Stress and Coping Strategies for Canadian Police Officers

by

Cameron Olive

Bachelor of Law Enforcement Studies

Justice Institute of British Columbia

Instructed by Greg Keenan

Advised by Greg Anderson

April 12th, 2019

Abstract

Police officers are often reported to experience high levels of occupational stress, and consequently face numerous effects on their work and home lives. This study examines the reasons behind stress for Canadian police officers and suggests possible stress reduction techniques to reduce the impact of stress on long-term emotional health. Research was also conducted to identify the feasibility of implementing such techniques in a police subculture. Using a qualitative analysis model, a variety of articles were reviewed in order to determine the prevalence of the issue, and formulate workable solutions. An investigation of the data revealed that adaptive cognitive and mindfulness based techniques could yield emotional health benefits for police officers.

Keywords: police, stress, emotional health, stress management

Table	of	Contents

Abstract	2
Background	4
Research Question	5
Literature Review	6
Stress and Policing	6
Absence of On-Duty Stress Coping Mechanisms	7
Organizational Compatibility with Stress Reduction	8
Officer Demographics	9
Research Design	11
Methodology	
Discussion	14
Exposure to Stress	14
On-Duty Stress Coping Techniques	16
Off-Duty Stress Coping Techniques	
Compatibility of Police Subculture with Stress Management	19
Limitations	21
Ethical Considerations	21
Conclusion	
References	

Background

Canadian police officers are exposed to a wide variety of highly stressful and potentially traumatic situations, including sudden deaths, motor vehicle accidents, physical assaults, and severe human suffering. This exposure increases the likelihood of a number of negative mental health effects (such as depression, anxiety, and post-traumatic stress disorder, among many others) when compared to the general public (Carleton et al., 2019). Accordingly, the effects of stress on police officers and potential coping mechanisms require rigorous investigation in order to address the elevated risk of emotional suffering. If such effects can be mitigated or eliminated, it is highly likely that police officers will experience increased job satisfaction and long-term emotional stability (Gilmartin, 2002b).

The impact of stress on police officers is a relatively new and ever-developing field of study. While there has been significant research conducted on the causes of stress and factors playing into increased stress levels, there is a dearth of research that discusses practical techniques for officers to use in the field and at home. Although there are many experimental techniques, there are few that have had been widely accepted and implemented across Canadian police departments. In order to suggest effective and practicable methods for police officers to use, a comprehensive review and discussion of current approaches and potential future approaches is necessary.

In this study, the terms 'stress coping mechanisms', 'stress coping techniques', and 'stress reduction techniques' are used interchangeably. Despite the different wording, these terms are nearly identical in their definition and their usage is closely aligned in the field of psychology. Stangor & Walinga (2014, p. 755) define stress coping as "...a more

4

specific process of cognitive appraisal to determine whether an individual believes he or she has the resources to respond effectively to the challenges of a stressor or change". For the purpose of this study, identified stress coping techniques will be tailored with this definition in mind; that is, to potentially empower an individual in their ability to respond to a stressor.

Research Question

This research study sought to answer the overarching question 'How can Canadian police officers increase their stress coping skills?'. Specifically, this study set out to determine practical stress reduction skills that police officers could incorporate into their on-the-job routines. In order to develop an understanding of stress in the context of policing, other questions relating to the fundamental origins of stress for police officers, the influence of officer demographics on stress coping abilities, and the nature of police work were peripherally investigated during the research. Determining skills that can be effectively used by police officers without impeding their duties is a primary function of this research, and gaining an understanding of police duties is necessary to create criteria for workable methods. Therefore, this research examines the police subculture and identifies barriers to effective stress management in Canadian police departments.

Canadian police organizations do not typically make specific training information available to the public. Although the public may be engaged through social media outlets, and shown some limited information (generally through photos) of training undertaken by their police officers, exact details and purposes of training are not generally shared. For this reason, it is difficult to obtain information on how police approach intradepartmental issues, especially those surrounding the mental health of their officers. While answering the research question, it was necessary to acknowledge that some police departments may have already utilized certain techniques, but not provided data on these methods to outside sources for review.

