BEHIND THE FRONT LINE
STRESSORS AND COPING IN BORDER SERVICES OFFICERS

by

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Abstract

Eighty one Border Services Officers (BSOs) completed a survey package to explore

BSOs' levels of occupational stress using the Police Stress Questionnaire-Organization

(PSQ-Org) and Police Stress Questionnaire – Operational (PSQ-Op). Data analysis

explored gender differences, years of service, armed versus unarmed officers and coping

styles. Officers reported moderate levels of stress on the PSQ-Org and PSQ-Op across all

variables examined. A correlation matrix determined relationships between coping

strategies and the PSQ-Org and PSQ-Op. The PSQ-Org was significantly correlated with

disengagement coping $r = .26$, $p = < .05$ while the PSQ-Op was correlated to both

engagement coping $r = .28$, $p = < .05$ and disengagement coping $r = .35$, $p = <.01$.

Gender differences in coping were found as female officers had a significant correlation

between engagement coping and the PSQ-Org $r = .41$, $p = < .05$ and the PSQ-Op $r = .53$,

$p = < .01$. Significant correlations between engagement coping and social support coping

were also found for female officers $r = .67$, p $= < .01$. Male officers reported using

disengagement coping which was significantly correlated with all three stress measures

PSQ-Org $r = .32$, $p = < .05$, PSQ-Op $r = .43$, $p = < .01$, and weekly stress $r = .32$, $p = <$

.05. Qualitative data suggested that BSOs may have experienced role conflict, role

ambiguity, and role overload associated with organizational stressors comprised of

management style and short staffing. Impact of current study on proactive interventions

in the workplace is discussed.

Preface

This thesis was the result of a year's work in designing, implementing and collecting the data. I primarily did the writing of the thesis and collected all the data. My supervisor assisted me with making corrections to my thesis and collaborated with me to ensure that I understood the different types of coping. In addition my supervisor and my committee helped me with data analysis and suggested different ways to interpret the results. This research required the approval of the University of British Columbia Research Ethics Board. My supervisor and I received approval from the Behavioural Research Ethics Board certificate number – H11-02649.

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Acknowledgements

To the brave men and women who work the front line to keep Canada safe.

Behind the front line: Stressors and coping in Border Services Officers

Chapter I: Introduction

Research in high stress occupations has found that first responders such as police are susceptible to high levels of stress due to the dangerous nature of their work. Workers in these fields are exposed to potentially traumatic situations such as armed conflict, motor vehicle crashes, and witnessing violence (Anshel, 2000; Noblet, Rodwell & Allisey, 2009). The perceptions that these jobs are stressful have been documented not only in research but in the form of books, television shows and movies.

Border Services Officers (BSO) working for the Canada Border Services Agency (CBSA) find themselves facing the same types of stressors. In a typical week officers across Canada examine over 105,000 travellers, seize contraband worth over 7 million dollars, remove over 250 inadmissible people and seize on average $780,000.00 of undeclared currency (CBSA, n.d.). However, there has been little research conducted on customs and immigration officers and in particular BSOs in regards to occupational stress. This research attempts to look behind the front line that the officers protect to explore their occupational stress.

Border Services Officers

Border Services Officers (BSOs) are federal law enforcement agents and designated peace officers employed by the Canada Border Services Agency (CBSA). BSOs are responsible for enforcing the customs act, immigration legislation; the criminal code of Canada as well as over 90 other Acts of Parliament (CBSA, n.d.). They are given the task of being vigilant against all threats to Canada's sovereignty, which can include terrorism, smuggling of prohibited weapons, proceeds of crime and narcotics. As

immigration officers they are to prevent the admission of individuals who are perpetrators of war crimes, involved in illegal migration, members of organized crime, or have serious criminal convictions (CBSA, n.d.). These officers are working in dynamic environments with a tremendous amount of responsibility riding on the decisions they make. BSOs are working in environments where security supersedes all other considerations. However, they must balance national security concerns with facilitating the movement of goods in trade relations. BSOs have the added pressure of a Canadian public who are relatively unaware of the CBSA and the work that it has been done to strengthen and protect Canada's border (CBSA, 2007).

BSOs can work at locations which operate 24 hours a day 7 days per week with some offices and ports of entry found near major centres while others are in more rural areas (CBSA, 2009). BSOs work in a variety of environments that have the inherent risk of serious injury or assault in the course of their duties. These potential risks can arise from persons being detained, working in remote locations or from contact with hazardous goods or contagious diseases in the course of searching people and examining their conveyances and personal effects (CBSA, 2009). In some instances officers may deny entry to people under the Immigration and Refuge Protection Act or refuse goods under the Customs Act, which may involve changing travel plans, which creates additional interpersonal dynamics with the travelling public.

BSOs deployed at a port of entry may talk with over 250 travellers during their shift. Furthermore they are dealing with a public that has to talk to them regardless if they have committed an offense which leaves BSOs in situations where the public feels that they have been targeted and profiled (CBSA, 2007). This high level of contact with pubic

has been shown to be problematic for some customs officers (Prunier-Poulmairet al.,

1998).

Canada Border Services Agency

      The CBSA is a federal agency which employees approximately 13,000 people

across Canada at 119 land border crossings, inland offices, mail centers, marine

operations, and international airports (CBSA, 2007). Since its inception in 2003, the

CBSA has been an important piece in the Public Safety portfolio as it combines the

Customs program, Citizenship and Immigration and the Canadian Food Inspection

Agency (CBSA, n.d.). CBSA provides integrated border services, which support national

security and public safety and balancing these needs against the free flow of goods and

people. The CBSA is currently an organization in transition and is a relatively new

agency, which emerged from the aftermath of the tragedy of 911.

Statement of Problem

      The primary purpose of this research was to identify Border Services Officers'

level of occupational stress with the additional goal of identifying the sources as well.

Thus practical implications for this study on Border Services Officers level of stress is

important as a proactive measure for the officers' health, their families well being, and

their ability to perform their duties. The literature on occupational stress appears to have

missed this portion of the population, which the researcher views as important, as

guarding a country's border can be a stressful endeavor (Alexander & Walker, 1996;

Kop, Euwema, & Schaufeli, 1999; McCreary & Thompson, 2006).

      A preliminary study on Border Services Officers seems timely as on August 19,

2010 The Washington Post reported that the United States Border Patrol Agency has

witnessed an increase in officer suicides since February 2008. There have been 15 reported suicides in the last 2 years which is a twenty year high ("Increase in suicides", 2010). Although this is an extreme example of what can happen when officers feel they cannot cope, it is important to start a dialogue by first understanding Border Services Officers' level of occupational stress.

Significance of the Study

Coyne and Racioppo (2000) suggested that there was a gap between clinical practice and making stress and coping research applicable in clinical practice situations. They suggested that clinicians used measures that were tailored for specific problems and were likely to capture the relevant information, which would aid the clinician. Thus research on BSO's level of stress may contribute to our academic knowledge by not only identifying stressors but educating counselling professionals who can assist officers in the field. The study can contribute to officer awareness of the issue and provide information to counselling professionals who could potentially be proactive in dealing with officer stress and avoid burnout or maladaptive coping.

First, this study will examine a population that has not been previously researched and thus has the potential to generate new knowledge about this population of law enforcement. Second, understanding BSO stress may help CBSA management gauge what stressors are affecting BSOs and move toward more psychoeducation on stress which could provide a mechanism for alleviating potential issues in the future (Kagan, Kagan & Watson, 1995). Finally, by identifying officers' stressors this research may help continue the dialogue of bridging the gap between stress research and clinical practice by

providing new information on an underrepresented population in the literature (Burke, 1998; Lazarus, 2000).

Chapter II: Literature Review

The etiology and effects of stress will be reviewed as well as some of the definitions of stress. This review will discuss components of occupational stress and briefly summarize some of the main theories surrounding occupational stress and the impacts on both the employer and employee. The discussion will then move toward occupational stress and first responders and the varying opinions on whether first responder occupations are more stressful than other types of occupations. The dialogue will continue in the context of years of service and gender differences. It will include reports of occupational stress from first responders in specific areas including customs officers and firefighters and self-reports of occupational stress. The review will conclude with the types of stressors reported and negative outcomes for both the individual and their families in regards to coping strategies.

Etiology of Stress

Stress has been defined as the interaction between an individual and their environment. Selye (as cited in Berry, 1998) defined stress as a generalized body response which is an individual's response to stressors which are either physical or psychological. The stressors are the conditions that bring on the stress, which can be a circumstance, an incident or entity. The stress can be viewed as either positive (eustress) or negative (distress). Therefore certain situations which elicit a moderate stress response and create conditions that are beneficial which is in contrast to higher levels of stress that leads to feelings of overload (Berry, 1998). Thus using these theoretical etiologies of stress it can be viewed as positive or negative and its level moderated by the subjective experience of an individual in the context of their environment.

Selye's General Adaptation Syndrome viewed stress in three distinct phases, which mirror the body's physiological response to stress. The alarm stage involves the autonomic nervous system, which regulates cardiovascular and digestive functions and prepares the body for action. The resistance phase engages the sympathetic nervous system and primes the body's fight or flight response. The final exhaustion phase deploys the parasympathetic nervous system if the stress is continuous, which can result in burnout and poor health outcomes. This view of active and passive responses to stress although accepted at the time now seems limited and incomplete, as it does not allow for individual differences in the evaluation of potential stressful events.

Lazarus and Folkman (1984) felt other processes of stress were just as important as biological processes associated with an organism being taxed by their environment and attempting to respond. They felt the additional processes should include the individual's resources available for coping, their costs and benefits. This highlights an individual's cognitive appraisal of the relationship between environmental inputs and individual's ability to meet, lessen or change the demands with goal of insuring their well-being. Thus, this process is more than just a demand and response dynamic but rather a continuous loop of feedback and appraisal between the individual and their environment. It must take into account the characteristics of the person and the disposition environmental event. Therefore when an individual feels psychological stress it is not an objective measure but rather their cognitive appraisal of their resources available to meet the environments demands.

Occupational Stress

Occupational stress has been viewed as a construct that contains a variety of variables which has lent itself to a number measures that focus on physical health, psychological health, anxiety, job satisfaction and locus of control (Duraisingam, Pidd & Roche, 2009). There have been additional theories on occupational stress such as the Person –Environment Fit Theory, which asserts that occupational stress occurs when the available resources and demands of work environment do not match the capabilities and goals of the employee which leads to poor health outcomes (Berry, 1998). There are several other theories such as the stressful life events model and the facet model but it is important to note that the majority of theories have overlap. In general they view occupational stress as an individual's interaction with the environment and that the stressor causes a physiological response which can lead to active coping or negative outcomes such as disengagement coping strategies or physical illness.

Occupational stressors can include environmental factors such as temperature, noise level, physical danger, and physical demands. These elements may manifest as physiological stressors in an individual or may create psychological stress based on the level of discomfort or threat experienced by the individual (Baker, 1985). The content or duties of the job can be characterized as stressors, which could be factors such as workload and shift work as well as organizational factors such as management and the individual's role in the organization (McCreary & Thompson, 2006).

Occupational stressors have been viewed in the context of employee experience, which have been classified as role conflict, role ambiguity and role overload (Berry, 1998). Role conflict arises when there is an incongruence between an individual's role of

their job and the view taken by others in their work environment. Role ambiguity occurs when an individual is left uncertain or unclear of how to complete a task. Lastly, role overload is when an individual experiences quantitative overload or qualitative overload (Berry, 1998). Thus looking at the variety of classifications of occupational stress one could expect the type of stressor and the level of stress experienced to vary from each type of occupation and organization.

Occupational Stress in Canada

In 2006 Health Canada commissioned a report to access the costs of work stress. The researchers conducted a meta-analysis of work stress research and found that 38% of Canadian workers were slightly stressed at work, 25% were relatively stressed at work, while 5.4% were extremely stressed. The researchers found increases in sick days as a result of mental health issues. They were able to categorize the potential cost to employers when the employees suffering from stress were present or absent from work. Present employees increased costs by errors in judgment, conflict resolution costs, low quality of work and stress related workplace accidents. Absent employee costs were associated with sick days, EAP program, increased burden on colleagues' quantitative stress and replacement worker costs. Employees that experience prolonged exposure to occupational stress had ramifications for the employer, as there was an increase in absenteeism, turnover and poor productivity.

Effects of Occupational Stress

Burnout has been found to be one of the negative outcomes in terms of the psychological impact from prolonged exposure in the work environment. It is defined using three different elements, which include feeling emotionally drained, negative

callous attitude, and negative evaluations of work accomplishments. It has been identified as a concern in particular occupations, which are providing services directly to the public (Kop, Euwema, & Schaufeli, 1999). These negative outcomes impact both employee and employer. Employees experiencing high levels of stress can have implications for the employer on two fronts first; lower job satisfaction can lead to poor job performance and lower productivity. Second, job satisfaction has been identified as a key component in predicting employee commitment, which can be linked to employee turnover (Duraisingam et al., 2009). However these stressors impacted the employees who experienced negative outcomes which included feelings of depression, a sense of failure, fatigue and loss of motivation (Kop et al., 1999).

Healthcare Workers. Duraisingam et al., (2009) conducted a study using surveys which measured working conditions, work stress, job satisfaction, turnover intention and key demographics of over 1,300 drug and alcohol workers in Australia. The researchers found that high stress had a negative impact on employee commitment to their employer. Individuals who experienced high levels of stress tended to report lower levels of job satisfaction. The researchers found the significant predictors that precipitated employee turnover were low job satisfaction, high work stress, low workplace social support and a pessimistic point of view towards compensation.

