



After the Alarm Research Study



How volunteer firefighters in Nova Scotia navigate community assets to cope with occupational stress after a critical incident through identification of resources, places, supports and services of significance and meaning.

Faculty/Presenter Disclosure

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Potential for conflict(s) of interest: None.

Mitigating Potential Bias

None associated with this study.

Learning Objectives

At the conclusion of this presentation, participants will be able to:

- 1) Identify coping strategies for volunteer firefighters.
- 2) Identify and recognize community assets such as resources, places, supports and services of meaning that help volunteer firefighters cope with occupational stressors.
- 3) With this knowledge, participants can support volunteer firefighters in the development of appropriate community resources, supports, and services for this occupational group.



Introduction

The purpose of this research is to explore how volunteer firefighters in Nova Scotia cope with occupational stress after a potentially traumatic or stressful incident through identification of resources, places, supports and services used in their community.

Study Objectives

This study has three objectives:

- 1) Identify occupational stressors and coping strategies for volunteer firefighters in Nova Scotia after a potentially traumatic incident.
- 2) Identify community assets such as resources, places, supports and services of meaning that help volunteer firefighters cope with occupational stressors.
- 3) Explore ways in which volunteer firefighters navigate identified community assets and compare this with existing community assets.

After the Alarm Research Study

We want to know what helps you
cope in your community after a
stressful incident.

Participate in this online survey at:
<https://surveys.dal.ca/opinio/s?s=49527>

The purpose of this research is to explore how volunteer firefighters in Nova Scotia cope with occupational stress after a potentially traumatic or stressful incident through identification of resources, places, supports and services used in their community.

Who can take part in this study?

- ❖ Currently serving volunteer firefighters in Nova Scotia
- ❖ Those 18 years of age and older



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Methodology

Two phases of mixed-methods study:

- 1) In August 2019, conducted a mixed-methods online survey, distributed to volunteer firefighters across Nova Scotia.*
 - This survey used the following standardized measures: critical incident inventory, the traumatic life events questionnaire, the public safety officers' stressors (PSOS) scale, the brief resilience scale, and COPE inventory.
 - Qualitative open-ended questions identified community assets and places of meaning.*
- 2) The second phase of this study will use socio spatial grounded theory and GIS-mapping techniques to identify and navigate existing community assets and compare with those identified by volunteer firefighters.

Participant Demographics

Nova Scotia Volunteer Firefighters, N=214			
Gender	Age	Education	Employment
Male= 169	18-24= 30	High School= 25%	Full-Time= 75%
Female= 43	25-34= 59	College= 50%	
Not Identified= 2	35-44= 47		
	45-54= 57		

Criteria:

- ❖ Currently serving volunteer firefighters in Nova Scotia
- ❖ Those 18 years of age and older

Employment Status

- Dual Roles in Public Safety

Paid Employment= Public Safety Role

- Law enforcement, paramedic, military, emergency dispatcher, correctional officer (53 individuals/25%)
- Construction (56 individuals/26%)

Serious Leisure Occupation= Firefighter

Preliminary Findings- Qualitative Data

What places or locations do you go that helps deal with potentially traumatic or stressful incidents?

- Home
- Firehall, *Peer Support
- Recreation: Trails, Woods, Beach

Are there any places or locations you avoid?

- Crowded places
- Accident scenes

What resources are you aware of in your community to help with stressful incidents?

- CISM
- EFAP (if have access, many through their employment not fire dept)

Preliminary Findings- Qualitative Data

Have you accessed any of these resources? Why or why not?

- Majority say no due to stigma or ability to access resources through their employment
- Those who say yes, generally attend CISM debriefings
- Do not know how or if there are services to access

What places and/or resources do you wish you had in your community to help after a potentially traumatic or stressful incident? Why?

- Free mental health service where clinicians understand firefighters
- More accessible and affordable
- Access to EAP or EFAP through fire service
- More training around mental health
- More public awareness of volunteer firefighters

Preliminary Findings- Coping Strategies

- Exercise and nature
- Dark humor
- Isolation
- Peers at fire department
- Time with family and friends

Final Thoughts- Quotes from Survey Participants

“It all comes down to finding something separate from that world that also makes you happy. Many [firefighters] get wrapped up in the world of [firefighting] and it can consume you. As fantastic as that world of brotherhood/sisterhood is you need a safe space outside of that world to heal your soul.”

“I would like to see more info about mental health issues being presented to departments during regular time periods, not just after bad incidents.”

“We could use a local place to deal with everyday stressors which would keep us healthier to deal the major critical incidents when they occur.”

“Being together after hard calls is the most meaningful, they’re the ones that understand the most”

Next Steps

- Further analysis of survey results and findings.
- Environmental scan of existing community assets and resources.
- Socio-spatial analysis and GIS-mapping techniques to identify and navigate existing community assets and compare with those identified by volunteer firefighters.
- Development of a wellness map

References

1. Canadian Mental Health Association. (2017). Resilient minds pre-course survey tool.
2. Carleton, R.N., Afifi, T.O., Turner, S., Taillieu, T., Duranceau, S., LeBouthillier, D.M.,...& Asmundson, G.J.G. (2018). Mental disorder symptoms among public safety personnel in Canada. *The Canadian Journal of Psychiatry*, 63(1), 55-64. <http://doi.org/10.1177/0706743717723825>
3. Carleton, R.N., Afifi, T.O., Turner, S., Taillieu, T., Vaughan, A.D., Anderson, G.S.,...& Camp, R.D. (2019). Mental health training, attitudes toward support, and screening positive for mental disorders, *Cognitive Behaviour Therapy*. <https://doi.org/10.1080/16506073.2019.1575900>
4. Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology*, 56, 267-283. Retrieved from <http://www.midss.org/content/cope-inventory>
5. Donnelly, E. A., & Bennett, M. (2014). Development of a critical incident stress inventory for the emergency medical services. *Traumatology: An International Journal*, 20(1), 1-8. <http://dx.doi.org/10.1177/1534765613496646>
6. Haynes, H. & Stein, G. (2018). Canadian fire department profile, 2014-2016. National Fire Protection Association. Retrieved from <https://www.nfpa.org/-/media/Files/News-and-Research/Fire-statistics-and-reports/Emergency-responders/oscanada.pdf>
7. Jones, P. & Evans, J. (2012). The spatial transcript: Analyzing mobilities through qualitative GIS, *Area*, 44(1), 92-99. Retrieved from <https://www.jstor.org/stable/41406050>
8. McCreary, D.R., & Thompson, M.M. (2006). Development of two reliable and valid measures of stressors in policing: The Operational and Organizational Police Stress Questionnaires. *International Journal of Stress Management*, 13, 494-518. Retrieved from <http://www.midss.org/content/operational-police-stress-questionnaire-psq-op>
9. Smith B.W., Dalen, J., Wiggins, K., Tooley, E., Christopher, P., & Bernard, J. (2008). The brief resilience scale: Assessing the ability to bounce back. *International Journal of Behavioural Medicine*, 15, 194-200. <http://doi.org/10.1080/10705500802222972>
10. Weathers, F. W., Blake, D. D., Schnurr, P. P., Kaloupek, D. G., Marx, B. P., & Keane, T. M. (2013). The Life Events Checklist for DSM-5 (LEC-5) – Standard. [Measurement instrument]. Available from <https://www.ptsd.va.gov/>

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