14 said, “Gave up looking at any assistance provided by employer.” Another commented, “After going through WCB process I said next time I would just use a sick day instead of dealing with their bullshit” (N44).

It is a poisonous work environment that is only good for the majority of the white males.
I have never been more depressed and isolated in my life; I know I’m not the only one.
My PTSD is more so from my fears of the co-workers and little from the actual calls. . . .
They will exaggerate and even flat out lie regarding something that happened in the hall and they will spread it like wild fire. (N29)

Theme 6: Exposure to trauma: Multiple traumas and PTSD (8/44 responses). Theme 6 emphasizes the comments firefighters share about daily exposures to trauma, how the work has negatively impacted them, and the effects of working so closely to death on a daily basis. Although this theme has the least comments, I found these comments to be the most impactful due to the raw nature of the language painting a sensory filled image of what is left within these firefighters at the end of the day. All eight comments focused on the challenges of exposure to trauma.

I feel more stress than when I was working. Keeping busy at work kept my mind off previous incidents and situations. I worked 8½ years straight at 2 Hall (skids) and that brought me to near a breaking point. I lost a lot of compassion for people and it definitely hardened me at the cost to my family. (N6)
This comment was written by a firefighter who had served over 20 years on the job. His comment provides great insight into why we see occupational stress being reported by firefighters with over 20 years’ experience and why in the SOOS-14 measurement they scored an average mean rate of 34 out of 40. The multiple traumas and stressors take their toll. If a firefighter works an average of four shifts a week for 52 weeks plus and minus vacation and shift coverage, that is over 200 shifts a year. Between 5 and 10 years, they have had anywhere from 1,000 to 2,000 shifts. Working at “2 Hall,” they attend calls servicing Vancouver’s Downtown Eastside, where 95.2% single room occupancy residents (SRO) had some form of substance dependence and 74.4% had a mental illness, including 47.4% with psychosis. When a firefighter has reached 20 years of service on the job and over; that is typically over 4,000 shifts with thousands of calls where one is never quite prepared for what they witness.

- “It’s not always just one call. It can be a build-up. So much death” (N11).
- “Firefighters are dying as a result of PTSD. . . . Resources need to be available for us and our families” (N33).
Chapter 7: Discussion

Overview of the Results

The survey results and comments of participants in the current study not only reflect all of the major themes regarding major occupational stressors, peer supports, and attitudes and towards psychological help for firefighters, they also add significant detail to the types of conducive mental health supports that best promote behavioural health. This research brings together previously identified issues as well as novel themes to form a comprehensive picture of how being a firefighter impacts the process of connecting with behavioural health supports.

Although previous studies have examined the interconnections between firefighter occupational stress, peers support and suicidal ideation (Carpenter et al., 2015), the purpose of this study was to shift the focus from suicidal ideation to understanding how firefighters can be supported through effective early mental health interventions, particularly, what firefighters themselves deemed as effective support. However, the findings of this study are consistent with Carpenter et al.’s study regarding the relationships between occupational stress and social support. That is, when social supports were reported high, occupational stressors were reported low. This is one of the first studies to provide an in-depth examination of firefighters’ preference of the type of mental health support, peer or professionally led, according to professional and personal issues. The findings of the current study contribute to an understanding of firefighter culture on mental health wellness and how occupational awareness is key to building a therapeutic relationship and trust to support firefighters. By combining quantitative and qualitative data results, this study addresses gaps in the literature themes and outcomes of previous studies. Specifically, by providing descriptions of the challenges firefighters have experienced professionally and personally when connecting with mental or behavioural supports.
Direct suggestions given from the firefighters can inform future departmental initiatives and organizational guidelines development in workplace health and safety.

Although the population in the study is specific to firefighters in one large city department, finding may be applied to other fire departments and voluntary fire departments, other first responder occupations such as paramedics, police, military organizations, and other occupations exposed to high traumas such as correctional officers and front-line health care givers; nurses, doctors, social work and mental health workers.