Nurses. McVicar (2003) conducted a meta-analysis to identify nurse's perceptions of workplace stress with the goal developing ways of reducing workplace stress and guide future research. McVicar used CINAHL, MEDLINE and COCHRANE databases to search for articles from January 1985 to April 2003 with key words which included nursing, stress, distress, stress management, job satisfaction, coping and staff

turnover. He found that workload, inadequate staffing levels, time pressure and relationships with colleagues and management, shift work, dealing with patient needs, and lack of rewards as the major workplace stressors. This research is important to mention as nursing although not directly related to officers or other first responders still involves a high level of training, working in teams and dealing with stressful situations involving the public. They are dealing with some of the same issues in regards to balancing their duties with goals of the organization and the needs of the public.

First Responders and Occupational Stress

The literature has shown that various types of first responder occupations such as policing have a variety of stressors associated with their work. For example the first type of stressors identified in policing was related to the various tasks and duties related to the day to day responsibilities of an officer which included threats of violence, physical harm, and facing unknown dangers. The second type of stressors were related more toward the organization which consisted of management style, poor communication, lack of resources, and staff shortages (Kop et al., 1999; McCreary & Thompson, 2006). This research suggested that the context in which police officers performed their duties were the greater sources of job stress than the duties themselves. It has been noted that certain aspects of first responders' work were known to be highly stressful which included the high demands and low control of the work in the context of frequent contact of the general public. However, it should be noted that officers and first responders may feel a moderate level of stress in the course of their work which is not necessarily harmful as it can keep them safe when accessing dangerous situations (Anderson, Litzenberger & Plecas, 2002)

These occupational stressors can lead to a variety of issues such as burnout, low productivity and poor performance in carrying out duties. In terms of comparison of other first responders firefighters would be placed in the category of highly stressful jobs. They are expected to work varying shifts and work under similar types of quasi military structures and must respond to emergencies and interact with the general public in the course of carrying out their duties (Pendelton, Stotland, Spiers & Kirsch, 1989). It should be noted that not all researchers feel that first responders experience higher levels of stress as compared to other occupations. They suggest that the research has face validity and upon closer inspection the measures used to capture occupational stress levels have yet to yield any clear results.

Varying Opinions on First Responder Stress

Kop et al., (1999) conducted research on 358 Dutch police officers who completed self report questionnaires to explore the type of stressors they experienced as well as comparing officers level of burnout to other occupations, and explored the interaction of lack of reciprocity on burnout and whether burnout increased officer violence. The researchers found that officers reported similar types of organizational and operational stressors as other studies and in general the officers reported policing as a rewarding experience. They discovered that the officers' reported levels of burnout (using Maslach Burnout Inventory), which the researchers viewed as an indication of prolonged work stress, were much lower than the reference sample of 4,000 workers in human services (e.g., nurses, doctors, mental health workers, and social workers). They concluded there were no differences in the police officers' levels stress as compared to other occupations. The researchers contributed their findings to Dutch officers having

more time to decompress stressful events and they concluded that police officers had a lot of administration tasks so they were not under constant pressures as compared to other human services workers.

The researchers cited occupations such as nursing and teaching as having to deal with more stress and stated that police had sufficient gaps between their interactions with public and were able to recuperate faster. Furthermore they felt that police officers were a self selected group which meant they may not be as susceptible to stress. A third possibility was that the officers did not properly report their level of stress as they have been taught to suppress emotional problems such as an inability to cope with stress. A fourth issue could be related to the officers' work environment at the time the study was conducted. Dutch officers usually worked in pairs and did not wear bulletproof vests.

In addition to these issues raised by the researchers there were additional concerns as they did not use an empirically tested stress measure but rather constructed a stress measure using additional biographic variables such as age, gender, rank and work experience. Thus more sound constructs and methods of capturing occupational stressors may have yielded different results, as construct validity is the bases for all sound research.

Comparing Occupations and Stress

Pendelton et al., (1989) studied police, firefighters and municipal workers to compare self-report of stress and the various health and social problems associated with stress. The researchers chose municipal employees as they felt they were a similar group as they had the same employer, worked in the same city and were subjected to the same civic regulations. The municipal employees included clerks, parks department workers,

drivers, labours, and accountants. The researchers found that police officers reported the highest levels of occupational stress, followed by municipal workers and then firefighters. The firefighters were found to experience on the job anxiety and showed prevalence of violence while drinking.

Although the researchers found that municipal workers generally suffered more strain due to job stress they did conclude that first responder jobs were less stressful but rather they attracted individuals who we were able to cope with the higher levels of stress. It was noted that in first responder occupations such as fire fighting and policing that the applicants were subjected to physical and mental evaluations to ensure they were up for the daily tasks. The researchers made the conclusion that police officers' jobs were more stressful but they did not experience more health and social problems than other occupations that they sampled.

These conclusions made by the researchers raise some concern as the sample used by the researchers included white males from age 35 years and younger. Thus it is possible that police officers may have experienced higher levels of strain but were not yet prevalent in the population sample due to relatively young age and years of service. It has been shown that poor coping and health outcomes tend to be reported more as the officers' years of service increases (Gershon, Lin & Li, 2002).

Police Officers and Occupational Stress. The context of police stress is one that mirrors that of traditional job stress but the difference is that in most instances officers are dealing with acute stress, which stems from extreme or unusual sources. In these instances officers are expected to make the correct decision to keep themselves and the public safe while still dealing with threat. These acute stressors could include factors such

as making an arrest, verbal confrontations with public, and dealing with unknown threats (Alexander and Walker, 1996). The stressors can include organizational stressors related to management style, organization restructuring, office work and emotionally demanding situations. These stressors have been shown to have a negative impact on police officers such as burnout and an increase in violent behaviour (Kop et al., 1999). These stressors can also have an impact on the officers' lives outside of work.

Alexander and Walker (1996) surveyed 400 spouses who were married to police officers working in the North East of Scotland. The purpose was to determine the influence that police work had on their families and martial relationships b**y** asking the spouses the amount to which they believed their partners were experiencing stress, any adverse affects on the family, and its impact on the marital relationship. The researchers found that many of issues raised by the spouses were associated with organizational factors such as lack of resources, time pressures, and lack of communication, long hours, shift work, and staff shortages, which were associated with the highest levels of stress.

Police officers in their study mentioned some operational stressors such as conducting an arrest, dealing with a violent person, and appearing for court. However, it was clear that the primary source for police officers' stress stemmed from factors associated with the organization. In addition situations which were considered acute stressors were seen as non-violent which included shift work, overtime, paperwork and the physical demands of the job such as carrying heavy equipment. These factors had a compounding effect and were viewed as more likely to create acute stress.

Occupational Stress and Canadian Police. Taylor and Bennell (2006) conducted stress research on 154 Ontario police officers using McCreary and

Thompson's Organizational Police Stress Questionnaire-PSQ-Org and the Organizational

Police Stress Questionnaire-PSQ-OP. Their goals were to determine how much actual

stress the officers felt rather than examining perceived stress, which has been a hallmark

of past research on law enforcement. They wanted to examine potential demographic and

moderators of police stress in the hopes of filling a gap in research by examining active

Canadian police officers.

Taylor and Bennell (2006) distributed surveys through the department mail server

and provided a link for officers to complete the questionnaires on-line. The results

indicated that none of the stressors caused a great deal of stress but they did find that

organizational stressors were rated as more stressful than operational ones. Demographic

data related to gender, rank, marital status, children, exercise and alcohol use where not

found to be significant moderators of stress. However, age, the presence of health

problems, education level and the degree of job satisfaction were significant moderators.

Younger officers reported more stress than older officers and officers with health

problems felt more stress than those who reported good health. Furthermore officers who

were less satisfied with their with their job reported more stress and officers with a high

school diplomas were significantly less stressed compared to those who had university

degrees.

Customs Officers in Other Countries. Prunier-Poulmair, Gadbois and Volkoff

(1998) examined customs officers employed by the French customs service to examine

how the effects of shift work and job demands impacted the physical health of the

customs officers as well as the effects on their families and social lives. The researchers

identified three variables, which they felt accurately captured the officers' experience.

The variables identified were "physically demanding job, "conflicting relations with travelers" and "boring monotonous job."

The researchers noted that there were a number of aspects to the job which were demanding for customs officers. However, the "conflictual relations with travellers" factor was rated as higher than the other two factors in regards to negative impact on their health. Although the differences were not found to be significant conflictual relations played a role in officer experiencing cardiovascular, sleep and digestive problems. In addition this discord with public resulted in stressful confrontations, which were related to more frequent reports of hypertension. Thus this research suggests that customs officers' jobs are stressful with interpersonal interactions with public at the top end of the demand scale.

Older Officers and Occupational Stress. Gershon, et al., (2002) explored the impact of psychosocial work stress on the health outcomes and coping of 105 aging police officers 50 years of age or older working for an urban police force in the United States. The officers were asked to fill out a voluntary survey during roll call and had 1,106 respondents and took a subset of 105 officers over the age of 50. They found that officers who perceived work stress had poor health outcomes stemming from poor coping strategies, which included alcohol abuse, gambling, depression and aggressive behaviour. However, they found that older officers did not have perceived levels of higher stress with the organization which has been found with previous research (Kop et al., 1999; McCreary & Thompson, 2006). The researchers theorized that this difference could be associated with officers being able to adapt to different management styles.

It should be noted that officers with more years of service reported less stress. However, these differences were not explained thoroughly in the research only that older officers coped with stress by drawing on past experiences. For example, dealing with an intoxicated person may seem fairly stressful for new officers. However, for older officers the repeated nature of some the operational tasks exposed them to situations that provided more experience to draw upon when assessing potential threats (Gershon, et al., 2002).

In contrast Kop et al., (1999) found that older officers (many years of service) felt more emotionally drained when they felt that there was a lack of reciprocity from their colleagues and organization and that inexperienced male officers were found to be more cynical and prone to use violence. Goto (2006) found differences with Royal Canadian Mounted Police (RCMP) members who had less than 10 years of experience. These officers indicated that threats against themselves, family and friends as stressful compared to members with more than 10 years who identified armed violent arrests as most traumatic.

Gender Differences and First Responder Occupational Stress. Law enforcement has been traditionally a male gendered occupation but it is now a viable career option for women. This shift in gender demographics within this realm of first responders has led researchers to ask the question of whether there are gender differences in occupational stress. The results suggest gender differences and occupational stress in first responders have been mixed. In most instances gender differences have not been found but this does not necessarily mean that there are no differences. Findings could have been influenced by small samples, unequal samples or social factors such as female

officers taking on the same role as their male counterparts of suppressing emotional problems such as an inability to cope with stress (Kop et al., 1999).

     Female Officers in the United States. Norvell, Hills and Murrin (1993) conducted a study of 52 female officers and compared them with 52 male officers who worked for the highway state patrol. The female and male officers were matched up based on the female participants' variables, which were age, marital status, years of experience, job title, and education. The participants were given a number of assessment measures which included a demographic questionnaire, Perceived Stress Scale (PSS), the Job Descriptive Index (JDI), the Cohen-Hoberman Inventory of Physical Symptoms (CHIPS), the Daily Hassles Scale (DHS), and the Maslach Burnout Inventory (MBI).

     The researchers were able to find gender differences as the male officers reported higher levels of perceived stress, emotional exhaustion and greater dissatisfaction with their work compared to females. However they were only able to partially confirm that female officers experienced higher levels of perceived stress in relation to dissatisfaction with co-workers. This stressor may be traced back to gender-related jokes which have been found in other studies to account for significant levels of female officer stress (Kurtz, 2008). Although this was not a clear distinction between genders it is important to note that researchers' attempted to create an equal comparison in regards to their sample populations and were able to find some differences indicating that more gender differences may emerge in future research.

     Female Officers in the Netherlands. Kop et al., (1999) did not produce any differences in gender in regards to emotional exhaustion, depersonalization, or personal accomplishments. These findings could be due to sampling as the respondents for the

Dutch study were primarily male representing 83% of the sample. The authors have suggested that because policing was viewed as a highly male charged environment that female officers may have suppressed admissions to emotional problems or that it might suggest better coping by female officers. However, they did find that male officers were more likely to have a positive view toward using violence with males behaving more violently than females. Prunier-Poulmair et al., (1998) reported some gender differences in their study of French customs officers, which found that female officers reported poor health outcomes that included musculoskeletal problems and digestive symptoms. Female officers reported that they took more medication, which included painkillers and antidepressants.

Female Officers in Canada. Goto (2006) conducted a study on 92 Royal Canadian Mounted Police (RCMP) members, which was comprised of 73 male and 19 female officers working in the Lower Mainland of British Columbia. The officers were given a number of self report measures to determine the prevalence of Post Traumatic Stress Disorder (PTSD) and its symptoms using demographic data which included gender and years of service. In addition she captured how officers coped with the stressors of their work. The measure included The Police Stress Survey, State-Trait Anxiety Inventory, Self-Rating Scale for Post Traumatic Stress Disorder, Impact of Events scale and Coping Scale. Goto found some gender differences as male officers rated actual and potential violence against themselves, family or friends as most stressful. In contrast female officers viewed car accidents and witnessing sudden death as the most stressful.

Female Firefighters. Murphy, Beaton, Cain and Pike (1994) conducted a study on fire fighters' reports of job stress and the symptomology of the experience. The

sample included only 41 females out of sample of over 700 fire fighters who were asked to mail in surveys. The researchers asked the participants to rate how "bothersome" the following items were to them over the previous 10 days. The factors consisted of impacts to personal health, which were defined as sleeping patterns. The additional factors appeared to be characterized as duty related which were job skill concerns, safety and organizational factors, which related to quality of equipment, wages and benefits.

The results indicated that female fire fighters reported significantly higher levels of stress than males on one factor, which were "job skill concerns." Although the researchers did not find much difference across all factors it is important to note that stress around ability to do the work could be central focus for female firefighters within their cohort as well as within the public, as the job is physically demanding. However, there are concerns in regards to construct validity as the participants were asked to rate items as 'bothersome" which mirrors concerns of previous research using the same wording which suggested that the construct being measured was job satisfaction rather than occupational stress (Lord, Gray and Pond , 1991).

