2018

Police Stress: An Analysis of the Impact on Child Sexual Exploitation Investigators

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Walden University
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Abstract

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MA, University of Phoenix, 2007

BS, University of Great Falls, 1999

Dissertation Submitted in Partial Fulfillment

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Criminal Justice

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Abstract

The psychological and physiological effects of work-related stress on law enforcement causes high morbidity and mortality rates and rates of alcoholism, substance abuse, domestic violence, and suicide higher than the national average. The purpose of this explanatory sequential mixed-methods study was to examine whether work-related stress experienced by child sexual exploitation (CSE) and child sexual abuse (CSA) investigators differ from that of other duty assigned subgroups. I used Karasek's job demands-control model as the theoretical framework for this study. I conducted the study within a medium sized law enforcement agency in eastern Washington State. The sample in the quantitative study consisted of 27 law enforcement officers from 17 duty-assigned subgroups who completed McCreary and Thompson's Operational Police Stress Survey (PSQ-Op) and Organizational Police Stress Questionnaire (PSQ-Org). The sample in the qualitative study consisted of 7 law enforcement officers who answered 5 researcher developed questions during a telephone interview. Descriptive statistics, a Pearson's correlation analysis, and linear regression analysis of the PSQ-Op and PSQ-Org revealed no significant difference in reported work-related stress experienced within the duty-assigned subgroups, revealing no correlative difference of stress experienced by CSE and CSA investigators and the other duty assigned subgroups due to job demands and job control. Content analysis of the qualitative interviews revealed themes that supported the finding of the quantitative study. The findings of this study support the need for law enforcement leaders to take preemptive measures to mitigate the effects of work-related stress on all law enforcement officers.

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Dedication

I would like to take the time to dedicate this accomplishment to my late father, Willie Floyd Simmons, Jr. You were with me in body during a portion of this journey and you have been with me in sprit throughout its entirety.

Acknowledgments

I would like to thank my wife, Nikesha Martinez-Simmons for her patience and support throughout the entirety of this journey. I would also like to thank my children Justis, Jayce, Kingston, and Freya, for allowing dad to miss sporting events, school events, and normal dad time to complete this program. I would also like to thank my mother, Mary l. Simmons, for your support of all my goals throughout my lifetime.

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Chapter 1: Introduction

Introduction

Work- related stress, which consists of psychological workplace demands, can yield short and long-term effects on physical and mental health (Ganster & Rosen, 2013). Researchers estimate that companies in the United States lose approximately $300 billion annually because of work-stress related issues (O'Keefe, Brown, & Christian, 2014). Health care costs related to work-related stress are estimated to be $68 billion annually (O'Keefe, Brown, & Christian, 2014). Employees that experience work-related stress often suffer devastating psychological and physiological effects, such as high morbidity and mortality rates and rates of alcoholism, substance abuse, domestic violence, and suicide higher than the national average (Ganster & Rosen, 2013). Although there are many stressful occupations in the United States, researchers identify and regard law enforcement as one of the most stressful occupations in the country (Quick & Henderson, 2016). Recent research yields evidence that law enforcement officers experience adverse psychological and physiological conditions at higher rates than other occupations in the United States (Donnelly, Valentine, & Oehme, 2015). The adverse psychological and physiological conditions include PTSD, cardiovascular disease, anxiety, depression, suicidal behavior, and interpersonal violence (Donnelly, Valentine, & Oehme, 2015).

Law enforcement agencies in the United States vary in organizational structure. The organizational structure of a law enforcement agency is designed to provide a way for the agency to service their community (Lexipol, LLC, 2015). Most law enforcement agencies in the United States are quasi-military organizations (Cole, Smith, & DeJong,

2015). Sizable quasi-military law enforcement organizations are composed of subgroups, which have focused goals and missions (Johnson & Vaughn, 2016). Child sexual exploitation (CSE) and child sexual abuse (CSA) investigators are personnel within a subunit of a law enforcement agency. CSE and CSA have been a major focus of the public, government, and media in the United States (Appleton, 2014). Researchers correlate professionals' exposure to child sexual abuse with psychological issues; however, the studies examining the effects of work-related stress in CSE and CSA investigators is sparse (Powell & Guadagno, 2013). The researchers that have examined the effects of work-related stress on CSE and CSA investigators suggest an understanding of how stress manifests itself during CSA and CSE investigations is needed (Powell & Guadagno, 2013).

A weakness of past research investigating stress in law enforcement has been the examination of the occupation as one homogeneous group (Habersaat, Geiger, Abdellaoui, & Wolf, 2015). Researchers in few studies suggest specific goals and missions of subgroups within law enforcement organizations effects how stress is manifested within these groups (Habersaat et al., 2015). In this study, I provide a comparative analysis of stress experienced by CSE and CSA investigators with stress experienced by law enforcement officers in other subgroups. The implications for positive social change may include preemptive measures by law enforcement organizations to mitigate and manage the psychological and physiological effects of work-related stress by addressing mental and physical health needs of CSE investigators

and other law enforcement personnel through stress management interventions, resources, and programs (Evans, Pistrang, & Billings, 2013).

In this chapter, I discuss the background of the study. I also discuss the research problem, research questions and hypothesis, theoretical background, and nature of the study. I then provide the reader with definitions of applicable concepts and constructs in the study. Finally, I discuss assumptions, scope and delimitations, limitations, and the significance of the study.

Problem Statement

In a plethora of recent research, researchers have identified law enforcement as among the most stressful occupations (Karaffa & Koch, 2016). Law enforcement officers experience a morbidity and mortality rate that is nearly three times higher than that of the average worker in the United States (Mumford, Taylor, & Kubu, 2015). Law enforcement officers also experience higher rates of alcoholism, substance abuse, domestic violence, and suicide (Donnelly, Valentine, & Oehme, 2015). Law enforcement agencies can consist of numerous duty-assigned subgroups, such as uniformed officers, detectives, and specialized assignments. These positions may contain additional duty-assigned subgroups. Among these duty-assigned subgroups are investigators tasked with investigating CSE. A limitation of current police work-related studies is the failure to explore and identify the unique stressors of specific police duty-assigned subgroups such as CSE investigators. Despite this limitation, current studies relating exposure to critical incidents and a high lifetime risk of mental and physical health issues in police officers supported the need for this study.

Purpose

I conducted this explanatory, sequential, mixed-methods study to discover whether there is a correlative difference in work-related stress caused by job demands and job control within different duty-assigned subgroups within law enforcement agencies by comparing organizational and occupational stress of CSE and CSA investigators to other law enforcement subgroups. The analytical results may support the need to identify and address the varied psychological and physiological needs of law enforcement officers by their assigned duty assignments, as well as identify the need for specific organizational policies addressing these specific mental and physical health needs.

Research Questions and Hypothesis

In this explanatory sequential mixed-methods study, I explored a hypothesis, null hypothesis, and research question. I collected data in the quantitative phase of the study first to explore the following hypothesis and null hypothesis:

> **Hypothesis (H_a1):** Does work-related stress experienced by CSE and CSA investigators differ from that of other law enforcement subgroups because of different job demands and job controls?
>
> **Null Hypothesis (H_01):** There is no significant difference in work-related stress caused by job demands and job controls experienced between CSE and CSA investigators and other law enforcement subgroups.

I measured the statistical relationship between operational and organizational stress using a Pearson's correlation coefficient test. I used linear regression analysis to determine if

the independent variables identified in the two research instruments and demographic survey accurately predicted the outcome variables, operational and organizational stress. Also, I used linear regression analysis to assess which independent variables were significant predictors of the dependent variables.

Subsequently, I collected qualitative data to explore the following research question:

Research Question: How does work stress caused by job demand and job control differ between CSE and CSA investigators and other law enforcement subgroups?

Theoretical Framework

I employed the theoretical framework of the jobs demands-control model for this study. According to the jobs demands-control model, an employee's psychological and physiological health is dependent on that employee's job demands and job controls (Maun, Makikangas, & Kinnunen, 2016). The job demands-control model has been highly used and is a major influence on job stress studies (Maun, Makikangas, & Kinnunen, 2016). The job demands-controls model consists of two primary hypotheses: the strain hypothesis and the learning hypothesis (Maun, Makikangas, & Kinnunen, 2016).

The negative effect on health and well-being of jobs with high demands and low employee controls is the concept of the strain hypothesis (Maun, Makikangas, & Kinnunen, 2016). The correlation of high levels of motivation and learning with jobs with high demands and high employee controls is the concept of the learning hypothesis (Maun, Makikangas, & Kinnunen, 2016). The job demands-control model strain theory

served as the guiding foundation for the comparative analysis of work-related stress in different duty-assigned subgroups within law enforcement in Washington State.

Nature of the Study

I used an explanatory sequential mixed-methods approach with an emphasis on a phenomenological qualitative approach for this study. Mixed methods studies are popular in social, behavioral, and health sciences (Creswell, 2013). According to Creswell (2009), mixed methods research involves combining characteristics of both the quantitative and qualitative approaches to strengthen the results of data collected during a study. The use of mixed-methods studies has increased exponentially over the past three decades (Creswell, 2013). Explanatory sequential mixed-methods research involves conducting quantitative research first (closed-ended questions), analyzing the results, and building on the results of the quantitative research with qaulitative research (opened-ended questions; Creswell, 2013). This form of mixed-methods study is considered sequential because the quantitative study is conducted followed by the qualitative study (Creswell, 2013).

The use of an explanatory sequential mixed-methods structure for this study allowed for multiple prospectives to explore the relationship between duty assignment, specifically as a CSE or CSA investigator, and work-related stress (Creswell, 2013). The hypothesis of the jobs demands-control model is an employee's psychological and physiological health are dependent on that employee's job demands and job controls (Maun, Makikangas, & Kinnunen, 2016). The quantitative data were used to test this hypotesis. The qualitative data were used to further explore the varied psychological and

physiological needs of law enforcement officers by their assigned duty assignments, specifically in CSE and CSA investigators.

Definitions

CSE and CSA-Investigators: Law enforcement officers who conduct child sexual exploitation and child sexual abuse investigations.

Commissioned Law Enforcement Officer (WA state): Any full-time, fully compensated and elected, appointed, or employed officer of a general authority Washington law enforcement agency given the authority to detect and apprehend persons committing infractions or violating the traffic or criminal laws in the state of Washington (Washington State Legislature, 2017).

Law Enforcement Agency (WA state): means any agency, department, or division of a municipal corporation, political subdivision, or other unit of local government of this state, and any agency, department, or division of state government, having as its primary function the detection and apprehension of persons committing infractions or violating the traffic or criminal laws in general, as distinguished from a limited authority Washington law enforcement agency, and any other unit of government expressly designated by statute as a general authority Washington law enforcement agency. The Washington state patrol and the department of fish and wildlife are general authority Washington law enforcement agencies (Washington State Legislature, 2017).

*Organizational S*tress: A physical or psychological response to stressors related to an employee's role within an organization (Unknown, 2017).

Occupational Stress: A physical or psychological disorder associated with the work environment (BusinessDictionary, 2017).

Stress: a physical, chemical, or emotional factor that causes bodily or mental tension and may be a factor in disease causation (Merriam-Webster Dictionaries, 2017).