Literature Review

In the literature review, I set out to answer my research question through a comprehensive selection and examination of academic articles relating to my topic. Although I initially set forth to answer how Canadian *law enforcement* officers can increase their stress coping skills, I found the scope of the topic too broad, and discovered a scarcity of material for most law enforcement professions other than police. Consequently, the research question was revised to 'How can Canadian police officers increase their stress coping skills?', and I directed my research accordingly. Despite this revision, I believe my research could still have some relevance for non-police law enforcement agencies when discussing workable coping strategies and mental illness prevention. For this review, I chose to select only North American material in order to maintain both applicability and relatability for Canadian police agencies. Although I discovered some relatable material from international sources, the organizational structures, policies, and practices often differed significantly from North America, and were therefore excluded.

Stress and Policing

Upon a comprehensive review of the literature, it is clear that police officers are exposed to significant levels of stress through their work and accordingly suffer higher rates of mental health issues. This, unfortunately, seems to be an inherent side effect of working in first response and public safety in Canada. In a recent study, Carleton et al.

6

(2019) found that 44.5% of Canadian public safety personnel had an identifiable mental health disorder, of which the highest responses were PTSD and major depressive disorder. In contrast, Statistics Canada (2012) reports the rate of mental health disorders among the general population as 10.1%, a remarkable difference when compared to public safety personnel. In their research, Carleton et al. (2019) acknowledge a lack of available and reliable data for definitive rates of exposure to potentially traumatic situations for this demographic. In the study, however, they determined that public safety personnel, including police officers, are exposed to traumatic events at a higher rate than the general public. A large study by Duxbury & Higgins (2012a), involving 7091 police employees belonging to 25 different police forces across Canada, supported this. The study found that around 50% of participants self-reported experiencing high levels of stress, while a further 46% reported moderate stress levels. Further research suggests that police officers see their own profession as a stressful occupation, and this was a recurring theme when discussing the nature of police work (Conn & Butterfield, 2013; Tsai, Nolasco, & Vaughn, 2017; Violanti et al., 2018).

Absence of On-Duty Stress Coping Mechanisms

Significant amounts of research has been conducted on stress reduction methods for police officers and other public safety personnel. Recurring suggestions throughout the research included exercise, diet, lifestyle, and maintaining social connections, among others. However, little research addressed stress reduction techniques that could be implemented whilst police officers are actually on-duty. Much of the focus of preexisting research seemed to revolve around how police officers could increase stress coping through off-duty activities, especially in regards to physical exercise and social interaction. Although this is certainly useful in helping a police officer to combat overall stress, there was a clear lack of research surrounding techniques that could potentially help to reduce stress levels experienced by a police officer whilst on-the-job.

Organizational Compatibility with Stress Reduction

The police subculture has a variety of unique elements that influence the ability of a police officer to effectively and capably manage occupational stress. Firstly, research indicates that the nature of shift work is a major contributing factor to stress levels in policing. In Canada, rotational shift work is defined as "...either continuous [shifts], running 24 hours per day, 7 days per week, or semi-continuous [shifts], running 2 or 3 shifts per day with or without weekends. Workers take turns working on all shifts that are part of a particular system" (Canadian Centre for Occupational Health and Safety [CCOHS], 2010, para. 1). Excluding overtime, police shifts typically fall between 8-12 hours, and usually run on a regular cycle of days-on and days-off. Depending on the police department, officers may rotate through different shift times in order to avoid constantly working (for example) all nights or all days. Even so, research shows that shift work can have a variety of negative health effects, including higher levels of burnout, emotional exhaustion, and job stress (Abdollahi, 2002; CCOHS, 2010; Griffin & Sun, 2017; Saunders, 2010). Many Canadian police departments utilize a rotating shift schedule, and an examination of the effects of shift work is mandatory when discussing the long-term emotional health of police officers.