**Implications for Mental Health Practitioners (or Counsellors)**

The findings of this study have several implications for professionals involved with working with firefighters. The quantitative and qualitative data confirms that firefighters prefer talking to someone who understands the firefighting culture and nature of the traumas that they are exposed to. Counsellors who are trained in firefighter occupational awareness were regarded a preference over other counsellors as one firefighter suggested that counsellors go on a ride-along so that they can experience and understand the sights, sounds, and smells which firefighters face daily.

Trust and confidentiality were two other factors firefighters expressed when choosing mental health support. A number of firefighters commented on the “horrible” experiences they have when attempting to connect with supports either at the workplace with peers, employers or back to work agencies, and even with mental health professionals. These comments were supported with the expressions of feeling judged in some manner, and as one firefighter commented, “would rather suffer in silence.” This comment confirms what van der Kolk (2014) described as trauma being a part of a secret, and why the talk therapy is important when assisting individuals who have lived through trauma need to release this trapped secret they hold within
their bodies. When other firefighters are saying the have “never been more depressed and isolated” (N29) in their lives and blatantly commenting, “firefighters are dying as a result of PTSD” (N33), it is also clear that providing confidential and occupationally aware early intervention support is the first step in mitigating firefighter occupational stressors.

Understanding the occupation of firefighters, like other first responders and military personal, are often faced with multiple traumas, sometimes within one shift, tells us that an important therapeutic goal is providing firefighters with day to day coping strategies that they can practice on the job to maintain their health and wellness. Moreover, comments regarding the complexity of multiple personal and work stressors leads to a conclusion that a holistic approach including physical, emotional, spiritual, and cognitive well being needs to be considered in supporting behavioural health. This may be building a network of resources of other types of therapies and resources to support firefighters such as recreational and physical therapies, family therapy, music therapy, chaplain support, and financial planning supports.

**Future Research Directions**

Though this study is believed to be the first in Canada to examine occupational stress, peer supports and the attitudes of firefighters towards seeking professional psychological help, future research needs to identify further behavioural health initiatives supporting firefighters throughout their careers. For instance, some firefighters in this study reported that lack of sleep was their biggest occupational stessor, but there were no anecdotal comments provided to suggest what the specific causes of sleep interruption was such as the number of calls or alarms in the night shift or ruminating thoughts of calls, or simply poor sleep management from the nature of shift work. Further research on optimizing firefighter sleep would support better occupational stress management.
Other firefighters mentioned that peer support was important to them however trust of confidentiality within the department seemed to be a challenge. Further research in identifying appropriate peer support, possibly even retired firefighters, who understand the culture and nature of the calls, yet have a separation from being active on the floor and seeing their peers after providing support, may be an option to future peer support programs. Furthermore, with the roll out of a new firefighter occupational awareness training for therapists, research on therapeutic relationships with an occupationally aware and a standard therapist without the training may provide some insight this training does support the idea of being better understood by a mental health professional.

Limitations

This survey was distributed to only one large firefighting department in the Lower Mainland of BC, and this particular department has been the recipient of several surveys over the past few years, with one particular survey containing the same occupational stress measure (SOOS-14). Participation in the study was voluntary, which likely led to participants declining the survey if they thought they already had completed this questionnaire before. Furthermore, the survey was distributed to its members through a closed Facebook page accessible by members of the department, meaning some members may not have had access if they did not check their Facebook. Another consideration is that Facebook is used as a social platform and an escape for many, and for members to be solicited to take a work survey on this social media platform may have discouraged members from participating. Finally, since this was only one large department in the Lower Mainland, the research results may vary from department to department depending on initiatives being taken on behavioural health supports.
Recommendations for Firefighter Organizations

Based on the findings from this study, the following recommendations are being recommended to enhance access to psychological care within fire organizations.