Measuring First Responder Occupational Stress

The majority of first responders' stress has been measured using quantitative approaches. Past research has highlighted the importance of understanding the population that is being studied to ensure the research methods do not create an increase in the participants' burden. Furthermore measures used should have construct validity to capture accurate data with the understanding that self-report measures have limitations.

Response Burden. Gershon et al., (2002) used a five page survey to collect demographic and psychosocial data on their population, concentrating the four constructs,

of stress outcomes, coping, stressors and perceived stress. The questionnaires took about 20 minutes to complete and were given to officers before they started their shift, during roll call. This is an important point to note when conducting research with police and other first responders as that they may be already burdened with additional operational tasks and thus the idea of providing and additional administrative task such as a questionnaire could only add to their perceived stress. Thus, the measure should be long enough to capture the necessary data but not so long to create increased burden for the participants.

Canadian Police. McCreary and Thompson (2006) noted that previous occupational stress measures such as the Occupational Stress Indicator, Job Stress Scale, and ASSET (A Shortened Stress Evaluation Tool) although common methods for measuring general occupational stress failed to capture unique stress associated with higher stress occupations. In addition, other measures such as the Police Stress Survey and Daily Hassles survey contain over 60 items which could create additional burden to sample populations. However, self reports are not the only methods that have been used to quantify police officers stress.

Physiological Measures. Anderson et al., (2002) investigated the assumption that police work is stressful with the goal of building on past self-report measures. Their aim was to gather physical evidence that measured the officers' physiological reactions during the course of their duties. The study used a random sampling of 76 general duty police officers in British Columbia who were wearing heart monitors. The data was captured during 76 full shift ride-alongs using self-report, observations and autonomic nervous system monitoring. The researchers found that the officers experienced both

physical and psychosocial stress. In addition to stress on the job they noted that officers suffered from anticipatory stress at the start of each shift. However, this type of stress was transient and appeared to dissipate after a few minutes once the officers were able to properly gauge that there was no threat.

Construct Validity of Stress Measures. Lord, et al., (1991) examined the psychometrics of the Police Stress Inventory (PSI) to empirically evaluate its convergent and discriminate validity. The researchers used a sample of 245 North Carolina officers who averaged a range of 7 to 10 years of service. The researchers found the measure was not accurately measuring police officer stress and could not draw any conclusion as to whether police officers experienced higher levels of stress in their other occupations. They felt that the PSI was a better measure of job satisfaction than police stress. Further factor analysis found that the four subscales did fit into the model and accounted for almost 40% of the variance.

In addition, the individual items mirrored items on other police officer stress questionnaires, which cover both duty related and organizational related stressor. The key issue appeared to be construct validity, as the measure used the word "bothersome" when asking officers to rate items on the scale. Thus the questions relates to what one views as the construct of stress. Does bothersome properly reflect the construct? The researchers changed the scale range from three points to five and changed a few of the items and concluded that measure was more suited toward the construct of job satisfaction rather than police stress. It would have been possibly more beneficial to change the wording from bothersome to having officer rate things about their job they found stressful.

Effects of Occupational Stress on Police and First Responders

Kop et al., (1999) found that although the officers viewed their work as stressful, there were some aspects of the work which were rewarding as well which included positive interactions with the public. However, there were some additional negative consequences, including depression, burnout and cardiovascular disease, back pain and insomnia (Gershon et al., 2002). Furthermore, there can be an impact on the people who are close to the first responder as sometimes occupational stress can spill over into their personal lives. Jackson and Maslach (1982) studied 142 police couples and found that officers who reported high levels of burnout were more likely to have behaviours that impacted negatively on their home life. The spouses reported unhappy marriages and that the officers were aggressive and disengaged from household and family related situations.

Stress and Coping

Organizations can contribute considerable amounts of financial and organizational resources in the initial training of officers and other first responders. Thus it seems imperative for researchers to identify stressors and specific sources of stress with the goal of shifting toward more proactive approaches to manage occupational stressor rather than officers resorting to disengagement coping strategies. Disengagement coping such as the consumption of alcohol, food and tobacco are well known methods of trying to reduce stress in first responder culture (Alexander, 1996). However, these stressors can lead to poor productivity on the job and eventually for some to leave their profession (Anshel, 2000; Duraisingam et al., 2009; Gershon et al., 2002)

Burke (1998) found that officers who experienced stress and did not use passive coping such as keeping one's temper were more likely to use disengagement coping strategies which included alcohol, drugs, and withdrawal from loved ones as compared to officer who used more adaptive coping strategies. In addition to these poor coping strategies, officers resorted to smoking and overeating or unhealthy food choices (Gershon et al., 2002). It is important to know how first responders cope with stressors as it has been found that officers who used disengagement coping strategies were five times more likely to report perceived work stress than officers who used strategies that were more based on engagement coping strategies such as problem solving (Gershon et al, 2002).

Burke (1998) conducted a study on 391 men and women employed in police work using anonymous questionnaires, which had multiple item scales analyzing well-being outcomes and psychosomatic symptoms. The population reported as 85% married, 95% male and in the early stages of their careers with one third of the sample working for less than six years. The results suggested that officers who used more escapist coping reported more work-family conflict and more psychosomatic symptoms. In contrast, officers utilizing more active coping techniques reported an indirect effect on work-family conflict through officers using less escapist coping. Furthermore, officers who used active coping resulted in officers having a positive effect on their level of job satisfaction. The results suggest that using proactive educational interventions to guard against poor coping strategies by officers experiencing stress may reduce the use of maladaptive coping, psychosomatic symptoms, work-family conflict and increase job satisfaction.

Reducing Stress

Grossman, Niemann, Schmidt, and Walach (2004) conducted a meta analysis on 20 reports gathered from indexes which included Medline, PsychInfo and Digital Dissertations, Psyndex Plus, Web of Science. Their goal was to explore the effectiveness of structured group programs called Mindfulness-based stress reduction (MBSR) which used a systematic approach and the here and now experience of mental process to help individuals improve their abilities to cope with everyday stressors of daily life. MBSR was an 8-10 week program, which used up to 40 participants.

The intention was to have clients accurately perceive their moment to moment reaction to stimuli, which were internal and external and assumed that this awareness of mental processes would create effective actions toward managing their stress, which would lead to a greater sense of control. The goal was to generate greater awareness of accurate perceptions, which would lead to a reduction of negative affect and augmentation of exuberance and coping. The researchers avoided using studies that did not clearly state the types of interventions they employed, that failed to quantify health outcomes, had poor statistical analysis and did not use MBSR as the main component in the intervention. The studies included individuals from a variety of clinical populations (e.g., pain, cancer, heart disease, depression, and anxiety), as well as stressed non-clinical groups. The researchers found that MBSR training might augment an individual's ability to cope with daily life stress. These results highlighted the potential benefits of stress reduction programs and how they may be helpful to people by providing a proactive means of dealing with stress.

Psychoeducation and Stress Reduction in First Responders

Kagan et al., (1995) conducted a 3 year study on 373 emergency services personnel working at a municipal fire hall to examine the psychoeducational prevention models for job stress reduction. Their focus was to determine whether populations of workers in highly stressful first responder roles could experience a reduction in their stress levels using relatively low cost psychoeducation programs and interventions. The intervention programs were delivered by two male and two female counsellors and provided short programs that utilized one of three strategies which were progressive muscle relaxation (Program M), Interpersonal Process Recall (Program I) or crisis intervention strategies (Program A).

The researchers conducted a pretest, posttest and follow up test to determine the effectiveness of the four psychoeducational programs (M, A, I, M& I, M & A & I, A & I, and M & A) that were six weeks in length. The researchers used a battery of tests (Beck Depression Inventory, Occupational Stress Inventory, Maslach Burnout Inventory, State Trait Anxiety Inventory and the Kagan Affective Sensitivity Scale) to try and capture their operational definition of work stress. They found that there was a significant reduction in stress from levels before training through follow-up for all measures. Thus the researchers concluded that psychoeducation can have immediate short term effects but can also last over time. They concluded that psychoeducation does not necessarily have an additive effect but rather an interaction, as the combination of Interpersonal Process Recall and crisis intervention strategies appeared to have the greatest success in reducing work stress.

Research Question

The purpose of this research was to identify if Border Services Officers were experiencing low, moderate or high levels of stress in relation to other first responders? This would be determined after the study was conducted by comparison with the literature. Did officers experience the same types of stressors as other police agencies and first responders? What coping strategies were the officers using?

Hypotheses

What types of stressors would be identified by the officers as the most stressful? Hypothesis 1: It was expected that officers would report organizational stressors (e.g. staff shortages, lack of resources, and dealing with supervisors) as more stressful than operational stressors (e.g. paperwork, balancing personal time, shift work).

Was there a difference between the types of stressors reported by male and female officers? Hypothesis 2: It was expected that there would be a difference between the types of stressors that male and female officers report.

Did officers with more years of service experience higher or lower levels of stress? Hypothesis 3: It was expected that officers with less than 3 years of service would report higher levels of stress than officers with more than 3 years of service.

Did officers who were armed experience more or less stress than unarmed officers. Hypothesis 4: It was expected that there would be a difference.

Hypothesis 5: It was expected that officers that experienced higher levels of stress would use more maladaptive ways of coping (e.g. substance abuse, alcohol, denial) as compared to engagement coping (e.g. planning and seeking social support). Did the officers who were experiencing stress use engagement or disengagement coping.

Chapter III: Methodology

Design

A total of 150 packages were distributed to officers and a total of eighty-three respondents completed a stress package including the demographic questionnaire (Appendix C), the Organizational Police Stress Questionnaire-PSQ-Org (Appendix A) and the Operational Police Stress Questionnaire-PSQ-OP (Appendix B). The survey method was a quantitative design to help capture levels of stress experienced by the target population. This approach yielded data, which was both objective and scientific using a deductive process, which allowed for inferences to be made from the general to the specific.

The survey method related to the research question directly as the researchers were attempting to determine if BSOs felt occupational stress and how they quantified it. It was viewed as a practical way to obtain information on the target population, which was economical on the researchers' time and the participants. The survey and questionnaires captured a large amount of demographic information, which was used for statistical analysis to report means and for the regression model to determine interactions of the variables which were years of service and gender.

Limitations of Design. Using a survey only captured answers to specific questions, which suggested that the researchers may have missed important information that could have been captured using qualitative measures. However, the researchers tried to address this concern by providing open-ended questions in the demographic questionnaire. An additional concern arose with individuals working in these occupations as there was the potential of response bias related to social desirability, which could have

been problematic when dealing with first responders who are use to suppressing their

emotions (Kop et al., 1999). However, the officers were provided the opportunity to

complete the questionnaire anonymously which allowed for more expression of emotion.

Lastly, a self-administered surveys did not give the participants the opportunity to ask

clarifying questions. However, the researchers were available to the participants by phone

email or in person and thus were able to minimize this concern.

    Self-Report Measures. Spector, Dwyer and Jex (1988) agreed that self-report job

stress research had shown that it could generate data, which supported negative impacts

on the worker. However, they felt the method of purely relying on self-report surveys left

issues in regards to conclusions, which could be drawn from the data collected. They felt

that researchers were operating under the assumption that self-reports of employees were

a valid and accurate measure of the work environment.

    Spector et al., (1988) conducted a study to test the convergent validity of self-

report stress measures. The researchers conducted multitrait-multimethod study using two

sources, which were the self reports subordinates on their work stress levels and their

supervisors reporting on their perceptions of their employees' level of stress. The goal

was to investigate the convergent and divergent validities of self-reports on job stress.

The results found both convergent and discriminate validity of the variables measured

which found support for validity of using self reports in evaluating job stress. Thus the

researchers concluded that the method of using questionnaires would not confound the

results due to method factors provided the measure had both high reliability and construct

validity. These findings were relevant to the present study as the stress measures used had

both high reliability and construct validity using a variety of questionnaires and open-ended questions as well.

Lazarus (2000) viewed questionnaires as a first step in research and not as a final step in understanding all aspects of a target population's experience of occupational stress and coping. It only provided analysis of the surface, which made it difficult to capture contextual situations in which stress and coping occurred. Although there were some limitations the surveys and questionnaires used provided a method of looking at larger sample in current study.

Procedures

Participants. The participants were a convenience sample of Border Services Officers working as front line officers who had direct contact with the public on the daily basis at ports of entry land crossings in Western Canada. The data set consisted of a representative sample of the population of participants working at the border crossings, which included male and female officers from diverse ethnic, religious backgrounds and varying years of service.

The officers were notified of the study by posters posted in the staff lunch room and were asked to check their mail slots for further information (Appendix, F). The surveys were distributed through the office mailroom to all officers working the front counter and primary inspection line at the ports of entry in Western Canada. Each officer received a sealed envelope with the following stapled together in the following order; letter of introduction (Appendix E) the demographic questionnaire (Appendix C), coping scale (Appendix D) and the PSQ-OP (Appendix B) and PSQ-Org. (Appendix A). The subjects were asked to read the introduction letter, which outlined the reasons for the

study, explained confidentiality and informed consent. They were then instructed to fill out the survey and questionnaire and place the completed package into an additional envelope provided and drop their responses in the box labeled "UBC survey response box" which was located in the mailroom. The box was checked and the responses collected by the researcher daily.

The nature of shift work for BSOs made it difficult to ensure all officers were given the chance to respond to the survey, as there a were total of nine teams working at different locations which rotated from day to night shift. The surveys were collected over a two-week period. The goal was to have fifty responses but when the number surpassed fifty those additional responses were included in the data analysis. The number used mirrored the research of McCreary and Thompson (2006) who used 47 Ontario Provincial police in one of their research studies when developing their measure.