Further themes surrounding the police subculture arose during the research. A review of the literature indicates that police officers generally feel the causes of their stress do not necessarily result from basic job requirements, such as interacting with the

public or performing other core job functions. Rather, police officers often attribute high stress levels to poor organizational practices and demands (Duxbury & Higgins, 2012a; Tsai et al., 2018; Violanti et al., 2018). Violanti et al. (2018) found that organizational stressors were more prevalent than operational stressors, including a lack of resources, inadequate supervision, and a lack of support. In addition to this, a report by the RCMP found that members can face pressures and inhibitions resulting from organizational culture. The report described a culture in which officers had fear of appearing weak in front of their colleagues, and therefore possessed a reluctance to talk about or seek help with mental health problems (Rook, Baillie, Dingley, & Creighton, 2015). Abdollahi (2002) cited a wide variety of organizational stressors in the police culture, including a lack of input into policy and decision-making, a lack of recognition, insufficient administrative support, and role conflict.

Officer Demographics

Research shows that demographics play a major role in the ability of the officer to manage stress (Abdollahi, 2002; Duxbury & Higgins, 2012a; Griffin & Sun, 2017; Tsai et al., 2017). Race, gender, educational background, marital status, familial status, and age were all shown to have an influence on an officer's stress coping capabilities. Themes also emerged surrounding rank and corresponding job requirements.

Race and gender were shown to have a significant bearing on the ability of the officer to cope with stress. Duxbury & Higgins (2012a) found that at all ranks, women reported higher levels of stress and depressive moods than men, as illustrated in the table below.

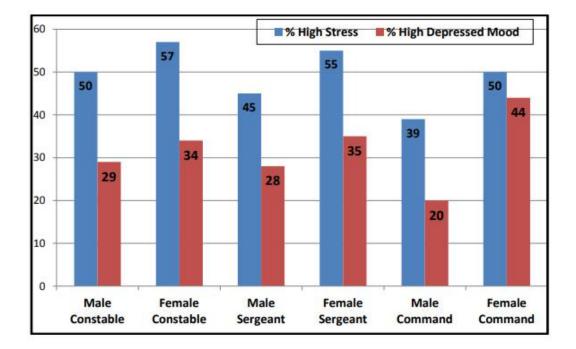


Figure 1. Relationship between rank and role overload. (Duxbury & Higgins, 2012b).

This is further supported by Tsai et al. (2017), who found that female police officers are more likely to suffer job-related depression and low self-esteem. Women in policing are also more likely to miss work due to illness, although it was not determined what influence mental health had on this data (Duxbury & Higgins, 2012a). Both Griffin & Sun (2017) and Tsai et al. (2017) noted in their research that Caucasian police officers are less likely to cope effectively with stress, while minority officers have less work-life conflict and experience less negative mental health effects resulting from stress. Other literature, however, countered this assertion. Further research into the experience of minority officers in Canadian policing should be conducted.

Abdollahi (2002) suggests that personality types can have a direct influence on the ability of an individual to manage stress. Police officers who can be associated with having a 'Type A' personality (that is, having more authoritative, competitive, and cynical personalities) tend to have lower stress coping abilities and experience higher levels of frustration in stressful events (Abdollahi, 2002). Conversely, officers who display high levels of optimism and self-control are more likely to be able to effectively cope with stress (Abdollahi, 2002).

Research shows that officers with an educated background are less likely to experience negative stress and work-family conflict. Griffin & Sun (2017) noted that increased levels of education had a positive correlation with stress coping abilities, and educated officers were much less likely to experience burnout. Duxbury & Higgins (2012a) also found that higher levels of education are linked to increased professionalism in police officers, and these officers often display a greater demand for career development and training. Interestingly, Tsai et al. (2017) found an inverse correlation between the education level of the officer and their perceptions of counseling support. This is important, as it indicates that although educated officers may experience less negative effects from stress, they are less likely to seek the appropriate levels of support when they do encounter a stressful or traumatic event.