Subgroups: Subgroups are distinct groups within an organization that perform actions that promote the overall mission and goals of the whole organization (Johnson & Vaughn, 2016).

Assumptions

Law enforcement agencies are composed of numerous duty assigned subgroups. CSE and CSA investigators are amoung these duty assigned subgroups within a law enforcement agency. Each duty assigned subunit has different missions, goals, experiences, job demands, and job controls. The fact that law enforcement agencies are often composed of different subgroups led me to the following assumptions:

- Law enforcement officers within a law enforcement agency experience stress differently according to their duty assignment, therefore,
- CSE and CSA experience with organizational and operational stressors cause different psychological and physiological responses than that of other law enforcement officers.

These assumptions formed the basis of this study.

Scope and Delimitations

In this study, I examined unique stressors caused by job demands and job control within duty assigned subgroups in law enforcement and compared the stressors

experienced by CSE and CSA investigators with that of other subgroups. The scope of this study was limited to full-time, commissioned law enforcement officers from a medium sized law enforcement agency in eastern Washington State. Studies examining stress within subgroups in law enforcement are sparse; therefore, the findings of this study may be beneficial to future research examining work-related stress in law enforcement.

Limitations

I conducted this study to fill the gap in prior research by examining work-related stress in law enforcement subgroups. Obtaining the sample of the population examined in this study from one law enforcement agency possibly made the findings not a generalization of the entire population. Another possible limitation is my experience with work-related stress in law enforcement, which could have potentially caused bias during the study. I bracketed my experience as a means of alleviating researcher bias during the study.

Significance

Law enforcement is a uniquely hazardous and challenging occupation and is ranked as one of our society's most stressful careers by some researchers (Donnelly, Valentine, & Oehme, 2015; Patterson, Chung, & Swan, 2014). Stressors that law enforcement officers experience manifest from not only occupational sources but also from organizational and personal sources (Mumford, Taylor, & Kubu, 2015). Researchers in recent research have shown that the nature of an officer's job assignment is related to the amount of stress an officer experiences (Mumford, Taylor, & Kubu, 2015). There has

been a plethora of research conducted examining stress in the law enforcement occupation. The scholars in these prior studies focused on the 'generic' function of police work as law enforcement, or the enforcement of laws, failing to delve into detailed duty assignments within organizations (Huey & Ricciardelli, 2015). There is a significant gap in research examining stress in subgroups in law enforcement organizations. The significant gap in research examining stress in duty-assigned subgroups includes the lack of empirical evidence related to work-related stress and CSE investigators (Babatunde, 2013). I conducted this study to fill this gap.

Summary

Researchers in prior studies have identified work-related stress as a significant problem in law enforcement. Filling the gap in research that examines work-related stress in police subgroups by focusing on stress experienced by CSE and CSA investigators because of job demands and job control was the purpose of this study. In this chapter, I introduced the topic of this study and background of the study. I also identified the problem, purpose, research question and hypothesis in this chapter, along with the theoretical framework and nature of the study. Finally, I defined applicable concepts and constructs and discussed the scope, delimitations, limitations, and the significance of the study. I provide a review of the literature in Chapter 2.

Chapter 2: Literature Review

Introduction

The psychological and physiological effects of work-related stress have a lasting impact on the person experiencing the stress (Ganster & Rosen, 2013). Work-related stress also has a substantial negative financial effect on employing entities (O'Keefe, Brown, & Christian, 2014). The study of work-related stress is rooted in the traditional study of stress by researchers starting in the early 1900s, and researchers started to recognize the reality of the impact of work-related stress in the United States in the 1970s (Beheshtifar & Nazarian, 2013). Scholars, as well as government agencies in the United States, recognize the reality of the severity of work-related stress. Researchers suggest addressing the impact that work-related stress has on employees and their employers at the organizational level (Quick & Henderson, 2016). Organizations look to stress management interventions to promote health and wellness of their employees (Quick & Henderson, 2016).

Due to the hazardous and challenging nature of law enforcement, some researchers regard the occupation as one of the most stressful jobs in society (Donnelly, Valentine, & Oehme, 2015 & Patterson, Chung, & Swan, 2014). Stress in law enforcement can originate from several internal and external sources. Law enforcement officers experience adverse psychological and physiological conditions at rates higher than those who do not work in the field (Donnelly, Valentine, & Oehme, 2015; Mumford, Taylor, & Kubu, 2015). Researchers link stress experienced by law enforcement officers to elevated rates of PTSD, cardiovascular disease, anxiety, depression, suicidal behavior,

and interpersonal violence (Donnelly, Valentine, & Oehme, 2015; Mumford, Taylor, & Kubu, 2015). It is possible that stress in law enforcement is the result of the varying job demands and varying levels of job controls in the different working environments within the career field.

There has been a vast amount of research examining work-related stress; however, a limitation of this research is the focus of law enforcement officers as one homogeneous group (Huey & Ricciardelli, 2015). Law enforcement agencies consist of numerous subgroups, each with unique working environments. The success of police operations often depends on the activities of subgroups such as patrol officers, traffic officers, K-9 officers, school resource officers, neighborhood resource officers, and investigators (Hess, Orthmann, & Cho, 2013). Among these unique subgroups are CSE investigators, who are also often known as detectives. The sexual exploitation of children is a crime that gains significant attention from the public as well as the government (Appleton, 2014). Statistics from recent research show an alarming number of children are victims of sexual abuse, child abuse, and neglect (Centers for Disease Control and Prevention, 2016). Researchers suggest working with abused children is one of the most stressful occupational events (Violanti et al., 2016).

Research examining the effect of work-related stress on investigators is scarce (Powell & Guadagno, 2013). In existing research, researchers propose the exposure to sexually abused children is related to long-term ill-health (Powell & Guadagno, 2013). Addressing the effect of work-related stress on investigators who are in regular contact

with child victims of sexual abuse is complex and must be addressed appropriately by law enforcement agencies (Powell & Guadagno, 2013).

My goal for this literature review is to examine existing literature on influential theories of occupational stress, the concept of occupational stress, existing research in stress in law enforcement, and stress and child sexual predator and abuse investigators.

Literature Search Strategy

Law enforcement in the United States is unique due to the diversity of the occupation (Cox, McCamey, & Scaramella, 2013). I used the uniqueness of American policing as an occupation as a strategy to limit the review of literature in this study to that examining work-related stress and law enforcement in the United States. I used numerous sources to obtain peer-reviewed articles, books, periodicals and, websites. The periodicals and websites used were limited to reputable sources. I limited most of the sources used in the literature review to those created or published since 2013. The periodicals and websites used were:

- Google
- Google Scholar
- ProQuest Criminal Justice
- ProQuest Central
- Sage Premier
- Political Science Complete
- Business Source Complete
- Academic Search Complete

- MEDLINE with Full Text
- ProQuest Nursing
- Allied Health Source
- ProQuest Health
- CINAHL & MEDLINE
- Simultaneous Search
- Science Direct
- PsycINFO
- PsycARTICLES
- PsycEXTRA

I used a plethora of search terms to gather literature about stress, stress theoretical frameworks, occupational stress, the effects of work-related stress on law enforcement in the United States, child sexual exploitation, and abuse, and the effects of exposure to child sexual exploitation and abuse on law enforcement during investigations. The search terms used were:

- Stress
- Stress theories
- Occupational Stress
- Work-related stress
- Police
- Law enforcement

- Child sexual abuse
- Police organizations
- Anxiety
- Depression
- PTSD
- Suicide
- Organizational stressors
- Occupational stressors
- Personal stressors
- Interpersonal violence
- Domestic violence
- Financial impact
- Stress management
- Organizational structure
- Child sexual exploitation
- Alcoholism
- Turnover
- Shift work
- Investigations
- High strain
- JDC model
- Job demands

- Job control

Theoretical Foundation

In 1979, Karasek introduced the job demand-control (JDC) model. The JDC model has been one of the most influential occupational stress models since the 1980s (Presseau et al., 2014; Smith, Wareham, & Lambert, 2014; Trybou et al., 2014; Verhofstadt, Verhaest, & Witte, 2015). First, Karasek theorizes that work stress is a result of stressful work environments that consist of heavy job demands in conjunction with the low ability to influence the work environment (Presseau et al., 2014). Secondly, Karasek theorizes that increased employee control shields against the adverse effects of job demand on stress (Presseau et al., 2014). Job demands refer to tasks and requirements of an employee (Schmidt et al., 2015; Trybou et al., 2014). Job control refers to the ability and authority of an employee to control work activities at work (Schmidt et al., 2015; Trybou et al., 2014). In the JDC model, Karasek proposes different permutations of job demand and job control exists in different working environments (Trybou et al., 2014). Stressful jobs also—called high strain jobs—are characterized by high demands and low control (Trybou et al., 2014). Researchers have linked high demand and low control jobs to absenteeism, turnover, low job satisfaction, and negative physiological conditions (Presseau et al., 2014; Schmidt et al., 2015; Verhofstadt, Verhaest, & Witte, 2015). On the other hand, high job demands and high job control fosters learning and activity (Verhofstadt, Verhaest, & Witte, 2015).

A limitation of past and present law enforcement occupational stress studies is the failure to identify a theoretical framework as a foundation of the research (Webster, 2014). Researchers acknowledge the JDC model as a theoretical framework in numerous international studies of stress and law enforcement; however, an exhaustive search for law enforcement stress studies within the United States that identify the JDC model as a theoretical framework yielded no results. Evidence of severe psychological and physiological problems has linked law enforcement to high strain (Hall et al., 2010). The ability to examine the relationship between demand and control and each variable's relationship to stress in law enforcement, along with how stress differs in different working environments, was beneficial to this study.

A Glance at Occupational Stress

The study of work-related stress is a significant branch of the concept of stress which was termed and introduced by Hans Selye in 1936 (Beheshtifar & Nazarian, 2013). Selye established the concepts of eustress and distress (Babatunde, 2013). Eustress, which derives from the Greek word meaning 'good,' refers to the body's positive response to external stressors (Babatunde, 2013). Distress refers to the body's negative response to external stressors that are apprised and seen as adverse to one's wellbeing (Babatunde, 2013). Regardless of the body's interaction to a stressor, Selye theorized that the body would undergo a reactionary metabolic process to battle, accept, or alleviate a stress situation (Babatunde, 2013). Eustress causes motivation and promotes higher performance, while protracted exposure to distress results in damage to health (O'Keefe, Brown, & Christian, 2014). The familiarity of work-related stress and the phenomenon's

impact on health issues in the United States dates back to the late 1970s to early 1980s, when HackmanOldham (1976) and Karasek (1979) identified a relationship between occupational stress and employee control (American Psychological Association [APA]), 2016; Kivimaki, 2015; Quick & Henderson, 2016). A popular focus of current research, especially in the fields of psychology, social, and medical sciences, has been occupational stress (Beheshtifar & Nazarian, 2013). Researchers in the literature examining occupational stress provide significant evidence that work-related stress has a significant impact on the physical and mental health of employees working withing organizations and a substantial economic impact on organizations in the United States (Fridrich, Jenny, & Bauer, 2016).