**Recommendation 1: Firefighter departments should consider reviewing their extended health benefit plans with their employers with a goal of including registered clinical counsellors in addition to registered clinical psychologists.** A number of specific requests were made to see occupation ally aware counselling therapists and counsellors recommended by peers. Generally, there are long waits to see a registered psychologist, whereas counselling therapists are more accessible. Some firefighters may also have a pre-existing relationship with counsellors prior to entering the department. As one firefighter mentioned other creative art therapies (music therapy, yoga therapy, drama therapy) should also be considered in broadening the pool of accessible behavioural health therapies that could lead to timelier interventions and much needed care for firefighters’ overall health and wellness.

**Recommendation 2: Firefighter organizations should consider reviewing their extended health benefit plans with a goal of adding group counselling.** Firefighters identified CISM team support defusing as the most important organizational support after a critical incident. They also noted that the top two reasons for contacting peer support is because they understand the issues and trust a fellow firefighter. While there have been major criticisms on the voiced regarding trust and confidentiality amongst peers, a mental health professional led counselling group would provide a safe and confidential environment that continues on the strengths of group processing beyond the brevity of short-term critical incident group defusing and debriefings. Currently there is a pilot project being held looking at group retreats supporting
firefighters by building resiliency through sharing their narrative with fellow firefighters in a workshop led by mental health professionals.

**Recommendation 3:** Provide education both theoretical and experiential (ride-along, hall visits, table talks) for mental health providers on the occupational awareness of firefighters. Firefighters in this study not only showed positive attitudes towards mental health service providers but they also noted that they have a higher level of training when it comes to mental health issues. However, the biggest challenge participants noted was finding counsellors who “get it” and the importance it was to speak with a counsellor who understood the culture and challenges of the job.

**Recommendation 4:** Continue to conduct psychoeducational training (i.e., Resilient Minds) on firefighter stress and coping mechanisms throughout a firefighter’s career. This education should start in firefighter training and continue every two to three years as part of a firefighter training cycle. This training will encourage the conversations about signs of burn out, occupational stressors, and PTSD. It will also provide an opportunity to remind firefighters about psychological services available to them and their entitlements within their benefits.

**Recommendation 5:** Provide education for firefighter spouses and close family members (parents or siblings) at various stages of a firefighter’s career. Education should include the effects of occupational stress, signs and symptoms to look out for, as well as family resources. Social supports, including family, have been well documented as mitigating the effects of PTSD. Corneil et al. (1999) found that marriage was a protective factor against PTSD in the sample from the United States.

**Recommendation 6:** Provide a transition program for retiring firefighters. Within this study, firefighters with 20 or more years of service reported the second highest mean levels
of stress. A firefighter’s direct comment also noted that it was in this stage when he was not as active on the floor with calls that he had time to ruminate and think about the past calls. Many of these firefighters are in the later stages of their career and nearing retirement. A program that would allow them to address some of the cumulative trauma they have experienced, prior to exiting policing and losing extended their health benefits would likely be beneficial.

**Recommendation 7: Educate supervisors (chiefs, captains, lieutenants) on signs and symptoms to look out for within their subordinates.** Encourage supervisors to check-in with their members regularly and especially after involvement in critical incidents. After a critical incident table talk should be initiated and at that time a confidential vote such as everyone marking yes or no on a piece of paper, and placed in a box, opened up, and tallied for a CISD should be taken. Given the paramilitary hierarchy that exists within the firefighting culture, and the fear of lower ranking firefighters fearing to speak up for support out of fear up appearing weak, it does not help when “Senior officers . . . decide against CISM debriefings for their crews from incidents that fall under the mandatory criteria” (N5). Therefore, training chiefs to become adequate “with the care of their employee’s mental health” (N16) would be a shift in the current attitudes towards seeking mental health support at work.