Research Design

This research project utilized a qualitative research methodology design. This design was chosen as the research was undertaken with the objective of identifying and answering a social or human problem, and minimal statistical data was available on the subject (Creswell & Creswell, 2018). Also, qualitative research designs tend to offer more flexibility for the structure of the final report, and allows the researcher to offer interpretations of the data based on their findings (Creswell & Creswell, 2018). Workable

data, in the context of this study, is much more closely aligned to information generally obtained through qualitative research, such as interviews, surveys, and self-reporting.

In this study, only secondary research was conducted. This was, in part, due to time constraints and the limitations surrounding civilian research into policing. Also, the resources available for this study were not to the extent which would allow extensive primary research to be conducted across numerous police departments. Rather, this research set out to identify general themes and ideas from pre-existing research that could assist in developing workable solutions to stress-related issues facing police officers in Canada. Furthermore, conducting primary research on the mental health of police officers is a sensitive topic, and would require significant ethical approval. This approval process was not necessary for the purposes of this research, as only secondary research was being conducted. Regardless, the research was conducted with strong ethical considerations in mind, and adhered to the Justice Institute of British Columbia's Research Policies and Procedures guidelines.

This study focused on broad concepts and theories to help answer the research question. Qualitative studies involving the use of open-ended questions, especially those in the context of interviews and self-reporting, were frequently used. This research seems to be favoured when discussing the subject matter of stress, as it allows participants to identify issues and concepts themselves, without the researcher influencing the participant in the identification of causes. Also, a qualitative approach to research allows the researcher to study the specific context and setting of participants, and allows greater latitude in creating an agenda for change or reform (Creswell & Creswell, 2018). This study focuses on a specific subculture in society with the goal of offering suggestions for practice and policy, so these concepts are important.

Methodology

In order to gather relevant literature for this study, I conducted a comprehensive search and review of multiple online library databases, including the Justice Institute of British Columbia (JIBC), University of Fraser Valley (UFV), and Camosun College. A search for academic sources was also conducted at the library of the Justice Institute of British Columbia. The initial online searches utilized the keywords 'police' and 'stress', and were constrained to academic journals published within the past 20 years. Emotional health for police officers is a relatively new and evolving field of study; accordingly, the date range was constricted to the past two decades. These search parameters returned 4,153 articles for review from JIBC's database, 13,962 from UFV, and 6,280 from Camosun College. Through these searches, I found many articles were simply not relevant to the research. Material from international sources comprised a significant amount of the articles, generating many non-English results. Furthermore, the excessive number of articles restricted my ability to appropriately select meaningful material for review. In order to reduce the amount of irrelevant material, I included further search terms of 'officer', 'stress', 'coping', and 'health'. I maintained the date range parameters, ensured all articles were from academic journals, and excluded non-North American articles. As aforementioned, I chose to select only North American material in order to maintain relevance to Canadian policing. The inclusion of further search terms and additional parameters improved the relevance and reasonability of the search, reducing the search results to 112 articles for JIBC's online database, 330 for UFV, and 162 for

Camosun College. These articles were then considered for specific applicability to my research.

Discussion

A number of themes arose during the research. As listed below, the age, ethnicity, and general background of the officer had was found to have a direct impact on their ability to manage stress. Also, research consistently found that police officers have high risk levels for general stress, PTSD, and a variety of other negative mental health issues. Numerous coping mechanisms were suggested, but most notably, forms of taskorientation and relaxation techniques were found to be workable in a policing context. Lastly, the police subculture was noted to be highly incompatible with strong emotional health practices and long-term mental health. An examination of enacting culture change in police departments would be invaluable when further discussing the implementation of stress coping mechanisms as departmental policy.

Exposure to Stress

It is well-documented that police officers experience considerable amounts of stress, and have an increased propensity for mental health issues when compared to the general population (Carleton et al., 2019; Violanti et al., 2018; Griffin & Sun, 2017; Conn & Butterfield, 2013). As previously mentioned, police officers are often exposed to numerous high-risk and/or high-stress situations, including situations involving violence, injury, severe suffering, and death. With an increased exposure to stressful events, it is incumbent that officers possess improved coping skills to handle the various stress factors.