The National Institute for Occupational Safety and Health has identified work-related stress as a major variable in physical and mental health (Lucas, Weidner, & Janisse, 2012). Occupational stress consists of an employee's interpretation of the objective circumstances of their job (Beheshtifar & Nazarian, 2013). A majority of adults spend approximately half of their waking hours at work (Kivimaki, 2015). Researchers in many recent studies examine the psychological and physiological impact of work-related stress on the workforce in the United States and identify the phenomena as a leading cause of serious health issues in the world today (Beheshtifar & Nazarian, 2013). The results of these studies have spawned an extensive debate regarding the relationship between work stress and chronic health conditions (Kivimaki, 2015). Researchers such as Babatunde (2015) argue that stress caused by job strains is a major issue. Babatunde states:

> Within diverse organisational and work psychology fields of research, it is acknowledged that occupational stress still remains an albatross as a result of its detrimental consequences on employees' psychological wellness, physical health, work-life balance and negatively associated with outcomes such as job satisfaction, organisational commitment, turnover and productivity. (p.27*)*

Although there is a divide in the opinions generated in work-related stress studies concerning the relationship between work stressors and their effect on human psychology and physiology, there is significant support spawned in studies identifying the phenomenon's adverse effect on health.

In a general review of the literature on the subject of occupational stress, Babatunde (2013) found that past organizational and behavioral studies support the theory that work-related stress increases unfavorable and negative health outcomes(Babatunde, 2013). In a similar review, Kivimaki and Kawachi (2015) found that a sample of 600,000 men and women from 27 cohort studies in Europe, the United States, and Japan experienced an increased risk of adverse physiological ailments as a result of their exposure to work stressors such as job strain and long working hours. There was a minuscule difference in the effect of work stressors on health in factors such as sex, age, and socioeconomic background in the 27 studies (Kivimaki, 2015). Given this minute difference, developers of theories surrounding occupational stress and research have revealed that there are individual differences in the perception of work-related stress (Lucas, Weidner, & Janisse, 2012). The impact of stress at work can last for months, or even years, and often forces those affected to work less, change jobs, or cease

working all together (Blix, Perski, Berglund, & Savic, 2013). The impact of stress, fatigue, and burnout are not only detrimental to the individual experiencing the phenomena, but also to organizations who experience a deficit in employee work performance, employee absence, employee interpersonal conflict, workplace accidents, and turnover, and society, who accrues the financial burden of work stress related medication and treatment (Beheshtifar & Nazarian, 2013; Steffens, Haslam, Schuh, Jwtten, & van Dick, 2016).

Historically, economic researchers have viewed occupational stress as stress overload from occupational causes (Beheshtifar & Nazarian, 2013). In several studies conducted solely in the United States, a substantial number of Americans reported feeling the negative effects of work-related stress (Darden, 2014). Darden (2014) found that 80% of workers in the United States experience stress at work, while O'Keefe, Brown, and Christian (2014) found that 70% of United States workers identify their job as a major source of stress (Darden, 2014; O'Keefe, Brown, & Christian, 2014). Darden also found that 50% of American workers feel that they need assistance managing work-related stress (Darden, 2014). Health issues prompted by work-related stress cost United States businesses an estimated $68 billion and causes a 10% decline in profits annually (O'Keefe, Brown, & Christian, 2014). $700,000,000 is spent annually by organizations in the United States to hire and train new employees to replace those age 45-65 who die of heart attacks (Adams, 2009). The annual cost that each organization in the United States spends on smoking employees' health care is $10,000 (Adams, 2009). Approximately one million American workers are absent from work each day because of work-stress

related issues, equating to approximately 550,000,000 days per year of employee stress-related absences (Adams, 2009 & O'Keefe, Brown, & Christian, 2014). Forty percent of job turnover is a product of work-related stress (O'Keefe, Brown, & Christian, 2014).O'Keefe et al. identify occupational stress as both a societal and economic issue (O'Keefe, Brown, & Christian, 2014). In the economic realm, the concerns of work-related stress have increased because of the economic impact the phenomena has on organizations (Babatunde, 2013). Economists such as Grossman (1972) have contributed a vast amount of literature on work-related stress and associated health issues (Grossman, 1972).

Stress is linked to ten of the world's leading causes of death, to include cardiovascular disease, which is the leading cause of death for men and women (Quick & Henderson, 2016). There are an estimated 300,000 incidents of sudden cardiac death (SCD) in the United States each year, which accounts for 50% of the countries cardiovascular mortality (Zhang et al., 2015). Work-related stress is a significant cardiovascular risk factor (Quick & Henderson, 2016). Researchers in a plethora of quantitative studies and medical literature have linked work stressors to the risk of cardiovascular disease (Darden, 2014; Kivimaki, 2015.) In these studies, which include a comprehensive cross-sectional sample of both men and women of varying ages and socioeconomic backgrounds, researchers attribute a 10-40% increase in the risk of cardiovascular disease to work stressors (Kivimaki, 2015). Researchers have associated cardiovascular disease with shift work, work hazards, and social isolation (Quick & Henderson, 2016).

Researchers have also identified work-related stress as having a causative relationship with other adverse health conditions such as musculoskeletal disorders, work-related injuries, mood disturbances, mental health issues, and suicide (Darden, 2014; O'Keefe, Brown, & Christian, 2014). Two of the most reported issues relating to stress is anxiety and depression (Quick & Henderson, 2016). Researchers support these reports by showing that chronic stress can have negative effects on cognitive functioning, which can lead to psychiatric conditions such as anxiety and depression (Golkar et al., 2014). Quick and Henderson (2016) found that approximately 10% of the United States population suffers from a mood or anxiety disorder, and depression, a major contributor to ill health, affecting 16% of adults in the United States (Quick & Henderson, 2016). Researchers associate emotional issues such as emotional exhaustion, cynicism, and lack of confidence with burnout, which researchers have linked to work-related stress (Quick & Henderson, 2016). Burnout typically occurs in healthy and high-performing individuals who have not experienced a traumatic event in their life (Golkar et al., 2014). Currently, researchers have also linked other issues such as problems concentrating, sleepiness, extreme fatigue, irritability with work-related stress (Blix et al., 2013). In a 2013 study, Blix, Perski, Berglund, and Savic (2013) found a relationship between occupational stress and atrophy in regions of the brain known to be associated with chronic stress (Blix et al., 2013). A 2014 study by Golkar, Johansson, Kasahara, Osika, Perski, and Savic found that the ability to regulate negative emotions by individuals suffering from chronic occupational stress leaves them more vulnerable to depressive symptoms (Golkar et al., 2014).

Promoting health and well-being within organizations can generate substantial benefits for employees, the organization, and for society (Steffens et al., 2016). In current research, researchers suggest the battle against work-related stress begins at the organizational level and is facilitated by organizations who are committed to vested in protecting their employees (Quick & Henderson, 2016). Current researchers have shown that effectively designed and implemented stress management intervention programs reduce stress-related expenses by 25%, costing companies $100 to $150 per employee, but seeing an investment return of $300 to $450 per employee (Adams, 2009). Influential past researchers Defrank & Cooper (1987) and LeFerve, Matheny, & Kolt (2006) defined and established stress management interventions (SMIs). SMIs, which are designed to mitigate the amount of work stress experienced during the performance of work functions, provides employees with skills through three levels of interventions: primary interventions, secondary interventions, and tertiary interventions (Babatunde, 2015 & Quick & Henderson, 2016). SMIs consist of a conglomeration of "cognitive-behavioral programmes" (p.32) which focuses on the reduction of psychological and physiological variables of work stress and the psychological and physiological response to work place stressors (Babatunde, 2015). Some researchers believe that implementing SMIs in organizations is a highly effective way to alleviate unseen overhead healthcare expenses (Adams, 2009).

There are three tiers of SMIs: primary, secondary, and tertiary. The goal of primary SMIs is to reduce, restructure, or elevate aspects of a job that adversely affect an employee's health through organizational best practices (Babatunde, 2013). Secondary

SMIs consist of intervention tools such as wellness programs, physical fitness programs, and time/self-management programs that are designed to help employees cope with stress (Babatunde, 2015 & Quick & Henderson, 2016). Tertiary SMIs include treatment, therapy, and counseling for employees who have been traumatically affected by experiences at work, with the purpose of restoring psychological and physiological health (Babatunde, 2015 & Quick & Henderson, 2016). The effectiveness of SMIs has been under scrutiny by researchers because they have been found to focus on employees and their ability to cope with workplace stress rather than the causes of workplace stress at the organizational level (Beheshtifar & Nazarian, 2013). The focus on secondary and tertiary SMIs by organizations has been criticized by researchers, who point out that the existence and implantation of primary interventions are rare (Babatunde, 2015). Early occupational stress researchers found that secondary and tertiary SMIs "fail to address the salient issues of job autonomy" (Babatunde, 2015, p. 33). Some researchers believe that implementing all three tiers of SMIs has been identified as an unrealistic financially for organizations, while other researchers such as those in the field of Occupational Health Psychology (OHS) support the integration of all three tiers of SMIs (Babatunde, 2015). Currently, researchers support the notion that implementing SMIs at the organizational level is more complex and required the allocation of more resources (Biron & Karanika-Murray, 2014). There is a recent increase in the popularity of organizational level SMIs within organizations; however, there have only been a few studies that have evaluated the effectiveness of organizational level SMIs (Fridrich, Jenny, & Bauer, 2016).

NIOSH has indicated that the reduction of occupational stress requires organizations to combine organizational change with stress management programs (O'Keefe, Brown, & Christian, 2014). NIOSH identifies the primary SMI organizational change as the most accurate way to reduce stressors within an organization due to identified causes of work-related stress in the process (O'Keefe, Brown, & Christian, 2014; Sauter et al., Unknown). Furthermore, in 2013, NIOSH Director John Howard stated that the "greatest potential for broad-scale" (p.227) SMI in the United States is within the workplace (Anger et al., 2015). Howard said further that comprehensive SMI programs aimed at reducing work-related injuries, illnesses, and related physical and psychological diseases are key in the intervention effort (Anger et al., 2015). Researchers and professionals in the field of OHP also support Howard's stance on the importance of SMI within organizations (Anger et al., 2015). Despite the support for SMIs at the organizational level by organizational professionals and researchers, researchers in current literature identify the lack of sufficient empirical evidence to support the effectiveness of SMIs at the organizational level (Biron & Karanika-Murray, 2014). Furthermore, there is a belief by some researchers that the research designs used to evaluate SMIs at the organizational level is "too varied or not considered sufficiently strong." (p.86) Researchers articulate this argument by pointing out that past researchers focused on determining if organizational SMIs are effective but failed to explore how, when, and why SMIs are effective (Biron & Karanika-Murray, 2014).