Prior to conducting the survey the researchers obtained verbal consent to conduct the study from the Chief of Operations at each port of entry with the support of the District Director. The researchers consulted with president of the union chapter in the district in which the study was conducted. The union president had no concerns in regards to purpose or methods of the research. Each group was given a copy of the research proposal to read and provide feedback.

Measures

Demographic Questionnaire. The participants were asked to fill out a demographics questionnaire (Appendix C) that captured information that helped describe the population sample (age, gender, years of service, family status, and level of education). In addition it captured number of interactions with travellers and had open

ended questions for officers to provide feedback in their own words about work stress and their methods of coping.

  Stress Measure. The psychological measures, which the researcher had identified for use in the current study, were the Operational Police Stress Questionnaire (PSQ-Op) and the Organizational Police Stress Questionnaire (PSQ-Org). McCreary and Thompson (2006) developed the items for the questionnaires after conducting focus groups with 55 Ontario Provincial Police from a variety of regions across the province of Ontario. The focus groups provided details of the common types of stressors that the officers faced and allowed the researchers to capture the information. The two measures that were developed reflected the two sources of stress that were identified by the officers.

  Researchers categorized the PSQ-Op as operational stress, which encompassed the day to day duties of the officers, and the PSQ-Org as organizational stress, which represented the organization, and the cultural context in which they carried out their duties. The PSQ-Op and PSQ-Org were developed by the researchers as it had been shown that individuals who were in first responder occupations such as policing could experience higher levels of stress (Noblet, Rodwell & Allisey, 2009). In addition traditional measures such as the Occupational Stress Indicator, used to capture occupational stress by looking at job satisfaction, mental health and locus of control, were viewed as insufficient in capturing the unique stressors of police work (McCreary & Thompson, 2006).

  The measures consisted of two sets of questionnaires containing twenty questions each for a total of forty items. The questionnaire could be given together or independently. In this case both portions of the questionnaire were administered. The

types of items in the PSQ-Org (Appendix A) had questions that focused on areas such as excessive administrative duties, policy changes, bureaucracy, lack of training, staffing levels and management styles. The items on the PSQ-Op (Appendix B) outlined other potential stressors such as shift work, public expectations, managing their personal lives and fatigue (McCreary & Thompson, 2006).

The questionnaires first explained to the participants that the following items described different aspects of being an officer. They were then instructed to rate how much stress each item has caused them recently (McCreary & Thompson, 2006). The items were scored on a 7-point scale that ranged from 1, which represented "no stress at all", 4, which represented "moderate stress", and 7 which represented "A lot of stress." The PSQs were scored by summing or averaging the twenty items from each to create separate PSQ-OP and PSQ-Org scale scores (McCreary & Thompson, 2006). For the purpose of this study a not applicable (NA) option was added as it was possible that not all items may have resonated with BSOs and thus did not force them to answer on any particular item (Taylor & Bennell, 2006).

Discriminate validity. McCreary and Thompson (2006) conducted another study on 197 active duty police officers from a variety of regions of Ontario, which included both federal and municipal policing agencies. The researchers' goal was to determine the discriminate validity of PSQ-Op and PSQ-Org and whether their scores correlated with general stress measures. It was expected that there would be some shared variance between PSQ-Op and PSQ-Org with other stress questionnaires. However, it should have not been large enough to suggest that they are measuring the same construct.

The participants completed the PSQ-Op and PSQ-Org along with three additional

stress measures which included Perceived Stress Scale (PSS), short form of the Daily

Hassles Scale and the Negative Life Events Scale. The researchers had made a slight

change to the instructions from the previous study which had asked how much stress each

item has caused then in the past 6 months (McCreary & Thompson, 2006). The

researchers changed the last 6 months phrase with the word recently. The participants'

scores were averaged into separate scores with higher scores indicating higher levels of

perceived stress.

        The item scores for both PSQ-Op and PSQ-Org ranged from 1-7 with the

majority scoring moderately from 3-5. The PSQ-Op was found to share its variances with

other three general stress measures ranging from 12% to 30%. The PSQ-Org was found

to share 7% to 22% of its variance with the three general stress measures. The researchers

conducted a t-test between the total scores for both PSQ-Op and PSQ-Org and found that

organizational stressors were considered significantly more stressful than operational

stressors. Cronbach alpha for PSQ-Op and PSQ-Org were .92 and the corrected inter-item

correlations for the PSQ-Op ranged from .39 to .70 and .43 to .71 for the PSQ-Org.

This study showed that the PSQ-Op and PSQ-Org were reliable measures of

police stress because of their high Cronbach alphas and corrected item-total correlations.

They shared some variance with other general stress measures. However, the amount of

shared variance was low and thus pointing to strong discriminate validity with measures

of general stress.

Construct validity. McCreary and Thompson (2006) conducted an additional

study on 47 Ontario Provincial Police officers to test the initial reliability of the PSQ-OP

and PSQ-Org. The goal was to determine the construct validity of the measure and the initial reliability of the two measures. The expectation was that there should be some correlation between the two measures but not so high that they are measuring the same construct. In addition they wanted to measure the frequency of each item so the participants were asked to complete the same questionnaire but a different Likert scale ranging from "not at all frequently" to "very frequent." The responses for both questionnaires were averaged for individual scores for stress and frequency with high scores indicating greater frequency and level of stress.

The items for both PSQ-Op and PSQ-Org were rated as moderately stressful with an average score of 3.47 for PSQ-Op and 3.80 for PSQ-Org. The researchers conducted paired-sample t-test and found that organizational stressors were perceived to be significantly more stressful than operational stressors for this group of officers. A bivariate correlation coefficient was calculated and found that PSQ-Op and PSQ-Org were significantly and positively correlated (r=.60, p < .01) which meant they shared 36% of their variance. Cronbach's alpha reliability for PSQ-Op was .90 and for the PSQ-Org was .89. Thus it was clear that there was overlap of the measures but it still appeared small enough to conclude that they were not measuring the same construct but rather organizational and occupational stress separately. McCreary and Thompson's research was important, as it provided a reliable quantitative measure that was developed with a target population of police officers that had the potential to be used in other law enforcement agencies like the CBSA.

Coping Measure. The COPE has five scales, which assessed the different ways in which individuals responded to stress. The five scales included problem focused

coping, emotion focused coping the last three scales focused on more maladaptive ways of coping (e.g., venting of emotions, behavioural disengagement, mental disengagement) (Carver, Scheier, & Weintraub, 1989). The COPE scale had been used in previous research to help capture various types of officer coping strategies.

Goto (2006) used this scale to capture adaptive and maladaptive coping strategies related to stress on 92 Royal Canadian Mounted Police (RCMP) officers. The adaptive coping was defined as items such as active coping, planning and seeking social support. The maladaptive coping was defined as venting emotions, denial, mental disengagement and substance abuse. Goto found no gender differences in regards to coping as both male and female officers used more maladaptive coping strategies (substance abuse, venting emotions, mentally disengaging) rather than adaptive coping strategies(active coping, planning, seeking social support). She found that the more stress officers felt the more they used social support.

The Brief Cope scale was used in the present research to examine with demographic data as well as the levels of stress reported. Carver (1997) developed the Brief Cope as it was found the original COPE created more of response burden to medical populations who were being studied because of its length.

The measure included 28 items, which measured 14 different coping strategies, which were generally viewed as either adaptive or problematic. The goal of this measure was not to provide an overall coping index but to determine what types of coping the officers used in general and in relation to variables. The scales on the Brief Cope (Appendix, D) included the following; self-distraction (1 and 19) active coping (2 and 7) denial (3 and 8) substance use (4 and 11), use of emotional support (5 and 15) use of instrumental support

(10 and 23) behavioural disengagement (6 and 16) ,venting (9 and 21), positive reframing (12 and 17) planning (14 and 25), humor (18 and 28),acceptance (20 and 24) religion (22 and 27) and self-blame, (13 and 26) (Carver, 1997). For the purposes of the current study the researchers grouped the items it three different coping strategies which were engagement coping (Items 2,7,12,14,17,22.25,27) social support (Items 5,10,15,23,25,27) and disengagement (Items 1,3,4,6,8,9,11,13,16,18,19,20,21,24,26,28).

Engagement coping was viewed as taking active steps toward managing stress and included problem-focused and emotion-focused strategies such as cognitive restructuring. Disengagement coping was focused on evading feelings of stress, and included strategies such as avoidance denial, behavioural disengagement and substance use.

 Analysis

The demographic questionnaire data was used to generate descriptive statistics (i.e., means standard deviations, correlations) of the participants, which included age, sex, and years of experience. The total score for each measure was compared to the results with other studies for comparison on stress, gender differences, years of service and types of coping. Analysis of Variance (ANOVA) was computed to determine gender differences, armed versus unarmed and years of service on stress level and coping strategies used. The researchers conducted an Analysis of Variance (ANOVA) to determine whether organizational stressors were perceived to be significantly more stressful than operational stressors which was found in previous research (Kop et al., 1999; McCreary & Thompson, 2006).

Ethics

The participants worked in an environment where they had to follow specific procedures and were notified of items such as training and surveys that they must complete through their interoffice mail. Thus the participants may have felt that it was mandatory to complete the survey because it was placed in their mailbox as a requirement of the organization. However, the participants were informed that participation in the study was voluntary and that they could decline to participate. The researchers made a conscious decision not to include officers who were involved in administrative duties and specialty areas which meant that this group of officers did not have the opportunity to provide their input. In addition the officers were under time constraints to complete paperwork in the course of performing their duties. Therefore asking them to take time to reply to a questionnaire may have created increased burden to their activities.

Chapter IV: Results

Quantitative Data

The demographics consisted of the eighty one male and female Border Services

Officers working at land border crossings in Western Canada. There were a total of

eighty three packages returned but the data from two packages were not included because

they were incomplete. The age of the officers ranged from twenty years of age to forty

years of age and above with 83% between the ages of twenty to thirty-nine years old.

Male officers made up 57% of the sample and females 43%. The cultural composition

was primarily comprised of three groups which included Caucasian (63%), South Asian

(12%) and East Asian (13%). Many of the officers were in a relationship with a

significant other with 47% reporting being married and 22% in common-law

partnerships. The balance reported that they were either single 21% or separated 5%. It

was established that 50% had one child or more while the remainder reported having no

children. The years of service was comprised of 79% of officers having more than 3 years

of service and 21% having less than 3 years of service (See table 1). The officers

disclosed that 40% (20 male, 13 female) were armed with a duty pistol while 60% (26

male, 22 female) were not (See table 2).

The first hypothesis stated that officers would report organizational stressors (e.g.

staff shortages, lack of resources, and dealing with supervisors) as more stressful than

operational stressors (e.g. paperwork, balancing personal time, shift work). The

occupational stress measures did not yield any significant results as officers reported a

moderate level of stress on the PSQ-Org, organizational stress ($M = 4.16$, $SD = .99$) and

the PSQ-Op, operational stress ($M = 3.70$, $SD = 1.05$). See table 3. In addition, the

officers were asked to provide their current work week stress measure rating on a scale of

1-10 which also resulted in a moderate level of stress as well ($M = 5.34$, $SD = .44$). See

table 4.

Table 1
Demographics

Variables		N	Percent
Age	20-29	31	38.3
	30-39	36	44.4
	40 and above	14	17.3
Gender	Male	46	56.8
	Female	35	43.2
Ethnicity			
	Caucasian	55	63.3
	South Asian	10	12
	East Asian	11	13.3
	First Nation	1	1.2
	African	1	1.2
	Other	5	6
Current Relationship			
	Single	17	21
	Separated	4	4.8
	Common-law	18	22.2
	Married	38	46.9
	Other	4	4.9
Number of Children			
	None	41	50.6
	One or more	40	49.4
Religious Identification			
	Hinduism	2	2.4
	Sikh	8	10
	Christian	31	38.8
	None	38	47.5
Years of Service			
	Less than 3 years	17	21
	More than 3 years	64	79
Number of interactions with Travelers per day	0-99	2	2.5
	100-199	15	18.8
	200-299	34	42.5
	Over 300	29	36.3
Education			
	High school or equivalent	3	3.7
	Some post secondary	31	38.3
	Bachelors or equivalent	44	54.3
	Some graduate school	2	2.5
	Graduate school or higher	3	3.7
Armed with duty pistol			
	Yes	33	40.7
	No	48	59.3

Table 2
Demographics by Gender

Variables		Male N	Female N
Age	20-29	18	13
	30-39	19	17
	40 and above	9	5
Current Relationship	Single	11	6
	Separated	4	0
	Common-law	6	12
	Married	22	16
	Other	3	1
Number of Children	None	23	18
	One or more	23	17
Years of Service	Less than 3 years	9	8
	More than 3 years	37	26
Number of interactions with travelers per day	0-99	0	2
	100-199	10	5
	200-299	23	11
	Over 300	13	16
Education	High school / Equivalent	2	1
	Some post secondary	18	13
	Bachelors /equivalent	24	20
	Some graduate school	0	0
	Graduate or higher	0	1
Armed with duty pistol	Yes	20	13
	No	26	22

Table 3
Occupational Stress

Measure	M	N	SD
PSQ-Op/Organizational Stress	4.16	81	.995
PSQ-Op/Operational Stress	3.70	81	1.05

Table 4
Occupational Stress by Gender

Measure	Variable	N	M	SD
Organizational Stress	Male	45	4.21	1.09
Organizational Stress	Female	35	4.08	.88
Operational Stress	Male	45	3.76	1.07
Operational Stress	Female	35	3.70	1.05
Weekly Stress	Male	40	5.48	2.42
Weekly Stress	Female	31	5.16	2.31

The participants were compared by gender to observe if there were differences pertaining to levels and types of stress. The second hypothesis stated that there would be a difference between the types of stressors that male and female officers reported. There were no significant differences for organizational stress or operational stress between male and female officers (See table 4).

The third hypothesis stated that officers with less than three years of service would report higher levels of stress than officers with more than 3 years of service. There were no significant differences found (See table 5).