**Recommendation 8: Adequately screen, staff, and train Critical Incident Stress Management (CISM) peer support teams.** Have peer nominations on CISM peer support teams. CISM team peer support was identified by 71% of participants as the most important department-led initiative following a critical incident. Despite strong support for the program, concerns were raised by firefighters within this study: “It is very hard to maintain confidentiality with all of our CISM team members” (N6). This highlights the importance of a selective screening processes and a confidentiality agreement among its members. Another firefighter
identified, “I am not a fan of CISM and peers support. . . . Firefighters are not trained professionals who have gone to school for over four years” (N27). This response highlights the need for appropriate standardized peer support training in order to provide an effective and credible service for firefighter membership.

**Recommendation 9: Educate Worksafe BC and back to work employers on mental health and occupational awareness.** Firefighters described a variety of reasons why employers and agencies working with the employers of employee occupational health and safety and return to were “horrible to deal with” (N21) and would “rather use a sick day” (N44) than deal with such agencies. By providing occupational awareness regarding the unique psychological stressors firefighters face as a part of a workplace injury and illness could help firefighters rehabilitate faster and return to work in an effective and efficient manner.

**Recommendation 10: Organizations should maintain an up-to-date list of psychological service providers with occupational awareness covering a variety of geographical locations based on where firefighters are living.** This information should be easily and anonymously accessible. CISM team members could be used to check-in regularly with mental health professionals to adjust recommendations as needed based on wait times and firefighter feedback. The need for simple and anonymous access to information on psychological providers competent with firefighter occupational awareness was highlighted in the study. Furthermore, there needs to be additional support for the volunteer members who take on the role of peers supports and CISM members as they have to additionally take on the mental load of their peers.

**Recommendation 11: Consider implementing mandatory counseling sessions every one to two years for active firefighters.** In order to overcome the stigma of seeing a mental
health professional, mandatory counselling may be a means of overcoming that barrier in enhancing firefighter psychological health. Mandatory counselling following a serious critical incident was supported by 33% of the participants and 24% of participants’ thought it would be good to for firefighter members to attend a mandatory counselling at least once a year.

**Recommendation 12: Consider adopting the Canadian National Standard for psychological health in the workplace.** Alternatively, or additionally, consider connecting with Veteran Affairs Canada (VAC) for a national network of mental health supports for first responders. The implementation of the Canadian National Standard would provide an overarching framework and direction for firefighting departments to ensure that various levels of psychological supports are implemented and maintained. In connecting with VAC a relationship can be built to support nationwide first responders who “witness some horrific scenes that would rival a war zone at times” (N43). These national bodies that support behavioural health would aid in extinguishing the stigma around mental health and provide a message to all the firefighter members that mental health is supported at the highest levels.
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victims of a natural disaster. *The Journal of Nervous and Mental Disease, 180*(8), 498-504. doi:10.1097/00005053-199208000-00004


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doi:10.1177/070674370104600207


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after the air disaster in amsterdam. *Quality of Life Research, 16*(2), 239-252.


Woodall, S. J. (1998). *Ask not why the wounded fall, but how the valiant continue to march: New theory on work-related stress management in the fire service*


Appendix A: Participant Consent Letter

Consent Form

Extinguishing stigma: Examining firefighter stress, social supports and attitudes towards seeking psychological help for behavioural health

You are invited to participate in a graduate research study titled "Extinguishing Stigma: An examination of firefighter stress, perceived social supports, and attitudes towards receiving psychological help for behavioral health". This study is being led by the principal investigator Dr. Maria Buchanan, and a co-investigator Gemma Isaac from the Department of Education and Counselling Psychology at the University of British Columbia.

We want to learn more about how to help firefighters obtain supports for behavioral health. This study will help us learn more about firefighter occupational stress, perceived supports, and their attitudes towards seeking psychological help with peers and professional mental health providers. We are inviting active firefighter members to tend their thoughts on these subjects that may help program and training development to support physical and mental wellness for firefighters.

If you say “Yes” below, you will be directed to a secure online questionnaire accessible on a computer or your smartphone. You will be asked about 80 survey questions that will take between 20-30 minutes. If you do not wish to participate in the study, simply click the “No” option below and it will direct you to the end of the survey.