The Impact of Stress on Police in the United States

According to the U.S. Bureau of Labor Statistics (2016), there were 806,400 sworn law enforcement officers in the United States in 2014 (U.S. Department of Labor Bureau of Labor Statistics, 2016). The median pay for a sworn law enforcement officer in the United States in 2015 was $60,270, with detectives and criminal investigators having the highest median salary ($77,210 per year) and fish and game wardens having the lowest median salary ($52,780 per year). The other two median salary categories documented by the U.S. Department of Labor Bureau of Labor Statistics were transit and railroad police and police officers and sheriff's patrol officers. The median salary for transit and railroad police in 2015 was $59,670 per year, and the median salary for police and sheriff patrol officers in 2015 was $58,320 per year (U.S. Department of Labor Bureau of Labor Statistics, 2016). Law enforcement officers in the United States experience an occupational mortality rate that is three times that of the average (Mumford, 2015). The Officer Down Memorial Page (2018) documents the 134 line of duty deaths of law enforcement officers in 2017.

Table 1

2017 Line of Duty Deaths of United States Police Officers

Cause of Death	Number of Officers
9/11 related illness	5
Aircraft accident	2
Animal related	1
Assault	5

(Continued)

Cause of Death	Number of Officers
Automobile crash	28
Boating accident	2
Drowned	5
Duty related	3
Exposure to toxins	1
Gunfire	46
Heart attack	15
Motorcycle crash	4
Stabbed	1
Struck by vehicle	4
Unidentified	1
Vehicle Pursuit	5
Vehicular assault	6

Note: Adapted from "Honoring Officers Killed in 2017," https://www.odmp.org/search/year?year=2017. Copyright 1996-2018 by The Officer Down Memorial Page, Inc.

Researchers have identified law enforcement as one of our society's most stressful occupations (Kuhns, Maguire, & Leach, 2015; Menard & Arter, 2014). Stress in policing is a product of the constant interaction between the officer's environment and the officer's personal experience of, and response to, the experienced environment (Webster, 2014). Part of the uniqueness of law enforcement as an occupation is the vast number of different scenarios that officers encounter daily that place them at an increased risk of adverse physiological, psychological, and personal effects (Can & Hendy, 2014; Kuhns, Maguire, & Leach, 2015). Police officers handle a plethora of different calls for service and incidents, as seen in the table below.

Table 2

Typical Crimes and Incidents of Police Response and Investigation

Assault/Battery	Burglary	Drug Possession
Child Abuse	Theft	Drug Manufacturing
Child Pornography	Arson	Drug Trafficking
Fraud	Cyber Crimes	Disorderly Conduct
Domestic Violence	Shoplifting	Disturbing the Peace
Embezzlement	Vandalism	DUI
Extortion	Animal Abuse	Indecent Exposure
Forgery		Prostitution
Harassment		Public Intoxication
Hate Crimes		Mental Health Issues
Homicide/Manslaughter		Traffic Laws
Identity Theft		
Kidnapping		
Money Laundering		
Rape/Sexual Assault		
Stalking		

Note. Adapted from "View All Criminal Charges," by FindLaw.com, 2016, http://criminal.findlaw.com/criminal-charges/view-all-criminal-charges.html. Copyright 2016 by Thomas Reuters

The organizational structure of law enforcement agencies is designed to provide an effective way of addressing the wide variety of calls for service and incidents and to make available a means by which organizations can achieve their goals and missions (Lexipol, LLC, 2015). According to Willits (2014), "Organisational structure refers to the process by which labour is divided and managed within an organisation." (p.141) Organizational context refers to the social and environmental background in which a law enforcement agency operates (Willits, 2014). The division of labor within a law enforcement organization is known as organizational complexity. Occupational differentiation refers to the manner in which a law enforcement agency uses specialized

staff to accomplish goals (Randol, 2014; Willits, 2014). The quantity of specialized departments that perform designated tasks within a law enforcement organization is known as functional differentiation (Randol, 2014; Willits, 2014). Organizational control refers to the direction and control of tasks within a law enforcement agency. Willits (2014) identifies a deficiency in research regarding the link between organizational structure and police performance. Only a small number of researchers in recent studies explore the relationship between organizational structure and police outcomes and empirical evidence in these studies correlate outcomes within a law enforcement agency with the structure of the organization (Willits, 2014). Researchers in these studies also suggest that organizational structure influences police behavior (Willits, 2014).

Most law enforcement agencies in the United States are quasi-military organizations, meaning they follow "a military model of organization" (p.137), which consists of varying ranks and positions of varying responsibilities (Cole, Smith, & DeJong, 2015). The organizational structure of law enforcement agencies in the United States is often dependent on the size of the agency and the characteristics of the population that the agency serves. Most of the sizable law enforcement agencies in the United States are made of subgroups. Subgroups are distinct groups within an organization that perform actions that promote the overall mission and goals of the whole organization (Johnson & Vaughn, 2016). Subgroups have specialized goals, rules, and procedures, equipment, training, and technology that differ from other groups within an organization (Johnson & Vaughn, 2016). What makes subgroups unique are the contracted services, smaller chain of command, and narrow mission of each unit (Johnson

& Vaughn, 2016) Most sizeable law enforcement agencies in the United States share a common organizational structure consisting of a patrol division, investigative division, and administrative division (Cole, Smith, & DeJong, 2015; Cox, McCamey, & Scaramella, 2013; Lexipol, LLC, 2015). Patrol divisions are typically the largest divisions with the most resources in a law enforcement agency (Cox, McCamey, & Scaramella, 2013). Patrol divisions are referred to as the "backbone" of a law enforcement agency (Cox, McCamey, & Scaramella, 2013). Patrol divisions consist of uniformed officers who respond to calls for service and incidents within an assigned geographical area and units that focus on specific functions, such as traffic enforcement, school safety, and community-based policing (Cole, Smith, & DeJong, 2015; Cox, McCamey, & Scaramella, 2013; Lexipol, LLC, 2015). Investigative divisions consist of law enforcement personnel who obtain and process evidence in criminal matters (Cox, McCamey, & Scaramella, 2013). Investigative units can consist of law enforcement personnel who investigate crimes against persons, crimes against property, drugs and narcotics, gangs, criminal intelligence, and crime analysis (Lexipol, LLC, 2015). Administrative divisions typically consist of civilian, or non-law enforcement, personnel who are responsible for maintaining records, communications or dispatch, and department budgets (Cox, McCamey, & Scaramella, 2013).

Despite the complexity of the organizational structure of law enforcement agencies, researchers examining work-related stress within the occupation have implied that the group is homogeneous when referring to work environment (Habersaat et al., 2015). In reality, subgroups within organizations are tasked with different goals and

missions and work in different conditions (Habersaat et al., 2015). The difference in the tasks and working environments of subgroups within an organization creates differences in psychological and physiological demands (Habersaat et al., 2015). Habersaat et al. (2015) state:

> Thus, in order to understand how combinations of environmental and personal factors contribute to negative physical and mental health outcomes in the police force, it is important to investigate the possibility that for each police division, different combinations of risk factors may be health relevant. (p.214)

In a majority of studies examining occupational, organizational, and personal health risks of law enforcement officers, researchers have failed to address the differences of work-related stress, and related health outcomes, of subgroups within their working environment (Habersaat et al., 2015). Researchers in a few recent studies suggest that it is likely that occupational, organizational, and personal stressors are experienced differently across subgroups within a law enforcement organization (Habersaat et al., 2015). Exploring and understanding the differences in occupational, organizational, and personal stressors within law enforcement subgroups is vital in developing stress management interventions programs within the occupation (Habersaat et al., 2015). Occupational stressors include exposure to traumatic events, shift work, and work-related injuries (Mumford, Taylor, & Kubu, 2015). In a growing number of recently conducted studies, researchers have revealed that organizational variables, such as bureaucratic hurdles, administrative battles, and career ambitions have an immense effect on the mental and physical health of officers (Mumford, Taylor, & Kubu, 2015).

Stress experienced by law enforcement officers has a reach beyond the confines of the occupation and organization. Individuals who interact with officers outside of the profession often experience the byproduct of the stressors experienced by officers (Donnelly, Valentine, & Oehme, 2015). Occupational and organizational stress can lead to a plethora of negative psychological conditions in law enforcement officers (Karaffa & Koch, 2016). Researchers link exposure to negative occupational stressors by police officers to posttraumatic stress symptomology (PTSS) at high levels (Donnelly, Valentine, & Oehme, 2015; Mumford, Taylor, & Kubu, 2015). Recently, researchers have revealed that anxiety and depression are also prevalent products of stress in law enforcement officers (Karaffa & Koch, 2016). Researchers link high levels of anxiety and depression in law enforcement officers and to exposure hazardous situations to high levels of alcohol use among law enforcement officers (Donnelly, Valentine, & Oehme, 2015; Karaffa & Koch, 2016). Researchers in numerous prior studies have examined the relationship between stress and specific health outcomes in police officers (Mumford, Taylor, & Kubu, 2015). Police officers have a higher tendency to develop illnesses that are a result of deficiencies in their immune system (Karaffa & Koch, 2016). Chronic stress causes this deficiency in the immune system (Karaffa & Koch, 2016). Chronic stress also leads to the development of sleep disorders in law enforcement officers (Karaffa & Koch, 2016). Occupational and organizational stress experienced by law enforcement officers may also promote a decrease in commitment to their assigned duties and attitude toward their colleagues (Karaffa & Koch, 2016). An increasing amount of

empirical evidence has shown the relationship between stress in law enforcement officers and intimate partner violence (Donnelly, Valentine, & Oehme, 2015).

There has been a plethora of research conducted examining stress in the police occupation. These studies use a variety of methodologies, theoretical frameworks, and related scholarly structures. In these studies, researchers focus on a diverse range of topics related to stress and the police occupation; however, in most prior research, researchers focused solely on the long-term negative psychological and physiological effects of work-stress on police officers (Kurtz, Zavava, & Melander, 2014). In a 2015 quantitative study, Mumford et al. examined "physical activity patterns, job characteristics, substance use, critical incidents, job-related stress, personal health, and health-care usage" (Mumford, Taylor, & Kubu, 2015, p. 111) by surveying 184 respondents from 11 law enforcement agencies (69.4% response rate). Donnelly et al. (2015) examine the relationship between work-related stressors experienced by law enforcement officers, the use of Employee Assistance Programs (EAPs), and domestic violence in law enforcement families. In the quantitative study, Donnelly et al. survey 934 participants via an online study. Karaffa and Koch examine the relationship between the role of public and self-stigmas and the willingness of police officers to seek mental health treatment for stress-induced issues in a 2016 study. Karaffa and Koch's quantitative study used a 62-question online survey was given to 248 participants from municipal, county, state, and university law enforcement agencies from the States of Texas and Oklahoma.

Researchers in these studies provide valuable data and have numerous practical implications. The study conducted by Mumford et al. (2015) supports further research that into operational and policy implications of law enforcement agency wellness programs that focus on issues related to work-related stress in the occupation. Similarly, Donnelly et al. (2015) find that agencies should increase education and use of Employee Assistance Programs as a manner of assisting these agents with their psychological and physiological welfare. Karaffa's and Koch's (2016) study provides "theoretical and clinical considerations for researchers, practitioners providing mental health services to police officers and their families, and police administrators" (Karaffa & Koch, 2016, p. 774) Although the studies mentioned above have legitimate practical implications, there are numerous limitations to these and other prior studies. For example, researchers in a majority of prior studies use quantitative surveys as instruments to gather data. Donnelly et al. (2015) surveyed 2,241 officers; however, only 924 completed each of the modules of the survey. Details of Karaffa and Koch's use of an online survey are vague in their analysis of their study. Details regarding the origin of the study leave speculation as to the validity of the instrument. Police occupational stress is a phenomenon shared throughout the police culture. Although quantitative studies have a plethora of advantages, there are some distinct disadvantages to the method for use in examining work-related stress within the law-enforcement occupation. The use of a qualitative study to examine each of the phenomena's in each of the studies mentioned above could have provided a wide-lens from which to view the subject of each study (Xavier University Library, 2012). This wide-angled view may have provided a deeper picture of the focus

of each study (Xavier University Library, 2012). Also, most scholars have focused on the 'generic' function of police work as law enforcement, or the enforcement of laws, failing to delve into other activities such as processing cases through the criminal justice system (Huey & Ricciardelli, 2015).