Officers who were armed with a duty pistol were compared with officers who were not yet armed to establish whether armed officers encountered higher levels of stress. The fourth hypothesis stated that there would be differences. There were no significant differences found (See table 6).

A correlation matrix was used to determine relationships between the PSQ-Org, PSQ-Op and weekly stress and the type of coping mechanisms that officers used which were categorized as engagement, disengagement and social support. The fifth hypothesis stated that officers that experienced higher levels of stress would use more disengagement coping (e.g. substance abuse, alcohol, denial) as compared to engagement coping (e.g. planning and seeking social support). There was a significant correlation between operational stress and engagement coping $r = .28$, $p = < .05$ and operational stress and disengagement coping $r = .35$, $p = < .01$ (See table 7). Organizational stress was significantly correlated with disengagement coping only $r = .26$, $p = < .05$ indicating that officers who used more disengagement coping felt more organizational stress.

Table 5
Occupational Stress Years of Service

Measure	Variable	N	M	SD
Organizational Stress	less than 3 years	16	3.68	1.08
	more than 3 years	63	4.27	.96
Operational Stress	less than 3 years	17	3.60	.97
	more than 3 years	62	3.76	1.07
Weekly Stress	less than 3 years	15	4.40	1.76
	more than 3 years	55	5.55	2.37

Table 6
Stress Differences Armed Versus Unarmed Officers

Measure	Variable	N	M	SD
PSQ-Org	Armed	33	4.22	.829
	Not Armed	47	4.11	1.11
PSQ-Op	Armed	33	3.80	.90
	Not Armed	47	3.68	1.15
Weekly Stress	Armed	27	5.44	2.44
	Not Armed	44	5.27	2.21

Table 7
Correlations Between Stressors and Coping Strategies

	PSQ-Org	PSQ-Op	Weekly Stress	Social Support	Engagement	Disengagement
PSQ-Org	1	.664**	.394**	-.033	.091	.261*
PSQ-Op		1	.328**	.104	.281*	.353**
Weekly Stress			1	.290	.369	.264
Social Support				1	.668**	.087
Engagement					1	.315**
Disengagement						1

*$p < .05$, 2-tailed. **$p < .01$, 2-tailed.

An additional correlation matrix examined the relationship between gender, coping strategies, the PSQ-Org and the PSQ -Op. For male officers there was a significant correlation with PSQ-Org and weekly stress $r = .42$, $p = < .01$ and the PSQ-Op and weekly stress $r = .36$, $p = < .05$. In addition male officers reported using disengagement coping, which was significantly correlated with all three stress measures PSQ-Org $r = .32$, $p = < .05$, PSQ-Op $r = .43$, $p = < .01$, and weekly stress $r = .32$, $p = < .05$ (See table 11). In contrast for female officers, engagement coping was significantly related to the PSQ-Org $r = .41$, $p = < .05$ and the PSQ-Op $r = .53$, $p = < .01$. For female officers engagement coping was significantly correlated with social support $r = .67$, $p = < .01$(See table 12).

Ad Hoc Analysis

An ad hoc t-test analysis was conducted to examine the mean scores of the individual item mean scores on both PSQ-Org and PSQ-Op to determine which items were significant by gender. Item four on the PSQ-Op which was labeled as "Risk of being injured on the job" was significantly different with female officers rating it higher ($M = 3.54$, $SD = 1.40$) than male officers ($M = 2.80$, $SD = 1.42$) $p = <.05$ (See table 8). The PSQ-Org also had some individual items whose mean scores were scored higher than the total mean score. Item six labeled "staff shortages" had a mean score that was the highest across all items for male officer and female officers (See table, 8). In addition item twelve on the PSQ-Op labeled "fatigue" was rated as the highest stressor by both male and female officers with female officers rating it higher ($M = 5.37$, $SD = 1.57$) than the male officers ($M = 5.16$, $SD = 1.50$). See table 9.

Table: 8
PSQ-Org Gender Differences by Item

Item	Male	Female
1. Dealing with co-workers	3.49	3.26
2. The feeling that different rules apply to different people (eg favouritism)	4.96	4.74
3. Feeling like you always have to prove yourself to the organization	4.31	4.86
4. Excessive administrative duties	3.70	3.41
5. Constant changes in policy/legislation	4.05	4.09
6. Staff shortages	6.07	5.74
7. Bureaucratic red tape.	5.02	5.18
8. Too much computer work	2.70	2.69
9. Lack of training on new equipment	4.29	3.83
10. Perceived pressure of volunteer free time	2.49	2.12
11. Dealing with supervisor	3.78	3.69
12. Inconsistent leadership style	5.51	5.09
13. Lack of resources	5.09	4.86
14. Unequal sharing of work responsibilities	5.07	4.46
15. If you are sick or injured your co-workers seem to look down you	2.83	2.53
16. Leaders over-emphasise the negatives (e.g. supervisor evaluations, public complaints)	5.61	5.29
17. Internal investigations	4.45	4.72
18. Dealing with court system	3.35	3.45
19. The need to be accountable for doing your job	3.25	3.71
20. Inadequate equipment	4.29	3.74

Table 9

PSQ-OP Gender Differences by Item

Item	Male	Female
1. Shift work	4.71	4.62
2. Working alone at night	2.46	2.59
3. Over-time demands	3.91	3.51
4. Risk of being injured on the job	2.80*	3.54*
5. Work related activities on days off (e.g. court, community event)	2.19	2.50
6. Traumatic events (Motor vehicle accidents, death, injury)	2.55	2.55
7. Managing your social life outside of work	4.22	4.24
8. Not enough time available to spend with friends and family	4.98	4.80
9. Paperwork	3.42	3.17
10. Eating healthy at work	4.36	4.00
11. Finding time to stay in good physical condition	4.69	4.63
12. Fatigue	5.16	5.37
13. Occupation-related health issues (e.g. Back pain)	4.21	4.40
14. Lack of understanding from family and friends about your work	3.67	3.69
15. Making friends outside the job	3.53	3.62
16. Upholding a "higher image" in public	3.50	3.20
17. Negative comments from the public	3.93	3.54
18. Limitations to your social life (e.g. Who you friends are, where you socialize)	3.95	3.54
19. Feeling like you are always on the job	3.64	3.14
20. Friend/ family feel the effects of the stigma associated with your job	2.68	2.83

*p < .05

Table: 10
Coping Scale Gender Differences by Item

Item	Male	Female
1. I've been turning to work or other activities to take my mind off things.	2.02	2.03
2. I've been concentrating on doing something about the situation I'm in	2.24	2.09
3. I've been saying to myself "this isn't real.".	1.17	1.06
4. I've been using alcohol or other drugs to make myself feel better.	1.59	1.29
5. I've been getting emotional support from others.	1.96	2.00
6. I've been giving up trying to deal with it.	1.52	1.50
7. I've been taking action to try to make the situation better.	2.52*	2.09*
8. I've been refusing to believe that it has happened.	1.17	1.14
9. I've been saying things to let my unpleasant feelings escape.	1.91	1.80
10. I've been getting help and advice from other people.	2.07	2.06
11. I've been using alcohol or other drugs to help me get through it.	1.48	1.20
12. I've been trying to see it in a more positive.	2.43	2.14
13. I've been criticizing myself.	1.83	1.89
14. I've been trying to come up with a strategy about what to do.	2.35	2.26
15. I've been getting comfort and understanding from someone.	2.09	2.14
16. I've been giving up the attempt to cope.	1.35	1.18
17. I've been looking for something good in what is happening.	2.13	2.11
18. I've been making jokes about it.	2.65*	2.06*
19. I've been doing something to think about it less, such as going to movies, watching TV, etc.	2.52	2.26
20. I've been accepting the reality of the fact that it has happened.	2.48	2.06
21. I've been expressing my negative feelings.	2.46	2.29
22. I've been trying to find comfort in my religion or spiritual beliefs.	1.28	1.23
23. I've been trying to get advice or help from other people about what to do.	2.11	2.03
24. I've been learning to live with it.	2.37	2.35
25. I've been thinking hard about what steps to take.	2.37	2.23
26. I've been blaming myself for things that happened.	1.50	1.46
27. I've been praying or meditating.	1.33	1.31
28. I've been making fun of the situation.	2.43*	1.86*

*p < .05

Table 11
Male Officers Correlations Between Stressors and Coping Strategies

	PSQ-Org	PSQ-Op	Weekly Stress	Social Support	Engagement	Disengagement
PSQ-Org	1	.667**	.428**	-.176	-.134	.327*
PSQ-Op		1	.364*	-.005	.078	.430**
Weekly Stress			1	.175	.278	.329*
Social Support				1	.690**	.008
Engagement					1	.239
Disengagement						1

p< .05, 2-tailed. ***p< .01,* 2-tailed.

Table 12
Female Officers Correlations Between Stressors and Coping Strategies

	PSQ-Org	PSQ-Op	Weekly Stress	Social Support	Engagement	Disengagement
PSQ-Org	1	.658**	.336	.198	.414*	.065
PSQ-Op		1	.287	.261	.539**	.225
Weekly Stress			1	.423*	.485	.081
Social Support				1	.675**	.208
Engagement					1	.435**
Disengagement						1

p< .05, 2-tailed. **p< .01,* 2-tailed.

The individual items on the coping scale were scored by gender and compared to see if there were differences. Item number seven labeled "I've been taking action to try to make the situation better" was significant with male officers using this coping strategy more ($M = 2.52$, $SD = 1.02$) than female officers ($M = 2.09$, $SD = 1.02$,) $p = < .05$. Two additional items showed significance which included item eighteen labeled "I've been making jokes about it". Male officers rated this item higher ($M = 2.65$, $SD = .99$) as compared with female officers ($M = 2.06$, $SD = 2.06$) $p = < .05$. Item twenty-eight labeled "I've been making fun the situation" was used by male officers more frequently ($M = 2.43$, $SD = 1.03$) than female officers ($M = 1.86$, $SD = .87$) $p = < .05$ (See table 10).

Qualitative Data

The participants were asked to answer opened questions on the demographic questionnaire (See Appendix C) as the researchers felt that it would provide participants with a means to communicate additional information which may not have been captured by the survey questionnaires. The officers were asked to comment on the following question. Can you comment on a time when you felt stressed about work in past 6 months? What was the stressor? How did you cope? The following themes arose after reviewing the on paper responses provided by the officers. The following themes that emerged were related to organizational stressors and coping strategies.

The two types of stressors identified by the officers appeared to be associated with organizational stress. The first stressor was related to officers' feelings toward management. BSOs expressed concerns with management's lack of support, positive feedback and their limiting of the officers' ability to enforce legislation. Second officers voiced concerns related to inadequate staffing levels causing stress compounded by an

increase in the volume of traffic being processed. The officers expressed concerns that

they felt pressured to complete secondary examinations quickly to make scheduled road

times to facilitate traffic. See quotes below.

> Dealing with different management styles and incompetent supervisors are a
> constant stress, always feel paranoid management is looking for negatives and
> ways to get you on something (Participant 63)

> I would say that there has been a general stress …over what officers perceive as
> their duty to enforce and what management wants to enforce. It can be frustrating
> and stressful when you want to do your job to the best of your ability and you feel
> you are not able to due to pressure from management to keep wait times
> minimal… (Participant 23)

The officers were asked to provide insight in the ways they dealt with situations in

which they experienced stress. They provided feedback which suggested that they used

many different types of coping which included engagement coping, disengagement

coping and social support. In some instances officer appeared to be using a mixed

approach which involved incorporating more than one coping strategy. See quotes below.

> …speak my mind to supervisors. I guess by putting them on the spot this gets rid
> of my stress limit the amount of stress that I take home by having a short talk
> about work at home and then moving to other things work is work and home is
> reality! (Participant 53)

> I usually cope by working out four days a week and jogging, confiding in and
> spending time with close personal friends, talking with family, staying busy while
> at work, talking to my supervisor, planning for changes that I can control as far as
> work is concerned. (Participant 67)

Chapter V: Discussion

The primary objective of this research was to explore Border Services Officers' occupational stress and whether organizational stress was viewed as more stressful than operational stress. The aim was to compare Border Services Officers to other law enforcement agencies in regards to occupational stress and determine the types of coping strategies Border Services Officers used when faced with these stressors.

First Hypothesis

The first hypothesis compared organizational stress (PSQ-Org) versus operational stressor (PSQ-Op) by taking the mean scores and conducting a t-test to determine if the BSOs were experiencing a significant difference between these two types of stress. It was expected that officers would report organizational stressors (e.g. staff shortages, lack of resources, and dealing with supervisors) as more stressful than operational stressors (e.g. paperwork, balancing personal time, shift work).

The occupational stress measures did not yield any significant results as BSOs reported a moderate level of stress on the PSQ-Org, organizational stress ($M =$ 4.16, $SD = .99$) and the PSQ-Op, operational stress ($M = 3.70$, $SD = 1.05$). These moderate reports of stress were similar to results of a previous study which examined 47 Ontario police officers to test the initial reliability of the PSQ-Op and PSQ-Org. The Ontario police posted moderate stress scores with an average score of 3.47 for PSQ-Op and 3.80 for PSQ-Org (McCreary & Thompson, 2006). However, McCreary and Thompson were able to determine that organizational stressors were rated as more stressful than operational ones.

In the current study the differences between PSQ-Org and PSQ-Op were not found. However, an ad hoc analysis was conducted to examine the mean scores of the individual items on both PSQ-Org and PSQ-Op. The scoring of the individual items revealed a pattern of higher mean scores as some items were rated as more than moderately stressful. For example the PSQ-Org, registered a moderate level of stress for all officers (M = 4.16, SD = .99). In contrast item six, labeled "staff shortages" on the PSQ-Org had the highest mean score for all organizational stressors with male officers registering the higher mean score (M = 6.07) than female officers (M = 5.74). See table 8. This finding seems consistent with other research on organizational stressors and law enforcement. In one study four hundred spouses who were married to police officers working in the North East of Scotland were surveyed. The researchers found that many of issues raised by the spouses were linked with organizational dynamics such as lack of resources, time pressures, shift work, and staff shortages, which were associated with higher levels of officer stress (Alexander & Walker, 1996).