Violanti et al. (2018) assert that there are three critical elements in causing high levels of stress and burnout among the officers: cynicism, overcommitment, and an

14

imbalance between effort and reward. In order to properly adapt to the demands of the role of a police officer, it was suggested that officers improve resiliency in order to stay engaged at work, adapt to stressors, and rebound from the negative aspects of stress (Violanti et al., 2018).

Police leaders should acknowledge that the experience of their department's officers may differ, depending on their background. Race, ethnicity, and cultural background is thought to have an significant effect on how individuals handle stress, although research conflicts on how what the exact effects are, and whether they are beneficial or detrimental in stress coping. The individual experience of an officer can also be influenced by their age, rank, education, marital status, familial status, and personality, and all of these factors should be considered when approaching the subject of stress and trauma with that officer. Not all individuals experience stress in the same way, and a universal approach to stress coping may not be effective for a department.

Another significant consideration, when discussing stress in policing, is the concept of 'hypervigilance'. Hypervigilance was first proposed by Gilmartin (2002b), and suggests that police officers experience a significant emotional swing between their off-duty and on-duty lives. This concept is described as follows:

Hypervigilance is the necessary manner of viewing the world from a threat-based perspective, having the mindset to see the events unfolding as potentially hazardous. The effective and safe street officer has to believe that every encounter possesses the potential of lethal risk. The perceptual set of hypervigilance lets the officer have an increased awareness of all the data available in the environment. (Gilmartin, 2002b, p. 35).

Although hypervigilance may be viewed as an occupational requirement in order to effectively respond to the various high-risk situations faced by police officers, Gilmartin (2002b) suggest the long-term effects on emotional health may be detrimental. In order to counter the negative side effects of on-duty hypervigilance, it is necessary to identify both on-duty and off-duty stress management techniques.

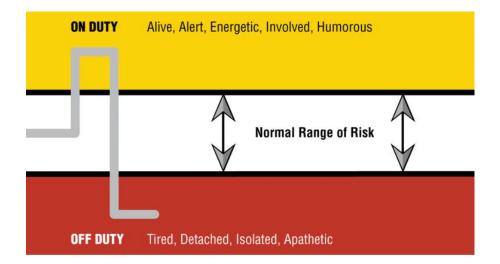


Figure 2. Chart illustrating the concept of hypervigilance. (Gilmartin, 2002a).

On-Duty Stress Coping Techniques

A fundamental aspect of utilizing stress management skills in a police context lies with the ability to perform such stress reduction techniques whilst on-duty. Throughout the research, it was found to be essential to identify methods that can reduce stress whilst actually on-the-job. Off-duty stress management techniques and their benefits will be discussed in the next section.

Adaptive cognitive responses, such as breathing exercises and being given specific tasks to complete (either physically or mentally) may serve to reduce anxiety and stress levels. Conn & Butterfield (2013) suggest these forms of relaxation techniques may be effective in a number of situations, such as when officers are required to stay on-scene at a distressing call. It is suggested that individuals who become distressed become selfpreoccupied, thereby increasing their levels of anxiety (Conn & Butterfield, 2013). Therefore, adaptive cognitive techniques, such as deep breathing exercises, may be of use to police officers who are experiencing distress.

The ability to engage in breathing exercises whilst on-duty yields a valuable benefit to police officers. Breathing exercises are discreet and require no additional resources of any sort. Rather, the lone requirement of the officer is the conscious thought of slow breathing, which can easily been done in tandem with performing work tasks. Breathing exercises are relatively simple to learn, and can be used at most times throughout a work day, whether the officer is actively experiencing increased stress or not. After mastering simple breathing exercises, such as belly breathing, advanced breathing exercises can be pursued. Techniques known as '4-7-8' breathing and 'roll' breathing are more advanced, but can yield different benefits depending on the individual (HealthLinkBC, 2017). Breathing exercises are seen as an effective way to reduce tension and relieve stress, and can assist in countering physiological reactions to stress, such as an elevated heart rate, high blood pressure, and anxiety (HealthLinkBC, 2017).