Post-Traumatic Stress Disorder in Law Enforcement Officers

The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (2013) characterize trauma and stress related disorders by the strict diagnostic criteria for exposure to traumatic or stressful events. Post-Traumatic Stress Disorder (PTSD) can be experienced by individuals who work in certain occupations where there is a high risk of experiencing traumatic events (Plat et al., 2013). Although researchers have recognized the human response to stressful events for centuries, the acceptance of PTSD as a clinical diagnosis did not occur until 1980 (Skogstad et al., 2013). Exposure to death, threatened death, or actual or threatened serious injury directly or indirectly is a requirement for a clinical diagnosis of PTSD (Faust & Thomas, 2014). The development of PTSD is a typical human response after exposure to severe stressors, but the reaction to the stressors usually diminishes shortly after that (Skogstad et al., 2013). Researchers have revealed that PTSD is more prevalent in law enforcement officers than in the general population (Skogstad et al., 2013). The exposure to traumatic events can have a devastating psychological toll on the most seasoned or experienced officer (Pasciak & Kelley, 2013). The prevalence of PTSD in law enforcement officers has been attributed to unpredictable and increased exposure to traumatic events such as violence, suffering, and death, as well as bureaucratic and organizational stress variables (Faust & Thomas, 2014; Galatzer-

Levy et al., 2013; Skogstad et al., 2013). Some researchers have suggested law enforcement officers are highly prone to developing PTSD and estimate that 10 % of law enforcement officers in the United States suffer from the disorder (Karaffa & Koch, 2016; Marchand et al., 2015; Skogstad et al., 2013). Researchers in other studies estimate duty-related PTSD to be between 7% and 19% (Faust & Thomas, 2014; Scoulos, 2014). Some researchers believe that the prevalence of PTSD in law enforcement officers is more common than previously thought (Faust & Thomas, 2014). Faust (2014) points out law enforcement officers often underreport PTSD symptoms because of the negative stigma related to mental illness. Law enforcement officers diagnosed with PTSD experience higher rates of suicide, alcoholism, domestic violence, divorce, and insomnia (Faust & Thomas, 2014). Researchers have also shown that PTSD has been linked with depression and anxiety (Skogstad et al., 2013).

Research investigating the effects of PTSD on law enforcement officers is important for understanding intervention methods and techniques (Evans, Pistrang, & Billings, 2013). Researchers identify three organizational preventative strategies utilized by law enforcement agencies to prevent the psychological distress experienced by law enforcement officers following traumatic events: pre-employment selection, training in stress management and early intervention (Skogstad et al., 2013). The pre-employment selection process by law enforcement agencies has been attributed to controlling PTSD experienced in the career field (Skogstad et al., 2013). Stress management training in emergency services fields such as firefighting has been shown to assist fire personnel in coping with traumatic events (Skogstad et al., 2013). Early psychiatric treatment, such as

that historically seen in the military, emphasizes that experiencing stress is normal in abnormal situations (Skogstad et al., 2013).

Depression and Its Link to Cardiovascular Disease

Researchers suggest that constant exposure to chronic stress has been linked to physiological changes in the body that are linked to depression, such as elevated levels of cortisol and reduced levels of serotonin, dopamine and other neurotransmitters in the brain (Violanti et al., 2013). Elevated levels of perceived work-related stress have been linked to depression in older law enforcement officers (Hartley et al., 2012). The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (2013) states; "The common feature of all these disorders is the presence of sad, empty, or irritable mood, accompanied by somatic and cognitive changes that significantly affect the individual's capacity to function." The failure of the stress response to shut off and reset can lead to depression (Violanti et al., 2013).

A major concern among researchers is the relationship between depression and cardiovascular disease (CVD) in law enforcement officers. Although law enforcement officers are viewed as a young and healthy occupational group, they experience more severe CVD risk factor levels and higher rates of CVD morbidity and mortality than that of the general population due to stress (Hartley et al., 2012). Researchers in past longitudinal studies have linked elevated levels of depressive symptoms with subsequent incidences of myocardial infarction (Violanti et al., 2013). A 2014 Harvard University School of Public Health article indicated that law enforcement officers in the United States are 30 to 70 higher risk of experiencing sudden cardiac death when they are

involved in stressful situations. Recently, researchers have found that law enforcement officers risk of sudden cardiac death was 34 to 69 times higher while attempting to restrain restive subjects or during altercations, 32 to 51 times higher during pursuits; 20 to 23 times higher during physical training, and 6 to 9 times higher during medical or rescue operations (Harvard University School of Public Health, 2014).

Alcoholism

Some researchers have found that law enforcement officers experience slightly higher rates of alcohol abuse than the public, due to higher levels of distress at work (Chopko, Palmieri, & Adams, 2013). Researchers have identified the elevated incidents of alcohol use in law enforcement as a coping strategy to deal with work-related stress (Menard & Arter, 2014). Alcohol is one of ten classes of drugs recognized in the Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition (2013) section on substance-related disorders. The Diagnostic and Statistical Manual of Mental Disorders, Fifth Edition states:

> All drugs that are taken in excess have in common direct activation of the brain reward system, which is involved in the reinforcement of behaviors and the production of memories. They produce such an intense activation of the reward system that normal activities may be neglected. Instead of achieving reward system activation through adaptive behaviors, drugs of abuse directly activate the reward pathways.

Binge drinking, or consuming five or more drinks consecutively, is a common behavior of law enforcement officers (Chopko, Palmieri, & Adams, 2013). Researchers suggest

that the use of alcohol is a staple in police subculture and encouraged (Menard & Arter, 2014). Researchers identify organizational stress and PTSD as two variables that have contributed to alcohol abuse among law enforcement officers (Chopko, Palmieri, & Adams, 2013). The personal relationships of law enforcement officers can be negatively affected by the excessive use of alcohol (Chopko, Palmieri, & Adams, 2013). Researchers in a minute amount of studies have examined the prevalence of alcohol abuse by law enforcement officers in the United States (Chopko, Palmieri, & Adams, 2013). Researchers that have examined alcoholism and law enforcement in the United States have obtained samples from large agencies (Chopko, Palmieri, & Adams, 2013). Obtaining samples from large agencies creates a significant gap in research because 76% of law enforcement agencies in the United States employ less than 25 sworn personnel (Chopko, Palmieri, & Adams, 2013).

Interpersonal/Domestic Violence

In past and present research, researchers have identified law enforcement work as a significant stressor on a marriage, often competing with family needs (Karaffa et al., 2015; Roberts et al., 2013). Researchers suggest that 40 percent of law enforcement families experience domestic or interpersonal violence in some form (Klinoff, Van Hasselt, & Black, 2015). The unique nature associated with law enforcement work, paralleled with the psychological and organizational demands of the job, can pose monumental challenges for a married couple (Karaffa et al., 2015). Physical and mental exhaustion may be experienced by law enforcement officers from emotional management or suppressing personal feelings and emotions while on duty (Roberts et al., 2013). Law

enforcement officers may also mask their feelings at home (Roberts et al., 2013). The lingering work-related stress may make family members targets for the stress and frustrations that are experienced at work (Karaffa et al., 2015). In past research, researchers have revealed that family issues are one of the most common reasons why law enforcement officers see mental health providers (Karaffa et al., 2015).

Researchers in recent studies suggest that law enforcement officers who suffer from PTSD have more violent marriages than those officers who do not suffer from the condition (Meffert et al., 2014). In these studies, researchers show officers with PTSD are both more likely to be violent and experience violence in marriage than their counterparts without the condition (Meffert et al., 2014). Researchers show law enforcement officers have a greater risk of committing homicide-suicide those in non-law enforcement career fields (Klinoff, Van Hasselt, & Black, 2015). Researchers attribute the increased risk of homicide-suicide by law enforcement officers to a plethora of job-related risk factors and continuous access to a firearm, which is the most common weapon used in homicide-suicides (Klinoff, Van Hasselt, & Black, 2015). A majority of victims in law enforcement homicide-suicide are women, and a majority of the perpetrators are current or past romantic partners (Klinoff, Van Hasselt, & Black, 2015). Also, a majority of the victims and perpetrators are below the age of 40, suspects use a duty weapon in most suicide-homicide incidents, most of the perpetrators are from the local police department, and the most common motive is divorce or estrangement (Klinoff, Van Hasselt, & Black, 2015).

Law Enforcement Suicide

Researchers in a large amount of past and present research examine suicide by law enforcement officers (Chae & Douglas, 2013). Researchers in past studies suggest that law enforcement officers have an elevated risk of suicide and are more likely to complete suicide than peers in other occupational groups, but the the articulation of the elevated risk is speculative (Bishopp & Boots, 2014; Rouse et al., 2014; Violanti et al., 2013; Violanti et al., 2016). Law enforcement officers are three to four times more likely to complete suicide than to die from a felonious assault (Bishopp & Boots, 2014). Each year, more law enforcement officers complete suicide than are killed by all other means combined in the line of duty (Deal, 2014). In 2016, 108 law enforcement officers in the United States completed suicide (Kulbarsh, 2017). Some researchers estimate that 140 law enforcement officers complete suicide each year (Rouse et al., 2014). A majority of law enforcement suicides involve the officer's duty weapon (Chae & Douglas, 2013). Researchers associate many variables with police suicide (Bishopp & Boots, 2014 & Deal, 2014).

Table 3

Variables Associated with Police Suicide

Officer age	Officer gender	Officer race
Officer marital status	Social support	Psychological factors
Depression	Anxiety	Alcohol/Substance Abuse
Anger	Burnout	PTSD
Access to weapons		

In a 2012 study by Chae and Boyle, an examination of empirically sound prior research revealed “five prominent themes” (p.92) associated with law enforcement suicide: “organizational stress, critical incident trauma, shift work and atypical work hours, relationship problems, and alcohol abuse” (p. 92). Chae and Boyle found that the extent of the impact of each of these variables is unclear, but determined that the existence of one variable alone does not increase the risk of suicide of law enforcement officers.