Item twelve on the PSQ-Op labeled "fatigue" had the highest mean score for operational stressors by both male and female officers with female officers having the a higher mean score (M = 5.37) than the male officers (M = 5.16). See table 9. These individual item scores appeared to be higher when compared to mean score on the PSQ-Op, operational stress measure which registered a slightly lower than moderate level of stress (M = 3.70). This implied that officer may have been feeling some operational stress in regards to fatigue. In addition it suggested the possibility that BSO were experiencing more than moderate levels of stress in both their organizational and operational tasks. It

seemed clear that some of individual items resonated with officers and yielded higher stress ratings.

Although officers reported moderate levels of stress on the PSQ-Org and PSQ-Op the researchers were aware that they might not have captured all the issues that BSOs navigated on the daily basis. The opened questions on the demographic questionnaire (See Appendix C) were supplementary in the hopes of encapsulating information that was not captured on the stress measures. In some instances questionnaires have been viewed as a first step in the research process and not as a final step in understanding all aspects of target population's experience of occupational stress and coping (Lazarus, 2000). Thus researchers found that the opened questions provided deeper insight into the types stressors the officers experienced and gave officers the opportunity to expand on the issues by adding a contextual layer.

The officers were asked to comment on a time when they felt stressed about work in past 6 months. What was the stressor? How did you cope? The hand written response suggested that the officers were feeling stress in a few key areas, which were, characterized as organizational stressors specifically related to management and staff shortages.

The officers who responded to the opened questions provided statements that appeared to be directly related to management as causing the majority of the stress. As one officer stated;

> I would say that there has been a general stress …over what officers perceive as their duty to enforce and what management wants to enforce. It can be frustrating and stressful when you want to do your job to the best of your ability and you feel you are not able to due to pressure from management to keep wait times minimal….

This comment seems to mirror the responses to item sixteen "Leaders over-emphasize the negatives" and item twelve "Inconsistent leadership style" on the PSQ-Org which were scored as high stress items for male and female officers (See table 8).

The officers additionally reported a lack of appropriate staffing levels to help manage an increasingly busy port of entry. One officer shared his feelings when he stated "…with minimal staff. There is pressure to examine quickly and make decisions quickly because of the volume and low staffing…" These reactions seem to lend support to item six, labeled "staff shortages" which had a mean score that was the highest stressor by mean score across all items on either scale (See table 8). These same issues were found with nurse's perceptions of workplace stress. The researchers found that workload, inadequate staffing levels, time pressure and relationships with colleagues and management, shift work, dealing with patient needs, and lack of rewards were all major workplace stressors (McVicar, 2003).

The opened ended question responses suggested that BSOs felt that management gave little or no consideration for the officers' job satisfaction or support but rather were motivated to only move traffic through the port of entry. BSOs expressed a feeling that management was sacrificing the officers' duty to do their job in exchange for keeping border wait times at a minimum. As one officer stated "Everyday stressors are the total lack of support from middle and senior management to let us enforce the laws, rules and regulations of the legislation we swore to... the stress of being treated like kids who need to be watched and micro-managed…." This stressor seemed to be compounded by the increase in the volume of travellers entering Canada and the lack of officers on the floor

to help deal with increased workload. This sentiment was echoed in one officer's feedback "This compound w/ low staffing numbers and expectation to deal with increased traffic in the same way as pervious with same # of staff." It appeared that BSOs were being asked to do more with less staff and they felt that there was little support from management which contributed to BSOs feeling stressed. It become apparent that they were caught between what they were sworn to do and what they were being directed to do by management.

These mixed results relate to research by Spector, Dwyer and Jex (1988) who found that self-report job stress research has shown that it can generate data, which was shown in the current study. However the method of purely relying on self-report surveys left issues in regards to conclusions, which could be drawn from the data collected. They felt that researchers were operating under the assumption that self-reports of employees were valid and accurate measures of the work environment. They concluded that method factors associated with using questionnaires would not confound the results provided the measure had both high reliability and construct validity. Their research findings were relevant to the present study as the PSQ-Org and PSQ-Op had both high reliability and construct validity. In addition the qualitative data seemed to support that officers were experiencing some of the stressors embedded in some the items. However, the individual items used to create each construct may not have properly reflected the work environment of a Border Services Officers which may have contributed to the insignificant results.

The researchers concede that it was possible that there were other issues that may have contributed to the lack of significant differences between organizational stressors

and operational stressors in the current study of BSOs. One issue was related to the

construct validity of the PSQ-Org and PSQ-Op. The measures were developed using

sample populations of Royal Canadian Mounted Police and Ontario police which

suggested that the constructs may not have overlapped with the duties and roles of Border

Services Officers as first thought. The examination of the individual items indicated that

BSOs scored high on certain items on each scale. However, the low scores on items that

did not relate to BSO duties may have caused the mean scores to be lower.

For example item ten on the PSQ-Op, "Perceived pressure to volunteer free

time", registered low mean scores for both male officers (M=2.49) and female officers *(M*

$= 2.69$) which suggested that this was not generally part of a BSOs duties (See table 9).

Item two on the PSQ-Op "Working alone at night" also had low mean scores for both

male officers ($M = 2.46$) and female officers ($M = 2.59$). This appeared accurate in this

instance as the ports that were part of the study generally had four to five officers

working during a graveyard shift. Therefore working alone at night was never a cause for

concern. Item five on the PSQ-Op "Work related activities on days off" was scored as a

low stressor with male officers scoring it lower ($M =2.19$) compared to female officers

($M = 2.59$). See table 9. The rating on this item looked accurate as BSOs generally had

cases which were immigration or customs related that were dealt with at the port of entry

and were usually completed during their regular working hours. It was less common for

BSOs to attend court on a regular basis as compared to municipal or federal policing

agencies who primarily dealt with criminal code offences.

A second possible reason for the insignificant results could be traced back to the

population itself. The researchers were examining a population that was self selected to

enter an occupation with known stressors. Therefore the items that may have registered as stressful to the general population did not translate as stressful to this population. Kop et al., (1999) conducted research on 358 Dutch police officers who completed self report questionnaires to explore the type of stressors they experienced as well as comparing officers level of burnout. They concluded that police officers were a self selected group which meant they may not have been as susceptible to stress.

Pendelton et al., (1989) examined police, firefighters and municipal workers and compared self-report of stress and the various health and social problems associated with stress. They speculated that first responder occupations attracted individuals who were able to cope with the higher levels of stress and noted that in first responder occupations such as fire fighting and policing that the applicants were subjected to physical and mental evaluations to make certain they were fit for duty. The researchers concluded that police officers jobs were more stressful but they did not experience more health or social problems than other occupations that they sampled.

A third possibility could have been that BSOs experienced higher levels of stress based on the day of the week, their day of the week where they were in the weekly shift to rotation. BSOs that were deployed at the ports of entry sampled typically worked five days on three days off rotating between evenings, day and graveyard shifts. Therefore it was likely that on officer that worked their fifth day in a row during an evening shift on a Saturday night, which was typically the busiest period, would have experienced higher levels of stress than an officer working their first day back on a Monday morning dayshift.

A fourth possibility could be related to occupational stressors in the context of employee experience, which has been classified as role conflict, role ambiguity and role overload. This seems to be embedded in the BSOs written responses which indicated that BSOs were subjected to more than just organizational and occupational stress. Role conflict arises when there is incongruence between an individual role of their job and the view taken by others in their work environment (Berry, 1998). This seems to be the case with officers who felt like they were trained to do one thing and management was asking them to do something else. One BSO stated "I'm working this job to keep my community and country safe. When we are short staffed and do nothing but push traffic for sake of minimizing complaints and expediting traffic…"

Furthermore role ambiguity occurs when an individual is left uncertain or unclear of how to complete a task. As one BSO emphasized in his comments "Had a really good exam I felt I should really pursue it but there was so much pressure from managers to get out on the road…." Thus in some instances officers felt they were being asked to leave exams or finish quickly to in order to make road time to help facilitate traffic through the port of entry which left officers wondering what was more important looking for contraband or facilitating travellers into Canada.

Lastly, role overload occurs when an individual experiences quantitative or qualitative overload. As stated by one officer "A common stressor for me is dealing with high traffic volumes with a low amount of staff." In this case officers who appeared to be describing a quantitative overload working in an environment with minimal staffing levels. In the present study the quantitative overload seems to be based on BSO's perception of low staffing levels. The officers appear to be able to cope well in situations

where they were allowed to do their job and rely on each other for support. However, the additional factors of management style and staff shortages may have caused the officers to feel less in control and unsupported. This may have lead to BSOs disengaging from the situation entirely to exert an internal locus of control (Duraisingam et al., 2009).

Second Hypothesis

The second hypothesis stated that there were gender differences in the type of stressors reported by male and female Border Service Officer. It was expected that there would be a difference between the types of stressors that male and female officers' report. The male officers reported no significant differences for organizational stress ($M = 4.21$, $SD = 1.09$) or operational stress ($M = 3.76$, $SD = 1.07$) including within or between group comparison with female officers who scored moderate levels of stress for organizational stress ($M = 4.08$, $SD = .88$) and operational stress ($M = 3.70$, $SD = 1.05$). See table 4.

This assumption of gender differences was based on previous research which had produced mixed results as studies with unequal groups had found some differences and other studies with more equal numbers of male and female participants had found significant results. Perhaps given a larger sample size of male and female participants there may have been some gender differences found. Norvell et al., (1993) conducted research on 52 female officers who were compared with 52 male officers working for the highway state patrol. The researchers found that male officers reported higher levels of perceived stress, emotional exhaustion and greater dissatisfaction with their work compared to female officers.

The present study did not find any gender differences in regards to total mean scores however the researchers examined the individual items within each scale and found one item which was significant. Item four on the PSQ-Op labeled as "Risk of being injured on the job" was significantly different with female officers rating it higher than male officers (See table 13).

Table: 13
PSQ-Op Gender Differences

Item	Male	Female
Risk of being injured on the job	2.80*	3.54*

*$p < .05$

This difference suggested that female officers may have felt the risk of being injured on the job was greater than male officers. It may have also indicated that they felt less capable to deal with some aspects of the job where injuries could occur such as making an arrest or having physical altercations. However, it could be that male officers were less likely to admit that these situations caused them stress. There were similar findings with other female first responders who reported significantly higher levels of stress than males on one factor, which were job skill concerns (Murphy et al., 1994). Gender differences were found on a sample of Royal Canadian Mounted Police (RCMP) members where male officers rated actual and potential violence against themselves, family or friends as most stressful while female officers viewed car accidents and witnessing sudden death as the most stressful (Goto, 2006).

In addition item six labeled "staff shortages" on the PSQ-Org had the highest mean score across all items with male officers reporting a higher mean score ($M = 6.07$, $SD = 1.28$) than female officers ($M = 5.74$, $SD = 1.52$). See table 8. Furthermore item twelve on the PSQ-Op labeled "fatigue" had a mean score higher than total mean score

than the PSQ-Op for both male and female officers with female officers rating it higher

(M = 5.37, SD = 1.57) than the male officers (*M* = 5.16, *SD* = 1.50). See table 9.

The researchers discovered that male and female officers seemed to mirror each

other's responses in regards to the most stressful items. For example on the PSQ-Org

items six "Staff shortages" (men *M* = 6.07, women, *M* = 5.74), sixteen "Leaders over-

emphasise the negatives" (men, *M* = 5.61, women, *M* = 5.29) and twelve "Inconsistent

leadership style" (men *M* = 5.51, women, *M* = 5.09) were rated not only as the highest by

both male and female officers but were ranked in the same order by both genders. This

same pattern was found on the PSQ-Op with item twelve "Fatigue" (men, *M* = 5.16,

women = 5.37) and item eight "Not enough time available to spend with friends and

family" (men *M* = 4.98, women *M* = 4.80) were rated the highest and ranked in the same

order. Thus it seemed that male and female officers were not only experiencing the same

types of occupational stressors but ranked them in the same order in terms of level of

stress experienced (See table 9).

Third Hypothesis

The third hypothesis was whether officers with more than three years of service

experienced higher or lower levels of stress? It was expected that officers with less than

three years of service would report higher levels of stress than officers with more than

three years of service. The results were not found to be significant as officers reported

moderate stress scores on the PSQ-Org and PSQ-Op and no differences in years of

service. These results were not expected based on previous research which did find

differences.

Gershon et al., (2002) examined the impact of psychosocial work stress on officers' health and coping sampling one hundred and five police officers fifty years of age or older working for an urban police force in the United States. They found that older officers did not have perceived levels of higher stress with the organization which has been found with previous research. The researchers theorized that this difference could have been associated with older officers being able to adapt to different management styles (Kop et al., 1999; McCreary & Thompson, 2006).

Dutch police officers who completed self report questionnaires to explore the type of stressors they experienced reported that older officers (many years of service) felt more emotionally drained when they felt that there was a lack of reciprocity from their colleagues and organization (Kop et al., 1999). Similar differences were discovered in Canada with Royal Canadian Mounted Police (RCMP) members who had less than ten years of experience. These officers indicated that threats against themselves, family and friends as stressful compared to members with more than ten years who identified armed violent arrests as most traumatic (Goto, 2006).

It may have been more useful for the researchers to use age as factor rather than years of service or perhaps increase the years of service to ten years. For example a BSO could have started a new career with CBSA in his late thirties or early forties and still could have been viewed as a newer officer because the three year cutoff did not take into account their life experiences. Gershon et al., (2002), found difference as they used police officers fifty years of age or older and Goto (2006) found differences using ten years of service rather than three years used in the current research which found no differences. The current sample consisted of seventeen officers with less than three years of service

compared to sixty-three officers with more than three years of service. Thus a larger and more even sample size may have resulted in differences being found.