This online survey is hosted by a web survey company located in the USA and as such is subject to U.S. laws, in particular, the US Patriot Act, which allows authorities access to the records of Internet service providers. If you choose to participate in the survey, you understand that your responses to the survey questions will be stored and accessed in the USA. The security and privacy policy for the web survey company can be found at the following link: http://www.qualtrics.com/security-statement/

The results of this study will be reported in a graduate thesis and may also be published in journal articles and books.

We do not think there is anything in this study that could harm you or be bad for you. Some of the questions we ask might upset you. Please contact the study researcher, a peer or professional support if you have any concerns.

Furthermore, some of the questions we ask may seem sensitive or personal. You do not have to answer any question if you do not want to.

You may be helped in this study by identifying occupational stressors that may be affecting your health. Resources to both peer and professional help will be provided at the end of the survey for your support.

Furthermore, others may benefit from what we learn in this study, in creating programs to support behavioural health and linking firefighters to appropriate supports. Your confidentiality will be respected. No personal information that discloses your identity will be collected (name or age). All documents will be identified only by code number and kept in a locked filing cabinet. Subjects will not be identified by name in any reports of the completed study.

All invited participants are invited to enter their name into a random drawing for a one-night stay in Whistler BC, by providing an email at the end page of the survey. You do not have to enter your email if you do not want to. Only the co-investigator and the hotel will have the name of the email chosen as submitted by the participant.

If you have any questions or concerns about what we are asking of you, please contact the study leader Gemma Isaac, graduate candidate in Masters of Counselling Psychology, UBC at gemma.isaac@alumni.ubc.ca.

If you have any concerns or complaints about your rights as a research participant and/o your experiences while participating in this study, contact the Research Participant Complaint Line in the UBC Office of Research Ethics at 604-822-8598 or if long distance e-mail RSIL@hrs.ubc.ca or call toll free 1-877-822-8598.

☐ Yes
☐ No
Appendix B: Debrief Statement

Dear Participant,

Thank you for completing this survey. Your responses could ultimately be used to improve mental health services for firefighters. If you would like a copy of the results of this study, please contact the researcher and arrangements will be made. The results will also be publicly available through UBC circle and/or any journal publications. If you have any questions or concerns about this study you may contact the principal investigator, Dr. Marla Buchanan in the Department of Education and Counselling Psychology at UBC or the co-investigator Gemma Isaac, Masters Student Researcher, in the Department of Education and Counselling Psychology at UBC. If you feel that you may be in need of mental health services, please contact consider any of the referral sources provided:

1. 24 hour Members and Family Assistance Program: Homewood Health (800) 663-1142
2. Approaching a member of your Critical Incident Stress Management Team or Peer Support Team for local resources
3. Find or discover a registered psychologist in British Columbia at: http://www.psychologists.bc.ca/find_psychologist_full
5. The crisis line available 24/7 anywhere in BC 1-800-SUICIDE: 1-800-784 2433
Appendix C: Sources of Occupational Stress Questionnaire

1. Sources of Occupational Stress (Kimbel et al. 2011)

Estimated time: 3 minutes
There are numerous sources of on-the-job stress that affect firefighters on a regular basis. Below you will find a listing of many of these stressors. Please indicate how much stress it has caused you over the last 10 shifts you worked, using a 5-point scale that ranges from 1 “No Stress At All” to 5 “A Lot Of Stress”