Tsai et al. (2017) suggest that police officers can reduce job stress through writing and expressing emotion. Rather than 'staying quiet' on their feelings and internalizing emotions, it is suggested that officers discuss stressful/traumatic experiences with a trusted person or a trained professional (possibly through a debriefing) and/or document events in a notebook or journal (Tsai et al., 2017). Recording events in a notebook is hardly an alien concept to police officers, and this coping mechanism would not require excessive additional effort. On-the-job implementation of this technique could be achieved by police officers carrying a secondary notebook to document personal feelings, thought, and emotion. If suggested as part of departmental policy for stress coping, departments may want to create guidelines for the usage of such a notebook. Details with potential legal implications must be excluded from this sort of a notebook or journal, with the focus on officers writing their emotional experiences for their own mental benefit.

Conn & Butterfield (2013) found that talking with family, significant others, or co-workers was a leading coping mechanism that helped police officers cope with trauma-induced stress. These conversations can be either formal or informal in nature, and did not necessarily have to be in the structured format of a psychological debriefing. Rather, it was found that simply talking with co-workers in some capacity about a stressful or traumatic incident could assist police officers in dealing with traumatic stress (Conn & Butterfield, 2013). This seems to further indicate that simply expressing emotions, in some way, is a viable mechanism for police officers to avoid internalizing negative feelings and can prevent increased stress levels.

Off-Duty Stress Coping Techniques

Research suggests there are a wide variety of stress coping techniques that can be used by police officers while off-duty. Because this topic is so broad, and already has significant amounts of research conducted on it, this study was directed towards methods that can be effectively incorporated into the work life of a police officer. However, there are some important and notably effective stress coping techniques that can be utilized by police officers outside of their scheduled shift, and these warrant discussion.

Exercise, diet, lifestyle, and maintaining social connections were all common themes in the research (Conn & Butterfield, 2013; Duxbury & Higgins, 2012a; Gilmartin,

2002b). Gilmartin (2002b) suggests 30-40 minutes of aerobic activity between four and five times a week, in order to raise the behavioral activity level of the officer and increase feelings of relaxation and well-being. Research shows that poor lifestyle choices, including behaviors such as using tobacco, alcohol, and other narcotics, proliferate the negative effects on long-term emotional health (Abdollahi, 2002; Papazoglou & Andersen, 2014). Griffin & Sun (2018) identified alcohol and tobacco abuse as a method commonly used by U.S. police officers to deal with stress, although data on the prevalence of this in Canadian policing could not be found. Lastly, numerous researchers suggest that self-isolation from social circles, as a result of overcommitment to policing, has detrimental effects on the emotional well-being of a police officer (Abdollahi, 2002; Gilmartin, 2002b; Griffin & Sun, 2018; Tsai et al., 2017).

Compatibility of Police Subculture with Stress Management

The police subculture has been frequently examined, and research suggests that it is incompatible with effective stress management. The reasoning for this ranged from overcommitment to the job (Violanti et al., 2018), the nature of shift work (Griffin & Sun, 2017), and poor organizational management practices (Tsai et al., 2017). Examining the police subculture is an extensive and diverse subject, but these were clearly identifiable areas that had relevance to the subject of coping and stress management.

Discussing the effects of shift work on police is mandatory when examining the police subculture. The CCOHS (2010) suggest that working on constantly changing work schedules or schedules that are considered 'not natural' (e.g. nighttime shifts) can disrupt family and social life, straining relationships between police officers and their family/friends. As previously discussed, having a strong social support system is key for

the emotional well-being of police officers. If strain is placed on marital, familial, or other social relationships, the ability of a police officer to handle stress and avoid burnout is compromised. In order to effectively combat stress in their officers, police departments should consider how their shift schedule and working hours is impacting their employees, through a careful analysis of objective research.