Fourth Hypothesis

Do officers who are armed experience more or less stress than unarmed officers. Officers who were armed with a duty pistol were compared with officers who were not yet armed to determine whether armed officers experienced higher levels of stress. The armed officers reported moderate levels of occupational stress both on the PSQ- Org and PSQ- Op which mirrored the stress levels reported by the unarmed officers which produced insignificant results (See table 6).

Although there were no significant differences in the stress levels of armed and unarmed officers it was important to note that there was a contextual change to the working environment which may have led to this result. In the preliminary stages of the arming progression there was some added accountability for the first few armed officers during the first year as they were limited numbers of armed officers at the ports of entry which resulted in armed officers feeling responsible for the safety of public and unarmed colleagues. It had been almost 5 years since the first officers were armed which meant there were more armed officers on duty. Thus many officers may have gotten comfortable working in an armed environment. In addition CBSA had primarily asked for volunteers to participate in the arming initiative thus this self-selected population went into the process understanding the added stress that went with being an armed officer. However, it would be interesting to examine how the officers who have not yet volunteered feel about being armed and whether the notion of being armed would have caused them stress. Additionally the ports of entry sampled in the current study had a

waiting list of officers willing to be armed but due to seat allotments in their various

regions not all officers could have gone for training. Thus there may be differences in

regions where the volunteer lists have been exhausted.

Fifth Hypothesis

Are officers who are experiencing stress able to cope in an adaptive way? It was

expected that officers who experienced higher levels of stress would use more

disengagement coping (e.g. substance use, alcohol, denial) as compared to engagement

coping (e.g. planning and seeking social support). The researchers looked at the

relationship between weekly stress, organizational stress, and operational stress as

compared to coping styles which included using social support, engagement coping and

disengagement coping. The goal was not to provide an overall coping index but to

determine what types of coping strategies the officers used in general and in relation to

variables.

A Pearson Correlation found that PSQ-Org, organizational stress, was

significantly correlated with disengagement coping $r = .26$, $p = < .05$ (See table 7).

Suggesting that officers used disengagement coping which focused on emotions with the

aim of escaping feelings of distress, and included strategies such as avoidance and

substance use when dealing with organizational stressors. As one officer stated "Research

new careers, self medicate/drink, run long distances, talk to loved ones…." It was

possible that the higher scoring items on the scale were the key stressors for these

officers. For example item six "Staff shortages" (men $M = 6.07$, women, $M = 5.74$), item

sixteen "Leaders over-emphasise the negatives" (men, $M = 5.61$, women, $M = 5.29$), and

item twelve "Inconsistent leadership style" (men $M = 5.51$, women, $M = 5.09$) which were scored as the highest by both male and female officers (See table 8).

PSQ-Op, operational stress, was correlated to both engagement coping $r = .28$, $p = < .05$ and disengagement coping $r = .35$, $p = < .01$ (See table 7). This hinted that officers used both engagement coping and disengagement coping when dealing with operational stressors such as fatigue and shift work which were the highest scored items (See table 9). These finding tied into some interesting patterns of coping in regards to gender.

Male officers had a significant correlation with PSQ-Org and weekly stress $r = .42$, $p = < .01$ (See table 11). There was a significant correlation between the PSQ-Op and weekly stress $r = .36$, $p = < .05$. These finding indicated that male officers experienced both organizational and operational stressors throughout their work week. In addition male officers reported that disengagement coping had significant correlation with all three stress measures PSQ-Org $r = .32$, $p = < .05$, PSQ-Op $r = .43$, $p = < .01$, and weekly stress $r = .32$, $p = < .05$. This proposed that male officers tended to use disengagement coping when experiencing any type of occupational stress.

Gender differences were further explored when looking at some of individual items on the coping scales. PSQ-Org and PSQ-Op scored by gender and compared to see if there were differences (See table 10). A total of three items were found to have significant differences between male and female officers coping strategies. Two items which were categorized as disengagement coping Item eighteen labeled "I've been making jokes about it". Male officers rated this item higher ($M= 2.65$, $SD= .99$) as compared with their female colleagues ($M =2.06$, $SD = 2.06$) $p = < .05$. Item twenty-eight

labeled "I've been making fun the situation" was used by male officers more frequently (M = 2.43, *SD* = 1.03) than female officers (*M* = 1.86, *SD* = .87) *p* = < .05. Thus male officer used disengagement coping, which in this instance was characterized as humor as male officers appeared to be avoid dealing with situation by making light of it.

Although male officers were found to use more disengagement coping there was one additional item coded as engagement coping that they reported using more than female officers as well. Item seven labeled "I've been taking action to try to make the situation better" was significant with male officers using this coping strategy more (*M* = 2.52, *SD* = 1.02) than female officers (*M* = 2.09, *SD* = 1.02,) *p* = < .05. (See table 10). These results suggested that male officers chose to be more active in their engagement coping such as thinking of solutions and taking action.

Female officers had a significant correlation between engagement coping and the PSQ-Org *r* = .41, *p* = < .05 and the PSQ-Op *r* = .53, *p* = < .01 (See table 12). The significant correlation between the engagement coping and the PSQ-Org and PSQ-Op indicated that female officers used more engagement coping and social support which indicated that they used more problem-focused and emotion-focused strategies, such as support seeking, acceptance and cognitive restructuring,

These gender differences seem consistent with previous research as some viewed law enforcement as a highly male charged environment which suggested that female officers reported lower levels of stress because they did not want to admit to having emotional problems or that it might have suggested better coping by female officers which seems to be the case in this sample of BSOs (Kop et al., 1999). Furthermore officers who used disengagement coping strategies, which in the current study were male

officers, were five times more likely to report perceived work stress than officers who used strategies that were more based on problem solving which suggested that female officers had better coping strategies as well (Gershon et al, 2002).

The results seem to match some of the open ended question responses. Many of the BSOs reported that they used social support, engagement coping and some disengagement coping methods when dealing with stressors. In most instances the officers' comments were focused on management as triggering their stress and coping mechanism. However, it is not clear why some BSOs chose to use disengagement coping strategies when dealing with organizational stressors that they reported.

Goto (2006) found both male and female officers used disengagement coping strategies (substance use, venting emotions, mentally disengaging) rather than engagement coping strategies (active coping, planning, seeking social support). As one officer stated "...to cope I attempted to speak with the supervisor to little effect. They were only interested in pleasing management and did not spend time building relationships at work." It became clear that officers used a mixed approached when coping with stressors and that they possibly started with engagement coping strategies but moved to disengagement coping to gain some sense of control.

The researchers would argue that officers used engagement and social support when dealing with situations that were more related to operational stressors because these were the situations that they were trained for. They were taught to rely on each other for back up so it seems natural that they would use social support when faced with stressful situations. However, in the course of doing their operational tasks it was possible that organizational stressors related to management style and staff shortages interfered in

these already stressful situations. As one officer stated "…I then just try to not to care about my job & ignore it, which is difficult when you really care…." The officers use of social support and engagement coping can be viewed as an indication of occupational stress. This trend was found in a sample Royal Canadian Mounted Police (RCMP) members who were surveyed and it was discovered that the more stress the officers felt the more they used social support (Goto, 2006).

The officers used a mixed approach when dealing with occupational stress and it is important to note that using disengagement coping is not necessarily always a bad approach. In contrast an officer using engagement coping may not always be beneficial either. Take for example an officer who disagrees with their supervisor and feels the need to deal with conflict right away. However, this stressor may not necessarily be a changeable situation therefore it might be viewed as beneficial for the officer to disengage rather than trying to address the situation and save themselves further stress.

Summary of Findings

The current research attempted to establish whether of Border Service Officers were experiencing occupational stress and seeking to identify whether they were experiencing higher levels stress from organizational or operational stressors. The PSQ-Org and PSQ-Op were the stress measures used to capture the officers' responses. The results indicated that the officers were subjected to moderate levels of stress. The officers did not report any differences in regards to gender, years of services and being armed or unarmed. Organizational stress was significantly correlated with disengagement coping styles and operational stress was correlated to both disengagement and engagement styles of coping. In addition some gender differences were found in regards to coping with male

officers more likely to use disengagement coping strategies and females more likely to

use engagement coping. The qualitative responses from the open ended questions

suggested that BSOs were experiencing organizational stress related management style

and short staffing and that they were possibly struggling with role ambiguity, role conflict

and role overload related to organizational stressors (Berry, 1998).

Previous research and theory discussed in terms of present findings

Stress has been defined as the interaction between an individual and their

environment. The stressors are the conditions that bring on the stress, which can be a

circumstance, an incident or an entity. Lazarus and Folkman, (1984) felt other processes

of stress were just as important as biological processes associated with an organism being

strained by their ecosystem and attempting to respond. The evaluation should include the

individual's resources available for coping. Therefore, an individual's experience of

psychological stress is not an impartial measure but rather their cognitive appraisal of

their assets available to meet the environments demand. These theoretical etiologies of

stress view it as positive or negative and the level of intensity experienced moderated by

the subjective experience of the individual in the contextual framework of their

environment.

Occupational stress can be viewed as a multifaceted construct which contains a

variety of variables which has lent itself to a number measures that focus on physical

health, psychological health, anxiety, job satisfaction and locus of control (Duraisingam,

et al., 2009). Occupational stressors can include environmental factors such as

temperature, noise level, physical danger, and physical demands. These elements may

manifest as physiological stressors in an individual or may create psychological stress based on the level of discomfort or threat experienced by the individual (Baker, 1985).

Previous research on law enforcement personnel suggested that various types of first responder occupations such as policing had a variety of stressors associated with their work. The types of stressors identified in policing were related to the various tasks and duties related to the day to day responsibilities of an officer and others toward the organization which consisted of management style, poor communication, lack of resources, and staff shortages (Kop et al., 1999; McCreary & Thompson, 2006). This research suggested that the context in which police officers performed their duties were the greater sources of job stress than the duties themselves. In addition research found that first responders used maladaptive coping styles when dealing with occupational stress.

BSOs did offer data to suggest that organizational stressors related to management style and staff shortages were the basis of their occupational stress. The current research found correlations between disengagement coping styles and organizational stress and operational stress was correlated to both disengagement and engagement coping. It discovered the male officers were more likely to use disengagement coping and female officers were more likely to use engagement coping strategies. Although the PSQ-Org and PSQ-Op did not provide significant results the researchers assert that the present study has contributed to research in a constructive way.

First the researchers were able to establish that BSOs experienced the same levels of moderate stress as compared to other law enforcement agencies which was not previously known. Second, the researchers were able to conclude that certain

organizational stressors related to management style and staff shortages were key

contributors to BSOs' occupational stress. Third, a connection between the types coping

and stressor was found as the qualitative data suggested that officers were experiencing

some forms of organizational stress which were related to management and inappropriate

staffing levels and when faced with these stressors the officers used both engagement

coping and disengagement coping strategies. Fourth, gender differences in coping were

found with male officers more prone to use disengagement coping and female officers

more likely to use engagement coping strategies. A fifth point was the suggestion that

officers appeared to be experiencing role conflict, role ambiguity, and role overload in

the contextual framework of their current work which seems to match with the officers

written responses. These findings require further exploration to determine whether

officers are experiencing these same types of issues in other regions of Canada and

service modes.

Limitations of study

The researchers have considered that the measures, PSQ-Org and PSQ-Op, did

not accurately measure BSO stress. This has been identified as an issue in previous

research which examined the psychometrics on a stress measure which was not

accurately measuring police officer stress (Lord et al., 1991). The researchers assert that

the PSQ-Org and PSQ-Op had good convergent and divergent validity but suggest the

possibility that officers may have been feeling higher levels of burnout or low job

satisfaction rather than stress which has been found in other occupations that dealt

directly with the public (Kop et al., 1999).

Suggestions for improvement

The recommendations for future research would be to conduct a factor analysis on the survey items to determine which items seem to be important to Border Services Officers and then use new updated version of the measure to determine whether it captures a larger portion of BSOs' stressors. This would aid with construct validity of the items being measured as it relates to BSOs rather than just police officers. This idea of evaluating measures was suggested in research which used Police Stress Inventory (PSI) where it was found that the four subscales did fit into the model and accounted for almost 40% of the variance (Lord et al., 1991). In addition to fine tuning the items within the measure the method of collecting the data could be improved.

The paper-pencil method used in the present study could be enhanced by placing the survey online and supplying the online link to participants which would allow BSOs to access the survey at their leisure. This use of online data collection would allow for more efficient use of time. It also has the potential for the researchers to capture a greater sample of officers in a variety of modes across Canada (air, land, marine, inland) without being limited by the geographical location of the research team. This was done in previous research by Taylor and Bennell (2006) who conducted stress research on 154 Ontario police officers using Organizational Police Stress Questionnaire-PSQ-Org and the Operational Police Stress Questionnaire-PSQ-OP and distributed the surveys through the department mail server and provided a link for officers to complete the questionnaires on-line.

Implications for future research

The CBSA employs approximately 13,000 people across Canada at 119 land border crossings, inland offices, mail centers, marine operations, and international

airports (CBSA, 2007). It is important to understand what types of stressors Border Services Officers deal with and how they cope. Research has found that those in law enforcement who used maladaptive coping strategies were five times more likely to report perceived work stress than officers who used strategies that were more based on problem solving (Gershon, et al, 2002).

Future research may lead to the Canada Border Services Agency and BSOs becoming proactive in dealing with stress. It seems clear that officers are going to receive stress from a variety of sources so it seems beneficial to educate officers and management on how to proactively deal with stress when it occurs rather than being reactive to maladaptive coping styles that are most likely compounding problems while only providing the officers short term relief. Proactive education in the workplace has been shown to provide some relief for employees who were experiencing stress and could provide a strong foundation for officers to build healthy coping skills.