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Not Stressed At All (1)</th>
<th>A Little Bit Stressed (2)</th>
<th>Moderately Stressed (3)</th>
<th>Quite A Bit Stressed (4)</th>
<th>Extremely Stressed (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Poor Diet</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Discrimination based on gender, ethnicity, or age</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Exposure to anxious or overly demanding co-worker or administrator</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Financial strain due to inadequate pay</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Bothered by not being able to predict or control events</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Concerns about not knowing the latest technology</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Thoughts about past run(s) that have been particularly upsetting/disturbing</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Observing negative effects of stress on coworkers, e.g. illness, alcohol abuse, and burn-out</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Dislike of routine paper work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10. Working with a substandard co-worker on emergency incidents or situations</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11. Conflicts with co-workers and team members</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12. Disruption of sleep</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13. Feelings of isolation from family due to work demands and stress</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>14. Concerns about serious personal injury/disability/death due to work</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
## Appendix D: Social Support Short Form–Firefighters

**Estimated time: 3 minutes**

The next 9 questions will ask you about the amount of support you receive from firefighter co-workers. For each statement, think back over the past 6 months and indicate how you disagree or agree.

<table>
<thead>
<tr>
<th>Question</th>
<th>Strongly Disagree (1)</th>
<th>Disagree (2)</th>
<th>Neither agree nor disagree (3)</th>
<th>Agree (4)</th>
<th>Strongly agree (5)</th>
</tr>
</thead>
<tbody>
<tr>
<td>15. You were carefully listened to and understood by firefighters you worked with.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>16. Among your firefighter colleagues, there was someone who made you feel better when you were feeling down.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>17. You had problems that you couldn’t discuss with other firefighters.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>18. Among your firefighter colleagues, there was someone you could go to when you needed advice.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>19. There were people in the fire service you could talk to about your experiences as a firefighter.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>20. The firefighters you knew respected the fact that you were a firefighter.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>21. You knew firefighters who would lend you money if you needed it.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>22. If you had been unable to do your daily chores at work, there was someone in the fire station who would have helped you with these tasks.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>23. If you had been ill, there were other firefighters who would have helped you.</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
**Appendix E: Attitudes Towards Seeking Professional Psychological Help**

Estimated time: 3 minutes

The next 10 questions examine thoughts about professional mental health providers; this may be any person who is trained to provide treatment for personal problems of a psychological nature such as a psychologist, psychiatrist, counselor, therapist or social worker. For the purpose of this survey, please consider that the professional mental health provider is NOT employed directly by the Fire Department. Please read each statement and respond according to the degree in which you disagree or agree.

<table>
<thead>
<tr>
<th>Statement</th>
<th>Strongly disagree (0)</th>
<th>Somewhat disagree (1)</th>
<th>Somewhat agree (2)</th>
<th>Strongly agree (3)</th>
</tr>
</thead>
<tbody>
<tr>
<td>30. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>31. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>32. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>33. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>34. I would want to get psychological help if I were worried or upset for a long period of time.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>35. I might want to have psychological counselling in the future.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>36. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>37. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>38. A person should work out his or her own problems; getting psychological counselling would be a last resort.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>39. Personal and emotional troubles, like many things, tend to work out by themselves.</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
Appendix F: Mental Health Provider Preference Questionnaire

Estimated Time: 5 minutes

Directions: Please read each statement and respond according to the degree in which you would prefer to contact a professional mental health provider or a peer supporter in each hypothetical situation. For the purposes of this survey, the following definitions are applicable:

Professional Mental Health Provider: Any person who is trained to provide treatment for personal problems of a psychological nature such as a psychologist, psychiatrist, counselor, therapist, or social worker. For purposes of this survey, please consider that the professional mental health provider is NOT employed directly by the your firefighter department.

Critical Incident Stress Management (CISM) or Peer Support team member: A firefighter trained in providing confidential peer support to other firefighters, in order to identify common reactions to stress, and educate members on healthy coping techniques, as well as make referrals to professional mental health providers when necessary.