It is suggested that having strong departmental leadership plays a significant role in building resiliency among police officers (Violanti et al., 2018). In Conn & Butterfield's (2013) study, participants had numerous items on their coping 'wish-list' that included changes to organizational attitudes and practices. A significant, recurring response from participants detailed the need to work in an environment where they felt concerns about mental health, especially after critical incident situations, would be taken seriously. Officers detailed the need to have access to appropriate levels of assistance after a traumatic or highly stressful event, such as involvement in a debriefing and/or access to a designated mental health professional. By involving officers in formal debriefing after a critical incident and making mental health services available to that individual, police leaders can help to develop an organizational culture conducive to strong emotional health (Conn & Butterfield, 2013). Individuals in positions of organizational authority, at every level, must contribute to a healthy and accepting culture. The chief of the department may make important decisions regarded policy, practices, and procedures, but depending on the size of the department, officers may not have regular interaction with that person. In regards to creating a positive and emotionally supportive organizational culture, it is important that a police officer has a strong level of support from their immediate superiors as well.

Limitations

Due to the time constraints on the study, I was not able to gather primary research on the subject matter. The qualitative secondary research that was available to me was mostly usable in the context of the study, but there was a significant absence of usable quantitative data. Canadian police departments generally do not disclose information related to mental health, and information relating to the prevalence of mental health issues among both working and retired police officers was scarce. Finding research that pertained specifically to Canadian law enforcement was also challenging, as there is significantly more research conducted both in the United States and internationally on the subject of stress in policing. Additionally, it was difficult to address what improvements could be made to current policies, as many departments do not make their intradepartmental approaches to such matters publicly available.

Ethical Considerations

The ethical interests of the researcher in this study were primarily concerned with increasing the quality of life for Canadian law enforcement officers by identifying the causes, effects, and potential coping methods for stress. There are ethical considerations to discussing research related to traumatic events and mental health, and to the best of my capabilities, I ensured that respect and sensitivity was demonstrated and maintained throughout the study. As only secondary research was being conducted for this study, the research activities did not include the collection or reporting of identifiable data from individuals. Therefore, there was no need to gain approval for the study from the Research Ethics Board.

Conclusion

Policing is a physically and mentally demanding occupation. The psychological burden on police officers has been examined extensively, and a combination of organizational and occupational stressors contribute to high stress levels in policing. Police officers are regularly exposed to stressful and potentially traumatic situations, and depending on their organization, may work in an environment that further exacerbates stress levels. In order to reduce the overall effect of stress on emotional health, it is important for police officers to both learn and practice on-duty and off-duty stress reduction techniques. Adaptive cognitive techniques, such as breathing exercises and writing in a notepad or journal, were found to be workable in a police context.

Police organizations should acknowledge that a universal approach to mental health may not be the most effective approach. The needs of each police department's members differs, and the organization must take a participatory approach with its officers when deciding what practices to implement. Officer demographics play an important role in their ability to manage stress, and these characteristics will differ across organizations. Although research suggests the police subculture is widely incompatible with strong mental health, making specific recommendations for organizational reform is not the goal of this study. Rather, this research sought to identify effective coping strategies for individuals working as police officers, and identify broad factors that may impede stress coping in police organizations. Further research should be conducted to examine the prevalence and efficacy of current stress management techniques, programs, and education in police departments in Canada.

References

- Abdollahi, M. K. (2002). Understanding police stress research. *Journal of Forensic Psychology Practice*, 2(2). doi: 10.1300/J158v02n02 01
- Canadian Centre for Occupational Health and Safety (2010). *Rotational shiftwork*. Retrieved from https://www.ccohs.ca/Oshanswers/ergonomics/shiftwrk.html
- Carleton, R. N., Krakauer, R., MacPhee, R. S., Cramm, H. A., Groll, D., Afifi, T. O., ... McCreary, D. R. (2019). Exposures to potentially traumatic events among public safety personnel in Canada. *Canadian Journal of Behavioural Science*, 51(1), 37– 52. https://doi.org/10.1037/cbs0000115
- Chopko, B. A., & Schwartz, R. C. (2013). The relation between mindfulness and posttraumatic stress symptoms among police officers. *Journal of Loss & Trauma, 18*(1), 1–9. https://doi.org/10.1080/15325024.2012.674442
- Conn, S. M., & Butterfield, L. D. (2013). Coping with secondary traumatic stress by general duty police officers: Practical implications. *Canadian Journal of Counselling and Psychotherapy*, 47(2), 272–298. Retrieved from https://cjcrcc.ucalgary.ca/
- Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches.* (5th ed.). Los Angeles, CA: SAGE.