Alexander, (1996) found officers utilizing more active coping techniques reported circuitous effect on work-family conflict via officers using less escapist coping. The results suggested that using proactive educational interventions to guard against poor coping strategies by officers experiencing stress can reduce the use of maladaptive coping, psychosomatic symptoms, work-family conflict and increase job satisfaction.

One type of educational intervention which might be beneficial was studied by Grossman, et al., (2004) who conducted a meta-analysis to explore the effectiveness of structured group programs called Mindfulness-based stress reduction (MBSR). They found that MBSR allowed clients to accurately perceive their current response to stimuli, and spawn enhanced consciousness of accurate perceptions which might boost an

individual's ability to cope with daily life stress. These results imply that the benefits of stress reduction programs may help people to be more proactive in dealing with stress. Although this was on a civilian population other researchers have found comparable results with first responders.

Kagan et al., (1995) conducted a 3 year study on 373 emergency services personnel working at a municipal fire hall to examine the psychoeducational prevention models for job stress reduction. Their focal point was whether first responders could sense a decrease in their stress levels using relatively low cost psychoeducation programs and interventions. The intervention programs were brief and utilized one of three approaches which included progressive muscle relaxation, Interpersonal Process Recall or crisis intervention strategies. They concluded that there were significant reductions in stress from levels before training through follow-up for all measures. Thus this shows the benefits of proactive stress reduction intervention plans as the interventions were effective, brief and low cost which is something both CBSA and BSOs should consider.

Implications for training

The implications for this research are far reaching for both the CBSA and BSOs. This current study shed some light on a law enforcement population that was not previously researched and could assist CBSA management and BSOs gauge what stressors are affecting them and the agency. It is hoped that it may help continue the dialogue of bridging the gap between stress research and clinical practice by providing new information on an underrepresented population in the literature. It is hoped that this will facilitate a move toward more psychoeducation on stress which could provide a mechanism for alleviating potential issues in the future. These interventions can be brief

and delivered at a moderately low cost to CBSA and can potentially guard against poor coping strategies by officers experiencing stress and may reduce the use of maladaptive coping, psychosomatic symptoms, work-family conflict and increase job satisfaction (Burke, 1998, Kagan et al., 1995). Proactive interventions may also provide communication tool that could help officers deal with management and their colleagues.

Government organizations like the CBSA allocate considerable amounts of capital and organizational resources in the preliminary training of officers and other first responders. Thus it appears imperative for researchers to identify stressors and specific sources of stress with the goal of leading toward more proactive approaches to dealing with occupational stressor rather than it resulting in officers turning to disengagement coping strategies. Disengagement coping such as the consumption of alcohol, food and tobacco are well known means of trying to reduce stress in first responder culture (Alexander, 1996). The research indicates that the psychoeducation can have immediate short term effects but can also last over time. These findings of using proactive work stress interventions and programs provides promise for the current study as the identification of work stressors is a preliminary step in improving BSOs well being and quality of life.

It is possible that in the future BSOs may experience an increase and prolonged exposure to stress as the strong Canadian dollar and lowered daily exceptions help increase the volume of traffic at the various ports of entry. Furthermore the Conservative government has just announced major cuts to the public service which includes CBSA which may further increase the quantitative burden of BSOs. BSOs that experience prolonged exposure to occupational stress could have ramifications for the CBSA, as

there could be an increase in absenteeism, low job satisfaction, turnover, poor

productivity and eventually for some to leave the agency entirely (Anshel, 2000;

Duraisingam et al., 2009; Gershon et al., 2002). The dialogue of occupational stress and

Border Services Officers must continue in order to help improve BSOs' mental health by

helping them understand what stressors they are dealing with and what they can do to

cope in a beneficial way.

It has been suggested that there is a gap between clinical practice and making

stress and coping research applicable in clinical practice situations. They advocate for

clinicians to employ measures for coping that are tailored for specific problems and that

are likely to capture relevant information, which will help clinicians (Coyne & Racioppo,

2000). Thus future research on BSOs' occupational stress and coping may contribute to

our academic knowledge by not only identifying stressors but educating counselling

professionals who can assist officers in the field. It can contribute to BSOs' awareness of

the issue and provide information to counselling professionals who could potentially be

proactive in dealing with officers' stress. It could supply knowledge which may aid future

counsellors who venture behind the front lines and attempt to bridge that clinical gap.

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Appendices

Appendix A

Organizational Police Stress Questionnaire-PSQ-Org

Below is a list of items that describe different aspects of being a peace officer. After each item please circle how much stress it has caused you recently, using a 7 point scale (see below) that ranges from "No Stress At All" to "A lot Of Stress". If the item described does not apply to you please circle the NA for Not Applicable.

No Stress At All			Moderate Stress			A Lot of Stress
1	2	3	4	5	6	7

1	Dealing with co-workers	1 2 3 4 5 6 7 NA
2	The feeling that different rules apply to different people (eg favouritism)	1 2 3 4 5 6 7 NA
3	Feeling like you always have to prove yourself to the organization	1 2 3 4 5 6 7 NA
4	Excessive administrative duties	1 2 3 4 5 6 7 NA
5	Constant changes in policy/legislation	1 2 3 4 5 6 7 NA
6	Staff shortages	1 2 3 4 5 6 7 NA
7	Bureaucratic red tape	1 2 3 4 5 6 7 NA
8	Too much computer work	1 2 3 4 5 6 7 NA
9	Lack of training on new equipment	1 2 3 4 5 6 7 NA
10	Perceived pressure of volunteer free time	1 2 3 4 5 6 7 NA
11	Dealing with supervisor	1 2 3 4 5 6 7 NA
12	Inconsistent leadership style	1 2 3 4 5 6 7 NA
13	Lack of resources	1 2 3 4 5 6 7 NA
14	Unequal sharing of work responsibilities	1 2 3 4 5 6 7 NA
15	If you are sick or injured your co-workers seem to look down you	1 2 3 4 5 6 7 NA
16	Leaders over-emphasise the negatives (e.g. supervisor evaluations, public complaints)	1 2 3 4 5 6 7 NA
17	Internal investigations	1 2 3 4 5 6 7 NA
18	Dealing with court system	1 2 3 4 5 6 7 NA
19	The need to be accountable for doing your job	1 2 3 4 5 6 7 NA
20	Inadequate equipment	1 2 3 4 5 6 7 NA

Appendix B

Operational Police Stress Questionnaire-PSQ-OP

Below is a list of items that describe different aspects of being a peace officer. After each item please circle how much stress it has caused you recently, using a 7 point scale (see below) that ranges from "No Stress At All" to "A lot Of Stress". If the item described does not apply to you please circle the NA for Not Applicable.

No Stress At All			Moderate Stress			A Lot of Stress
1	2	3	4	5	6	7

1	Shift work	1 2 3 4 5 6 7 NA
2	Working alone at night	1 2 3 4 5 6 7 NA
3	Over-time demands	1 2 3 4 5 6 7 NA
4	Risk of being injured on the job	1 2 3 4 5 6 7 NA
5	Work related activities on days off (e.g. court, community event)	1 2 3 4 5 6 7 NA
6	Traumatic events (Motor vehicle accidents, death, injury)	1 2 3 4 5 6 7 NA
7	Managing your social life outside of work	1 2 3 4 5 6 7 NA
8	Not enough time available to spend with friends and family	1 2 3 4 5 6 7 NA
9	Paperwork	1 2 3 4 5 6 7 NA
10	Eating healthy at work	1 2 3 4 5 6 7 NA
11	Finding time to stay in good physical condition	1 2 3 4 5 6 7 NA
12	Fatigue	1 2 3 4 5 6 7 NA
13	Occupation-related health issues (e.g. Back pain)	1 2 3 4 5 6 7 NA
14	Lack of understanding from family and friends about your work	1 2 3 4 5 6 7 NA
15	Making friends outside the job	1 2 3 4 5 6 7 NA
16	Upholding a "higher image" in public	1 2 3 4 5 6 7 NA
17	Negative comments from the public	1 2 3 4 5 6 7 NA
18	Limitations to your social life (e.g. Who you friends are, where you socialize)	1 2 3 4 5 6 7 NA
19	Feeling like you are always on the job	1 2 3 4 5 6 7 NA
20	Friend/ family feel the effects of the stigma associated with your job	1 2 3 4 5 6 7 NA

Appendix C

Demographic Questionnaire

Age:
　20- 29
　30 –39
　40 and above

Gender:
　Male
　Female

Ethnicity:
　Caucasian
　South-Asian
　East Asian
　First Nation
　African
　Other

Current Relationship Status:
　Single
　Single-with a partner
　Common-law
　Married Separated
　Other _____

Number of Children:
None
One or more

Current Religious Identification
　Muslim
　Hinduism
　Sikh
　Buddhist
　Christian
　None
　Other _____

Years of Service:
Less than 3 years
More than 3 years

Current Position:
General duty
Management
Administration

Number of Interactions with travellers
0-99
100-199
200-299
Over 300

Education (indicate highest level)
High School or Equivalent
Some Post Secondary
Bachelors or equivalent
Some graduate school
Graduate school or higher

Armed
Yes
No

Can you comment on a time when you felt stressed about work in past 6 months. What was the stressor? How did you cope?

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Appendix D

Coping Scale

These items ask what you've been doing to cope with occupational stressors. Different people deal with things in different ways. We are interested in how you've tried to deal with it. Each item says something about a particular way of coping. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

1 = I haven't been doing this at all
2 = I've been doing this a little bit
3 = I've been doing this a medium amount
4 = I've been doing this a lot

1. I've been turning to work or other activities to take my mind off things.	
2. I've been concentrating on doing something about the situation I'm in.	
3. I've been saying to myself "this isn't real.".	
4. I've been using alcohol or other drugs to make myself feel better.	
5. I've been getting emotional support from others.	
6. I've been giving up trying to deal with it.	
7. I've been taking action to try to make the situation better.	
8. I've been refusing to believe that it has happened.	
9. I've been saying things to let my unpleasant feelings escape.	
10. I've been getting help and advice from other people.	
11. I've been using alcohol or other drugs to help me get through it.	
12. I've been trying to see it in a more positive.	
13. I've been criticizing myself.	
14. I've been trying to come up with a strategy about what to do.	
15. I've been getting comfort and understanding from someone.	
16. I've been giving up the attempt to cope.	
17. I've been looking for something good in what is happening.	
18. I've been making jokes about it.	
19. I've been doing something to think about it less, such as going to movies,	
watching TV, reading, daydreaming, sleeping, or shopping.	
20. I've been accepting the reality of the fact that it has happened.	
21. I've been expressing my negative feelings.	
22. I've been trying to find comfort in my religion or spiritual beliefs.	
23. I've been trying to get advice or help from other people about what to do.	
24. I've been learning to live with it.	
25. I've been thinking hard about what steps to take.	
26. I've been blaming myself for things that happened.	
27. I've been praying or meditating.	
28. I've been making fun of the situation.	

Appendix E

Letter to Participants

THE UNIVERSITY OF BRITISH COLUMBIA **UBC**
Faculty of Education

March 11, 2011

2125 Main Mall
Vancouver, B.C., Canada V6T 1Z4
Tel: 604-822-5211 Fax: 604-822-6501

educ.ubc.ca

Cover letter for the Survey

Dear Research Participant:

We are asking you to complete this anonymous survey to help explore occupational stress in Border Services Officers (BSO) and to understand how Border Services Officers cope with these stressors. Although there has been research on other first responders such as police and firefighters there have been no studies to our knowledge on BSOs.

The purpose of this research is to identify the types of occupational stressors that BSOs face in their daily tasks. The survey will take 40 minutes to complete. We hope that we will further understand how individuals cope with occupational stress. This is opportunity for you to share your experience as BSO working the front line and add to research on population of law enforcement that has been neglected in research.

Please do not put your name on any of the surveys to ensure your anonymity. The surveys will picked up by the researchers from UBC and no individual information will be disclosed to anyone. The people who have access to the information will be the research team at UBC.

All information resulting from this study will be kept strictly confidential. Documents will be indetfied by a code number and kept in a locked filing cabinet once they have been collected. No participants will be identified in any reports of the completed study.

If you have any questions about this study you may contact Dr. Colleen Haney in the Department of Education and Counselling Psychology at UBC (604-822-4639) or Lawrence Prasad, Master Student Researcher in the Department of Education and Counselling Psychology at UBC (604-543-1882). If you have any concerns about your treatment or rights as a research participants you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598.

You may refuse to participate in this survey at any time. If you complete the survey it is assumed that consent for participation has been given. When you have completed the survey please put it in the envelope provided and place it the box marked UBC study in the mailroom or you can also hand it to Lawrence Prasad, Master Student Researcher.

Yours truly,
Dr. Colleen Haney

Lawrence Prasad

Appendix F

Recruitment Poster

Participants needed for study:
An exploration of occupational stressors and coping in Border Services Officers

In a typical week Border Services Officers across Canada
- **examine over 105,000 travellers**
- **seize contraband worth over 7 million dollars**
- **remove over 250 inadmissible people**
- **seize on average $780,000.00 of undeclared currency (CBSA, n.d.).**

However, there has been little research conducted on customs and immigration officers and in particular Border Services Officers s in regards to occupational stress.

Please check your mail slots for the survey envelope and how you can contribute to this exciting research. Participation is completely voluntary and all response will be kept confidential.

If you have any questions about this study you may contact Dr. Colleen Haney in the Department of Education and Counselling Psychology at UBC (604-822-4639) or Lawrence (Lou) Prasad, Masters Student Researcher in the Department of Education and Counselling Psychology at UBC (604-543-1882) or email: jaslaw@telus.net. If you have any concerns about your treatment or rights as a research participant you may contact the Research Subject Information Line in the UBC Office of Research Services at 604-822-8598