<table>
<thead>
<tr>
<th>Strongly Prefer CISM/Peer Support Member</th>
<th>Prefer CISM/Peer Support Member</th>
<th>Prefer Mental Health Professional</th>
<th>Strongly Prefer Mental Health Professional</th>
</tr>
</thead>
<tbody>
<tr>
<td>40. If I were experiencing relationship issues, or going through a relationship break-up, separation or a divorce.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>41. If I had trouble falling asleep or staying asleep.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>42. If I were drinking alcohol excessively and this behaviour was negatively affecting my relationships with friends and family.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>43. If I felt hopeless about the future of my career.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>44. If I were frustrated with organizational politics, colleagues, or supervisors.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>45. If I had a difficult time controlling my emotions on the job and it was affecting my performance.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>46. If I felt as if the demands of the department were interfering in my relationships with friends and family.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>47. If I had suicidal thoughts or other thoughts related to self-injury.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>48. If I were drinking alcohol excessively and this behaviour was negatively affecting my ability to do my job.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Appendix G: Reasons for Peer or Professional Support

VI. Reasons for Peer or Professional Support

Estimated time: 2 minutes
For the following items, please check all items that are important to you.

54. For what reasoning would you contact a CISM/Peer Support team member for mental health related issues?
   - Trust a fellow firefighter
   - They understand the issues
   - They know where to refer for further help (resources)
   - Worried about stigma of seeing a mental health professional
   - Other

55. For what reasons would you contact a professional mental health provider for mental health related issues?
   - Confidentiality
   - They have a higher level of training
   - They have an independent opinion separate from the work environment
   - Other

56. In your opinion, in terms of a department related initiative, what do you find most helpful after a critical incident?
   - Defusing to CISM team support
   - Support from management
   - Critical incident Group Debrief with a mental health professional
   - Individual referral to a psychologist
   - Other

57. In your opinion, Professional Mental Health help should be:
   - Made mandatory at least once a year for every member
   - Made mandatory following serious critical incidents
   - Made accessible to members at no cost when they feel they need it
   - Made accessible to members immediate family at no cost when they feel they need it
   - Emphasized as an available resource at least annually in CISM training
   - Facilitated by a professional trained in Firefighter Occupation Awareness
   - Other

VIII. Additional Comments

58. Is there anything else you would like to say on the subject of firefighter stress and accessing support?
Appendix H: Demographics

Demographics

Please choose your age range:
- 19-23
- 24-28
- 29-33
- 34-38
- 39-43
- 44-48
- 49-53
- 54-68
- 59 and over

Please indicate your gender:
- Male
- Female
- Transgendered
- Other

Please indicate your highest level of education:
- Graduate school or higher
- Some graduate school
- Trades/Apprentice Certification
- Bachelors degree or equivalent
- Some post-secondary
- High school or equivalent

Please indicate how many years of service completed:
- 0-5 years (joined 2013-present)
- 5-10 years (joined 2008-2012)
- 10-20 years (joined 1997-2007)
- 20+ years (joined 1996 or before)

Please indicate your current relationship status:
- Single
- Separated
- Divorced
- Common Law
- Married
- Other
### Appendix I: Thematic Analysis Map