Duxbury, L., & Higgins, C. (2012a). *Caring for and about those who serve: Work-life conflict and employee well being within Canada's police departments*. Retrieved from Carleton University website: https://sprott.carleton.ca/wpcontent/files/Duxbury-Higgins-Police2012_fullreport.pdf

- Duxbury, L., & Higgins, C. (2012b). *Relationship between rank and role overload*. Retrieved from https://jibc.arcabc.ca/islandora/object/jibc%3A2392/ datastream/PDF/view
- Gilmartin, K. M. (2002a). *Chart illustrating the concept of hypervigilance*. Retrieved from https://www.klemagazine.com/home/2016/11/14/stress-is-inevitable-suffering-is-not
- Gilmartin, K. M. (2002b). Emotional survival for law enforcement: A guide for officers and their families. Tucson, AZ: E-S Press.
- Griffin, J. D., & Sun, I. Y. (2018). Do work-family conflict and resiliency mediate police stress and burnout: A study of state police officers. *American Journal of Criminal Justice*, 43(2), 354–370. https://doi.org/10.1007/s12103-017-9401-y
- Hassell, K. D., & Brandl, S. G. (2009). An examination of the workplace experiences of police patrol officers: The role of race, sex, and sexual orientation. *Police Quarterly*, 12, 408-430. http://dx.doi.org/10.1111/j.2044-8325.1995.tb00578.x
- HealthLinkBC. (2017). Stress management: Breathing exercises for relaxation. Retrieved from https://www.healthlinkbc.ca/health-topics/uz2255
- Papazoglou, K., & Andersen, J. P. (2014). A guide to utilizing police training as a tool to promote resilience and improve health outcomes among police officers. *Traumatology: An International Journal, 20*(2), 103–111. https://doi.org/10.1037/h0099394

Rook, G., Baillie, P., Dingley, D., & Creighton, S. (2012). How can police agencies help their members deal with work-related stress? Retrieved from RCMP website: http://www.rcmp-grc.gc.ca/en/gazette/how-can-police-agencies-help-theirmembers-deal-work-related-stress

- Saunders, R. (2010). *Shift work and health* (Issue Briefing). Retrieved from Institute for Work & Health website: https://www.iwh.on.ca/summaries/issue-briefing/shiftwork-and-health
- Stangor, C., & Walinda, J. (2014). Introduction to psychology (1st Canadian ed.). Retrieved from https://opentextbc.ca/introductiontopsychology/
- Statistics Canada. (2012). Health at a glance: Mental and substance use disorders in Canada. (Statistics Canada Catalogue No. 82-624-X). Retrieved from https://www150.statcan.gc.ca/n1/pub/82-624-x/2013001/article/11855-eng.htm
- Tsai, L. C.-F., Nolasco, C. A. R. I., & Vaughn, M. S. (2018). Modeling job stress among police officers: Interplay of work environment, counseling support, and family discussion with co-workers. *Police Practice & Research*, 19(3), 253–269. https://doi.org/10.1080/15614263.2017.1342091
- Violanti, J. M., Mnatsakanova, A., Andrew, M. E., Allison, P., Gu, J. K., & Fekedulegn,
 D. (2018). Effort–reward imbalance and overcommitment at work: Associations with police burnout. *Police Quarterly*, *21*(4), 440–460.
 https://doi.org/10.1177/1098611118774764