Researchers in a growing number of studies have examined the relationship between organizational structure, stress, and law enforcement suicide (Chae & Douglas, 2013). Factors such as extensive and irregular shift work, sleep restriction, have been linked to the elevated risk of law enforcement suicide (Chae & Douglas, 2013). Continuous duty on the night shift, as well as unpredictable shifts, have been found to elevate the risk of suicidal behavior in law enforcement officers (Chae & Douglas, 2013). Law enforcement officers have also pointed out internal police administration and organization as a source of chronic stress (Violanti et al., 2016). Lack of organizational support and administrative stress have been linked to significant feelings of hopelessness (Violanti et al., 2016). Hopelessness occurs when an individual systematically misinterprets events in their life negatively and predicts calamitous outcomes for the issues that they are experiencing (Violanti et al., 2016). Studies have suggested that the feeling of hopelessness experienced by some law enforcement officers exceeds the effect of occupational hazards (Violanti et al., 2016). Hopelessness has been identified as a risk factor associated with suicidal behavior (Violanti et al., 2016).

Researchers link aspects of the operational, or occupational, characteristics of law enforcement to the elevated risk of suicide (Chae & Douglas, 2013). Researchers propose exposure to critical incidents increase the risk of substance abuse, PTSD, aggression, suicidal behavior, and depression (Bishopp & Boots, 2014; Chae & Douglas, 2013; Violanti et al., 2013; Violanti et al., 2016). Excessive alcohol use is said to be a significant factor in suicidal behavior by law enforcement officers (Bishopp & Boots, 2014). Law enforcement officers who consume excessive amounts of alcohol as a manner of coping with traumatic stress experience high levels of suicidal behavior (Chae & Douglas, 2013). Researchers in several studies have linked PTSD to the elevated risk of suicide in law enforcement officers (Chae & Douglas, 2013; Violanti et al., 2016). Individuals diagnosed with PTSD have been found to exhibit suicidal behaviors at a rate that is three times higher than individuals without PTSD (Violanti et al., 2016). Researchers have connected clinical depression with law enforcement suicides (Bishopp & Boots, 2014; Violanti et al., 2013; Violanti et al., 2016). Depression experienced as a result of work-related stress in law enforcement officers is a probable prerequisite to suicidal behavior (Violanti, Robinson, & Shen, 2013). Depression exacerbates work-related stressors experienced by law enforcement officers (Bishopp & Boots, 2014). Researchers point to the challenge of balancing police work, family life and intimate partner relationships as a significant source of stress (Chae & Douglas, 2013). Factors such as separation and divorce increase the risk of suicidal behavior in law enforcement officers (Chae & Douglas, 2013).

Depression, separation, and divorce have been found to increase suicidal behaviors more in female law enforcement officers than in male law enforcement officers (Bishopp & Boots, 2014; Violanti et al., 2013). Caucasian male officers constitute the highest number of law enforcement suicides on average (Violanti et al., 2013). Little research has been conducted to examine the suicide rate of Hispanic law enforcement officers (Violanti et al., 2013). Researchers have shown that detectives and criminal investigators have the highest suicide rates (Violanti et al., 2013). Small law enforcement agencies experience higher rates of sworn employee suicides than their larger counterparts (Violanti et al., 2013).

Turnover in Law Enforcement

Researchers have shown that turnover in law enforcement is a detriment financially, costing agencies between 75% and 200% of the departing employee's salary (Smith, Wareham, & Lambert, 2014). Even with such an enormous financial effect, research examining turnover in law enforcement is minimal (Smith, Wareham, & Lambert, 2014). According to Smith, Wareham, and Lambert (2014, p. 378), "Turnover is typically defined as the cessation of the official association between worker and the employing organization." There are two major categories of turnover, voluntary and involuntary (Smith, Wareham, & Lambert, 2014). When an employee chooses to leave employment at an organization, whether it is quitting or early retirement, voluntary turnover occurs (Smith, Wareham, & Lambert, 2014). Involuntary turnover occurs when the exit from an agency occurs not at the will of the employee, such as termination, death, and mandatory retirement (Smith, Wareham, & Lambert, 2014). Researchers in the

minute amount of research on law enforcement turnover have revealed that the most common form of turnover in the career field is voluntary turnover (Smith, Wareham, & Lambert, 2014).

Researchers in existing research of turnover in law enforcement have focused on individual-level variables, such as the desire to leave the career field, organizational factors, job satisfaction, and demographic factors are all variables in turnover (Smith, Wareham, & Lambert, 2014). Some researchers argue that workplace factors alone do not explain turnover in law enforcement and suggest the examination of external factors, such as communities, as well (Smith, Wareham, & Lambert, 2014). Researchers classify the major factors that affect law enforcement turnover into three groups: individual, organizational, and environmental (Smith, Wareham, & Lambert, 2014). Researchers in the limited studies on the phenomena of turnover in law enforcement suggest that environmental factors have the greatest influence (Smith, Wareham, & Lambert, 2014). Among the factors of the work environment found to have a major influence on turnover are job stress and burnout (Smith, Wareham, & Lambert, 2014).

Shift work and Absenteeism in Law Enforcement

Law enforcement represents an understudied population when it comes to the psychological and physiological effects of shift work (Fekedulegn et al., 2013). Researchers have shown that shift work is a substantial source of occupational stress and has been connected to adverse health conditions (Fekedulegn et al., 2013; Fekedulegn et al., 2013). Absenteeism accounts for 60 to 70% of absence from work in law enforcement agencies (Fekedulegn et al., 2013). In the limited studies examining shift work and law

enforcement, researchers suggest shift work is linked to sick leave absence (Fekedulegn et al., 2013). Researchers in these studies suggest a disruption in the sleep-wake cycle and biological rhythms such as melatonin, cortisol, and metabolism cause chronic health issues, leading to the use of sick leave absence (Fekedulegn et al., 2013). Researchers in prior studies have been unable to link extended or long work hours, with chronic health issues and absenteeism (Fekedulegn et al., 2013). In summary, law enforcement officers who work afternoon and night shifts experience an increased risk of chronic health issues; therefore, increased use of sick leave absence (Fekedulegn et al., 2013).

Child Sexual Exploitation Investigators

The sexual exploitation of youth is a significant focus of the public, government, and media and is an unfortunate reality around the globe (Appleton, 2014 & Backes, 2013). Child abuse is defined as **"**words or overt actions that cause harm, potential harm, or threat of harm**"** and consists of physical, sexual, and psychological abuse (Centers for Disease Control and Prevention, 2016). The concern over CSE is supported by researchers, which have shown that sexual violence is a traumatic crime only second to homicide (Backes, 2013). Researchers in a 2014 report on child maltreatment by the United States Department of Health & Human Services Administration for Children and Families identify the significance of child abuse in the United States. The source of child abuse and neglect date from the report is rooted in data collected by the National Child Abuse and Neglect Data System (NCANDS), a federally funded program (Administration on Children, Youth and Families Children's Bureau, 2015). 50 states, the District of Columbia, and the Common Wealth of Puerto Rico contribute data to

NCANDS (Administration on Children, Youth and Families Children's Bureau, 2015). The child population of the 50 reporting states, the District of Columbia, and the Common Wealth of Puerto Rico in 2014 was 74,356,370 (Administration on Children, Youth and Families Children's Bureau, 2015). According to the NCANDS data, 702, 208 children of the total child population of the reporting states and territories are victims of abuse or neglect in 2014 (Administration on Children, Youth and Families Children's Bureau, 2015).

The National Sexual Violence Resource Center (2015) reports that one and four girls and one in six boys are victims of sexual abuse before reaching the age of 18. According to Murray, Nguyen, and Cohen (2015):

> Childhood sexual abuse often occurs alongside other forms of abuse or neglect, and in family environments in which there may be low family support and/or high stress, such as high poverty, low parental education, absent or single parenting, parental substance abuse, domestic violence, or low caregiver warmth. (p.323)

In a 2013 American Journal of Humanities and Social Sciences article, Foster and Carson provide definitions for CSA and child sexual CSE:

> **Child sexual abuse (CSA)** is defined as the misuse of power and authority, combined with force or coercion, which leads to the exploitation of children in situations where adults, or children sufficiently older than the victim to have greater strength and power, seek sexual gratification through those who are developmentally immature and where, as a result, consent from the victim is a non-concept. (p.98)

> **Child sexual exploitation (CSE)** can involve the following: possession, manufacture, and distribution of child pornography; online enticement of children for sexual acts; child prostitution; child sex tourism; and child sexual molestation. (p.98)

A limitation of current research on child abuse, including CSA, is the shortage of studies that examine the issue from a child's view (Foster & Carson, 2013). Researchers in existing studies in the United States have examined child abuse and CSA from the adult victim's perspective (Foster & Carson, 2013). In standing studies, researchers have provided some data regarding occurrences of CSA. According to the Centers for Disease Control and Prevention (2016), 12.3% of women and 27.8% of men sexually abused as a child experienced the abuse at age 10 or younger. Each year 325,000 children are at risk of becoming the victim of commercial CSE (Centers for Disease Control and Prevention, 2016). Researchers suggest that 12 to 14 is the average age that girls enter into prostitution, while 11 to 13 is the average age boys enter into prostitution (Centers for Disease Control and Prevention, 2016). Furthermore, researchers suggest that only 12% of CSA gets reported to law enforcement (Centers for Disease Control and Prevention, 2016). Researchers show that child abuse obstructs growth and development in child victims (Foster & Carson, 2013). Individuals who survive CSA also experience an increased risk of mental illness and conditions such as anxiety depression, emotional and behavioral problems, and PTSD (Foster & Carson, 2013; Murray, Nguyen, & Cohen, 2015). Researchers also suggest that CSA survivors experience an increased likelihood of

alcoholism, drug addiction, and interfamilial problems in adulthood (Foster & Carson, 2013; Murray, Nguyen, & Cohen, 2015).

Sexual violence, such as that perpetrated against children, requires an attentive and synchronized response from criminal justice, medical, and social professionals, as well as researchers exploring the phenomenon (Mennicke et al., 2014). The investigation into allegations and cases of CSA and CSE and the identification and apprehension of the offender is the responsibility of law enforcement (Office of Juvenile Justice and Delinquency Prevention, Unknown). In past studies, researchers revealed witnessing abused children are in the top four of the sixty most stressful occupational events (Violanti et al., 2016). Research examining work-related stress and the phenomena's effect on professionals working with child abuse and neglect victims are embryonic (Powell & Guadagno, 2013). Researchers in existing literature suggest professionals helping abused and neglected children are at risk of developing mental issues such as burnout, compassion fatigue, absenteeism, secondary traumatic stress, and vicarious traumatization (Brown, 2013; Powell & Guadagno, 2013). Powell and Guadagno (2013) found that a plethora of stressors were related to child abuse investigations, to include organizational and bureaucratic stressors such as high work demands, tension caused by partnering with other agencies, and inadequate training to perform required work tasks (Powell & Guadagno, 2013). Powell and Guadagno also found that organizational or bureaucratic stress has been reported by child abuse investigators to be more detrimental than occupational stressors (Powell & Guadagno, 2013). Craun, Bourke, and Coulson (2015) conducted a mixed-methods study examining the correlation between online CSE

investigations members of the Internet Crimes Against Children (ICAC) Task Force, family life, and secondary traumatic stress. 600 ICAC members from around the United States fully completed the online survey (Craun, Bourke, & Coulson, 2015). Craun, Bourke, and Coulson found that a majority of the respondents felt that they had not experienced a change in their relationships while conducting online CSE investigations, with one in 10 respondents feeling that their work improved their personal relationships (Craun, Bourke, & Coulson, 2015). Other respondent consensuses of the majority in the study were the disgust with others (24.3%) (Craun, Bourke, & Coulson, 2015). The examination of ICAC members is a narrow view of the relative population of law enforcement officers who investigate CSA and CSE and is a limitation of Craun, Bourke, and Coulson's study (Craun, Bourke, & Coulson, 2015).