<table>
<thead>
<tr>
<th>Theme</th>
<th>Subtheme (colour = tone of comment)</th>
<th>Responses</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Access &amp; support</strong></td>
<td>Recognize positive change in mental health support in department</td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Happy with current support</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Extended medical plan doesn’t cover enough in terms of mental health support</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Worksafe BC -difficult to work with “horrible”, focus on get back to work and not treatment.</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>(I have) Lack of experience (cannot comment)</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>EAP not easily accessible, need face to face</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Gave up on looking for support through employer</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>More stress when not at work—work keeps mind busy</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Would rather suffer in silence than being &quot;humiliated&quot; by a stranger.</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Not supported at work</td>
<td>1</td>
</tr>
<tr>
<td><strong>Needs easier access to MH support</strong></td>
<td></td>
<td>5</td>
</tr>
<tr>
<td></td>
<td>Need better support from worksafe</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Need better support with employer/ back to work coordinator</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Need outside support, hotline? Report bullying?</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Professional MH should be brought in after serious incidents to perform group debriefings</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Everybody deals with stress differently</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>32</td>
</tr>
<tr>
<td><strong>Education/ cultural awareness</strong></td>
<td>Prefer peer support because they &quot;get it&quot;</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Peer referred counsellors is preferred</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Department Chiefs ineffective/ “inadequate” in caring for employees MD</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Poor training</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Workplace stress, inadequate teachers = set up to fail</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Lack of trust with MH professional</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Educate Worksafe BC and employer on FF MH</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Encourage self-coping for FF, to survive alone</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>List of MH professionals culturally aware in our community</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Look to other departments/systems/ operations that have programs that work in support employee MD</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>More support options than just mental health</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Need focus on treatment of MH</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Professional MH need FF culture awareness</td>
<td>7</td>
</tr>
<tr>
<td>Theme</td>
<td>Subtheme (colour = tone of comment)</td>
<td>Responses</td>
</tr>
<tr>
<td>-------</td>
<td>-----------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td></td>
<td></td>
<td>$n = 44$</td>
</tr>
<tr>
<td></td>
<td><strong>Educate FFs on MH</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Need more resources for FF and families about MH</strong></td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>Seek a MH professional as they are trained for MH issues</strong></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td><strong>Not a fan of CISM/Peer support because FF do not have this training</strong></td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>27</td>
</tr>
<tr>
<td><strong>Stigma—thoughts and attitudes</strong></td>
<td>Nature of work, higher exposure to awful experiences, however not everything warrants a CISD</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Stigma asking for help out of pride/fear what others will think</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>Stigma—Do not want to be perceived as weak</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Stigma saying PTSD that everyone will claim it and won't be believed &quot;crying wolf&quot;</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Fear of isolation and judgment</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Felt judged</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Workplace favours majority white males</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>13</td>
</tr>
<tr>
<td><strong>Operational guidelines/policy and procedures</strong></td>
<td>Challenge for chiefs to be effective in role when in position for short time</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>New work programs ineffective</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td><strong>CISM/CISD need to be carried out</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Mandatory Professional MH check up</strong></td>
<td>3</td>
</tr>
<tr>
<td></td>
<td><strong>Reprimand Officers not following operational/mandatory guidelines</strong></td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Early and timely access is critical</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>11</td>
</tr>
<tr>
<td><strong>Attitudes/Bullying/Lack of Trust within Dept.</strong></td>
<td>Frustrated</td>
<td>3</td>
</tr>
<tr>
<td></td>
<td>Lack of trust “confidentiality” within department</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Gossip and lies within the department, often higher-ranking officers, is toxic</td>
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</tr>
<tr>
<td></td>
<td>Nightmare working for the department.</td>
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</tr>
<tr>
<td></td>
<td>PTSD from workplace not the calls</td>
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</tr>
<tr>
<td></td>
<td>Bullying, intimidation tactics from co-workers</td>
<td>1</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td></td>
<td>9</td>
</tr>
<tr>
<td><strong>Exposure to Trauma; Compound; PTSD</strong></td>
<td>Compound stress, working at same toxic environment creates &quot;breaking point&quot;</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Recognize personal changes, loss of compassion for others, and &quot;hardened me at cost to my family&quot;</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>Stress accumulates</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>FFs are dying as a result of PTSD</td>
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</tr>
<tr>
<td>Theme</td>
<td>Subtheme (colour = tone of comment)</td>
<td>Responses</td>
</tr>
<tr>
<td>-----------------------</td>
<td>-------------------------------------------------------------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>So much death</td>
<td></td>
<td>1</td>
</tr>
<tr>
<td>TOTAL</td>
<td></td>
<td>8</td>
</tr>
<tr>
<td>Pride in job</td>
<td>I love being a FF, a dream come true to serve the people</td>
<td>1</td>
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<tr>
<td>TOTAL</td>
<td></td>
<td>101</td>
</tr>
</tbody>
</table>

*Note.* Tone of comment key: blue = praise, red = challenge, green = change, and yellow = attitudes.