In existing studies, researchers suggest that exposure to child sexual abuse is correlated with prolonged psychological issues and recommend precautions for professionals who work with child victims (Powell & Guadagno, 2013). The negative effects of CSA and CSE call for steps to be taken within the workplace to reduce the negative effects of working with victims of CSA and CSE (Powell & Guadagno, 2013). Globally, organizations who have failed to address workplace stressors suffered in abnormal working conditions by law enforcement officers have been held legally liable for psychiatric injury to employees (Powell & Guadagno, 2013). In *Seedman v. New South Wales (2000) 217 ALR 582*, an Australian police constable who was assigned to a unit to investigate child abuse without adequate training and supervision was awarded $750,000 for the negative psychological and physiological conditions she suffered as a

result (Butler, 2006; Powell & Guadagno, 2013; Wright, Powell, & Ridge, 2006). In the United States, the Court of Common Pleas of Philadelphia County affirmed an order for the City of Philadelphia Civil Service Commission to award civil service disability benefits to a 26-year veteran of the Philadelphia police department who suffered from PTSD after an encounter with an armed suspect (FindLaw, 2016).

The examination of the nature of workplace stressors of CSA and CSE investigators and how they respond to and cope with these stressors is a sparse, complex, under-researched (Powell & Guadagno, 2013; Wright, Powell, & Ridge, 2006). A gap in the literature offers little to no means of how law enforcement organizations should address the negative effects trauma caused by investigating CSA and CSE cases (Wright, Powell, & Ridge, 2006). Stress-related studies of law enforcement officers who work with child victims of abuse have also included social workers and therapists (Wright, Powell, & Ridge, 2006). The studies that include law enforcement officers contain a sample that is not regularly exposed to or trained to work with victims of CSA or CSE (Wright, Powell, & Ridge, 2006). Past researchers have primarily concentrated on measuring stress symptoms using objective clinical assessment tools (Wright, Powell, & Ridge, 2006). In existing research, researchers suggest addressing the work-related stress of CSA, and CSE investigators require a comprehensive understanding of how stress manifests during these investigations, prevention models, the proper working environment for CSA and CSE investigators, and the proper policies and procedures for these employees (Powell & Guadagno, 2013). The Innocent Justice Foundation, in partnership with the Department of Justice's Office of Juvenile Justice and Delinquency

Prevention (OJJDP) and the ICAC Task Force, developed the Supporting Heroes in Mental Health Foundation Training (SHIFT) to assist law enforcement, forensic, legal, and judicial professionals who work with victims of online CSE recognize and cope with the negative effects of working such cases through psycho-educational educational training (SHIFT Wellness, 2016). SHIFT (2016) developed guidelines for law enforcement agencies to follow that "Provide best practice recommendations" (p.2) for employees exposed to CSE visual material. SHIFT suggests that a healthy physical working environment is paramount for employees who exposed to CSA images (SHIFT Wellness, 2016). SHIFT also suggests employee support by mental health professionals who are familiar with the stressors of CSE work (SHIFT Wellness, 2016). Furthermore, SHIFT suggests adequate training for employees new to online CSE investigations (SHIFT Wellness, 2016). Employee control of breaks, casework, and their schedule is also a suggestion of SHIFT (SHIFT Wellness, 2016).

Conclusion

Work-related stress is a phenomenon that has an immense psychological and physiological effect on law enforcement officers and devastating financial and operational effect on law enforcement agencies. Law enforcement, as an occupation, is unique and the profession consists of numerous subgroups, or duty assigned subgroups all tasks with different duties; thus, experiencing different stressors. The source of stress in law enforcement and the effects that it has on officers vary. Researchers in a plethora of studies examine the effects of stress on law enforcement; however, there is a significant gap in many areas concerning the phenomenon. The identification of gaps in

current research in this literature review, especially concerning the study of stress in law enforcement subgroups, support the need for this study.

A mixed-method approach was used in this study to discover whether work-related stress caused by job demands and job control differs in CSE investigators as compared to other duty-assigned subgroups within law enforcement agencies. I discuss the methodology of this mixed-methods study in Chapter 3.

Chapter 3: Research Methods

Introduction

Law enforcement is often considered a challenging, hazardous, and stressful occupation (Korre, Farioli, Varvarigou, Sata, & Kales, 2014). In past and present research, researchers present empirical evidence that work-related stress has a detrimental psychological and physiological effect on law enforcement officers and supports the need for this study. Researchers delving into the phenomenon of stress in law enforcement often focus on occupational, organizational, and personal variables as sources of stress; however, a weakness of most past research on stress in law enforcement was the failure to examine the difference in occupational, organizational, and personal stressors experienced by law enforcement officers by their assigned duty (Habersaat, Geiger, Abdellaoui, & Wolf, 2015). Many law enforcement agencies in the United States have a quasi-military style organizational structure that consists of different subgroups (Cole, Smith, & DeJong, 2015; Johnson & Vaughn, 2016). These subgroups consist of law enforcement officers tasked with different duties. Researchers in current studies hypothesize stress experienced by law enforcement officers differ within subgroups in law enforcement organizations.

Setting

I used a purposeful sample of law enforcement officers from a medium sized law enforcement agency in eastern Washington State for this study. Law enforcement agencies in Washington State employ over 11,000 sworn commissioned law enforcement officers (Bureau of Justice Statistics, 2011). The agency employed 319 sworn law

enforcement officers at the time of the study. The U.S. Census Bureau (2017) estimated the population in the city that the agency services as 213,272 in 2015. The agency provides law enforcement services to the largest city in eastern Washington State. The overall sample size was also composed of sworn law enforcement officers who were still completing their probationary period, with the purpose of capturing data related to the stress of new law enforcement officers as well as experienced law enforcement officers. I obtained a letter of cooperation consisting of written permission to conduct the study within the organization from the department's chief of police.

The purpose of the examination of work-related stress in law enforcement officers from the eastern Washington State was to test the following hypothesis, and to explore the following research question:

Quantitative

Hypothesis (H_a1): Does work-related stress experienced by CSE and CSA investigators differ from that of other law enforcement subgroups because of different job demands and job controls?

Null Hypothesis (H_01): There is no significant difference in work-related stress caused by job demands and job controls experienced between CSE and CSA investigators and other law enforcement subgroups.

Qualitative

Research Question: How does work stress caused by job demand and job control differ (if at all) between CSE and CSA investigators and other law enforcement subgroups?

By using the hypothesis and research question for this study, I attempt to build upon and fill the gap in past and present research on work-related stress in law enforcement, which suggests that the stress that law enforcement officer's experience has lasting negative psychological and physiological effects.

Research Design and Rationale

An explanatory, sequential, mixed-methods approach, with an emphasis on a phenomenological qualitative approach, was used for this study. Mixed methods research involves combining characteristics of both the quantitative and qualitative approaches (Creswell, 2009). A mixed method approach can be used to strengthen the results of data from both the quantitative and qualitative approaches (Creswell, 2009). The number of researchers who use a mixed methodological approach is increasing because the process assists in expanding understanding of research questions and hypotheses by using one approach to verify the results of another (Creswell, 2009).

Quantitative research is a tool used to test objective theories through the examination of the relationship between variables (Creswell, 2014). Survey designs in quantitative research provide numerical descriptions of attitudes, opinions, and other measurable variables of a population under study (Creswell, 2014). I used the quantitative approach to discover, through comparative analysis, how work-related stress caused by job demands and job control effects law enforcement officers in different duty-assigned subgroups.

I used a transcendental phenomenological approach to inquiry for the qualitative portion of this study. Qualitative research is a vessel through which researchers explore

the meaning and understanding of human experience (Creswell, 2013). Qualitative research has been an important tool in administrative research, describing features of individuals, organizations, jurisdictions, or programs (O'Sullivan, Rassel, & Berner, 2008). Researchers conduct qualitative studies by obtaining detail-rich information from a small number of participants or cases (O'Sullivan, Rassel, & Berner, 2008).

The qualitative approach of phenomenological research is used to examine and describe the shared experience and meaning of a concept or phenomenon by several individuals (Creswell, 2013). Researchers obtain a richer understanding of nature and the everyday human experience through phenomenological studies (Patton, 2015). In a phenomenological study, the researcher collects data from participants who experience phenomena and cultivates an image of the shared experiences of the participants with the phenomena (Creswell, 2013). In a transcendental phenomenological study, the researcher brackets out his or her experiences with the phenomena studied (Creswell, 2009). Bracketing in qualitative research is also known as phenomenological reduction (Patton, 2015). Bracketing out his or her experiences as a researcher allows the readers to learn about the researcher's experience with the phenomena and conclude whether the researcher's experience biased the collection, analysis, and articulation of data (Creswell, 2013). After bracketing out his or her experiences, the researcher collects data from the participants (Creswell, 2013). The researcher then produces a textural description of the experiences or the participants, a structural description of their experiences, and a combination of both to provide a picture of the lived experience (Creswell, 2013). The qualitative approach was used in this study to examine further work stress caused by job

demands and job control in child sexual exploitation investigators and examine the potential difference in the phenomena of work stress between CSE investigators and other law enforcement duty assigned subgroups.

The quantitative data collection in this study was used to build the second phase, the qualitative study (Creswell, 2013). I used an explanatory sequential mixed-methods design with the purpose of using the qualitative data to explain the quantitative data further.

Role of the Researcher

At the time of the study, I was a law enforcement officer with 18 years of experience. I worked as a fully commisioned law enforcment officer and held the rank of sergeant, a supervisory rank. I had 8 years of experience investigating sex crimes, with six of the 8 years assigned to the Internet Crimes against Children Task Force as an investigator and as a child sexual predator investigator. I worked in a plethora of child sexual abuse and exploitation cases, such as cases involving child pornography, child luring, child rape, child molestation, child selling and buying, and juvenile human trafficking. In my career, I have also worked as a patrol officer, school resource officer, and criminal gang investigator, defensive tactics instructor, and member of the United States Marshal's Service Fugitive Task Force.

I was acquainted with numerous participants in this study; however, I did not have supervisory authority over the participants and did not use social affiliation to influence the participants' contribution to this study. Also, I controlled researcher bias in this study by eliminating any communication with the participants about the nature of the study

beyond that outlined in the written instructions for both parts and questions directly asked in the qualitative interviews. Because I work in the same environment as each participant, confidentiality was important. I did not document the name of the participant for both the quantitative and qualitative sections of the study. Although I examined the negative psychological and physiological effects of work-related stress on law enforcement officers in this study, my intent was not to elicit medical information from the participants. There was no compensation given for the participation in the study. Each participant's participation in the study was voluntary and took place without promise, threat, or coercion.

Methodology

Participant Selection: Quantitative Analysis of Stress in Law Enforcement

To calculate the sample size needed for the quantitative portion of this study, I determined three values (Burkholder, Unknown):

- Statistical Power
- Alpha Level
- Effect Size

The value of power chosen for this study was .80, meaning that the probability that the chosen statistical test in this study detected a real relationship between variables is 80%. The alpha level chosen for this study is .05 (α=.05), the standard alpha level in social science research (Burkholder, Unknown). An alpha level of .05 (α=.05) means that I had a 5% chance of arriving at the wrong conclusion in this study (Burkholder, Unknown). I used prior research by the developers of the two instruments used in this study, the PSQ-

Op and the PSQ-Org, to help estimate an effect size of .52 (r^2=.52; McCreary & Thompson, 2006). A correlation table and a correlation sample size calculator was used to estimate the sample size needed to detect a correlation between the independent variables and dependent variables in this study at a power of .80 (1-β=.80). I determined that the sample size needed was 27 (*n*=27).

I used 27 (*n*=27) law enforcement officers from a medium sized law enforcement agency in eastern Washington State, purposefully chosen for this study. The sample was stratified, meaning the sample's status as full-time, sworn law enforcement officers and their duty assignment was the basis for their selection. Also, I chose the sample from the selected agency because of the agency's size and the number of subgroups within each department. The agency was composed of 319 commissioned law enforcement officers at the time of the study. There were approximately 11,000 commissioned law enforcement officers in Washington State at the time of the study. Each of the 27 (*n*=27) participants in the study were purposefully selected, contacted by department email, and asked to participate in the study.

Participant Selection: Qualitative Analysis of Stress in Law Enforcement

A philosophy of qualitative researchers is to purposefully select participants to assist the research with understanding the phenomenon studied and the research questions of the study (Creswell, 2013). In phenomenological studies, the recommended size for a sample in a study is three to ten participants (Creswell, 2013). I gathered data for this study using a small, purposeful sample of seven law enforcement officers from varying subgroups. Each participant was a commissioned law enforcement officer of the state of

Washington. I verified the employment and commission as a law enforcement officer of each participant with the department. I used seven participants to ensure adequate coverage of subgroups and duties. My choice one of the participants was based merely on the fact that they were in investigator assigned to investigative CSE and CSA cases.

I based the selection of each participant of the qualitative portion of this study on duty assignment. I chose a law enforcement representative from patrol, detectives (investigations), administration, and specialty units. I did not select participants using their sex, race, sexual orientation, or ethnic background.

Instrumentation: Quantitative Study

In the quantitative portion of the study, I used two well-established and validated studies to obtain data from a purposeful sample of law enforcement officers. The purpose of survey research is to use a sample to gain knowledge about the attitudes, experiences, or characteristics of a population (Creswell, 2013). The survey tools I proposed to use in this study were the Operational Police Stress Survey (PSQ-Op) and the Organizational Police Stress Questionnaire (PSQ-Org). The PSQ-Op and the PSQ-Org are Likert scale surveys, each containing 20 questions. The surveys measure the work-related stress of law enforcement officers on a scale ranging from 1-*No Stress at All* to 7-*A lot of* Stress (McCreary & Thompson, 2013). The PSQ-Op and the PSQ-Org were developed by Donald R. McCreary and Megan M. Thompson (McCreary & Thompson, 2013). The relevance to law enforcement duties, the short-length, and the work-family balance consideration of the PSQ-Op and the PSQ-Org make these instruments suitable for the quantitative portion of this mixed methods study (McCreary & Thompson, 2006). The

PSQ-Op and the PSQ-Org are both "provided free for non-commercial, educational, and research purposes," as stated on the bottom of instruments (McCreary & Thompson, 2013).Reliability, construct validity, discriminant validity, and concurrent validity of the PSQ-Op and the PSQ-Org were all accessed in three of four studies conducted by McCreary and Thompson (2013). McCreary and Thompson published an article in 2013 in which the PSQ-Op and the PSQ-Org were shown to be reliable and showed construct validity, discriminant validity, and concurrent validity. In study number one, McCreary and Thompson use focus groups to interview Canadian law enforcement officers from various parts of the Province of Ontario (McCreary & Thompson, 2006). The focus groups, consisting of 10 participants, were asked four questions regarding stress in law enforcement (McCreary & Thompson, 2006). The result of the analyzed data from the focus groups revealed the stressors the participants discussed consisted of two categories: organizational stressors and operational stressors (McCreary & Thompson, 2006). McCreary and Thompson used the data gained from the focus groups to develop the PSQ-Op and the PSQ-Org. McCreary and Thompson used study number two as the preliminary test for the PSQ-Op and the PSQ-Org (McCreary & Thompson, 2006). The participants in study number two consisted of 47 law enforcement officers from the Canadian province of Ontario (McCreary & Thompson, 2006). The 47 participants completed the initial versions of the PSQ-Op and the PSQ-Org (McCreary & Thompson, 2006). Regarding the initial assessment of the reliability and validity of the PSQ-Op and the PSQ-Org by McCreary and Thompson, they state:

> This study demonstrated the initial reliability and validity of the PSQ-Op and PSQ-Org. The two scales showed adequate reliability in that their coefficients alpha were above .80, and most of their corrected item–total correlations were greater than .30. In the two instances where the latter criterion was not met, one item on the PSQ-Org was rewritten into two separate items (bringing the total number of items on the PSQ-Org to 20), whereas the remaining item was left alone. Construct validity was demonstrated by showing that the PSQ-Op and PSQ-Org shared only 36% of their variance and that stress ratings and frequency ratings were positively correlated. (p.502)

McCreary and Thompson (2013) examine the discriminant validity of the PSQ-Op and the PSQ-Org in the third study. The participants in study number three consisted of 197 law enforcement officers from the Canadian Province of Ontario (McCreary & Thompson, 2006). The participants completed the PSQ-Op, the PSQ-Org, the Perceived Stress Scale (PSS), a short form of the Daily Hassles Scale, and the Negative Life Events Scale (McCreary & Thompson, 2006). The Perceived Stress Scale (PSS), the short form of the Daily Hassles Scale, and the Negative Life Events Scale are three instruments that measure general life stress (McCreary & Thompson, 2006). Despite a minute overlap, McCreary and Thompson found that the PSQ-Op, the PSQ-Org measured separate and distinct constructs from the Perceived Stress Scale (PSS), the short form of the Daily Hassles Scale, and the Negative Life Events Scale (McCreary & Thompson, 2006).

The fourth study examined the construct validity of the PSQ-Op and the PSQ-Org (McCreary & Thompson, 2006). The participants in study number four consisted of 188

law enforcement officers from the Canadian Province of Ontario (McCreary & Thompson, 2006). The participants completed the PSQ-Op and the PSQ-Org, the Job Satisfaction Survey, and the Job-Related Affective Well-Being Scale (JAWS) (McCreary & Thompson, 2006). McCreary and Thompson replicated the reliability statistics of the PSQ-Op and the PSQ-Org in the fourth study (McCreary & Thompson, 2006).

Instrumentation: Qualitative Study

Face-to-face, one-on-one, interviews were initially planned to collect data in this study. Face-to-face consist of a few unstructured, open-ended questions designed to elicit views and opinions from the participants in a study (Creswell, 2009). There were numerous advantages and disadvantages to using face-to-face-interviews for this study. Advantages of using face-to-face interviews for this study include (Creswell, 2009):

- Face-to-face interviews allow a researcher to observe the participants of a study in the field directly.
- During face-to-face interviews, each participant can provide the researcher with historical information.
- Face-to-face interviews allow the researcher to maintain control over the questioning.

Disadvantages to using face-to-face interviews for this study include (Creswell, 2009):

- Face-to-face interviews offer secondary information from the view of the participants.
- Face-to-face interviews are pre-planned and occur in a setting other than in on that is natural.

- The presence of the researcher may bias responses in face-to-face interviews.
- The articulation and perspectives obtained during face-to-face interviews will vary from participant to participant.

Due to ongoing inclement winter weather, travel to and from the planned location of the face-to-face interviews was too dangerous for both the participants and me. I restructured the planned interviews and conducted them via telephone. The restructured change was submitted to the Walden University IRB and subsequently approved. Telephone interviews, just as face-to-face interviews, are unstructured, open-ended questions designed to elicit views and opinions from the participants in a study (Creswell, 2009). There were numerous advanteges and disadvantages to using telephone interviews for this study (Opdenakker, 2006). Advantages of usign telephone interviews in this study:

- Wide geographic access to participants.
- Ability to access hard to reach populations, such as those that work shift work.
- The willingness of participants to disclose sensitive issues not easily disclosed in person.

Disadvantages to using telephone interviews in this study:

- Reduction of researcher's ability to capture social cues, such as body language.
- Inability to standardize and organize the interview, making the interview susceptible to unplanned incidents such as interruptions.

During the telephone interviews, I took copious notes and audibly recorded the interview of each participant with two digital recorders. Using two recorders decreased the probability of technical difficulties. An online transcription company called Rev, at Rev.com, transcribed each audibly recorded interview.

Because this is explanatory sequential mixed methods study, the qualitative data collection built directly on the data obtained during the quantitative study (Creswell, 2013). I developed the qualitative survey tool used to obtain data during the telephone interviews in this study by using the data gleaned from the Operational Police Stress Survey (PSQ-Op) and the Organizational Police Stress Questionnaire (PSQ-Org). The survey in this study was part of an interview protocol, which I also developed. Using pre-existing instruments did not allow for the capture of data relevant to the previous quantitative study. Interview protocols are used for recording questions and answers in qualitative studies (Creswell, 2013). The interview protocol in this study (see Appendix B) consisted of:

- Date
- Location of interview
- Name of interviewer
- Name, employing agency, rank, and duty position of interviewee
- Informed Consent Statement
- Interview instructions for interviewer and interviewee
- Interview questions (main and follow-up)
- Space for notes taken during the interview

- Ending acknowledgment of thanks to the interviewee

Quantitative Procedures for Recruitment, Participation, and Data Collection

The purposeful chosen sample of participants in this study completed the PSQ-Op and the PSQ-Org. I obtained an employee list that contained the rank and duty position of each commissioned law enforcement officer in the agency. I selected representatives of the numerous subgroups within the agency to participate in the study. Each participant was invited to participate in the study by email. I advised each potential participant of the purpose of the study and possible implications of the findings of the study. I provided each potential participant in the study with a packet that contained an informed consent letter, a demographic questionnaire, the PSQ-Op, and the PSQ-Org (see Appendix C). No signature or acknowledgement of consent was required to ensure confidentiality. Completion of the surveys implied consent. Data were collected from each of the 27 (n=27) participants from the 20 questions of the PSQ-Op and the 20 questions of the PSQ-Org. After the completion and return of each survey, I provided contact information for the participants to answer any questions or concerns. This cross-sectional study did require me to follow-up post-survey with any participants.

Qualitative Procedures for Recruitment, Participation, and Data Collection

Just as in the quantitative portion of this mixed methods study, I purposefully selected the seven participants in the qualitative portion of this study for telephone interviews. The seven participants in the qualitative study where not participants of the quantitative study. I obtained an employee list containing the rank and duty position of each commissioned law enforcement officer. I attempted to select participants that did

not duplicate subgroups for the interviews, having one law enforcement officer for each subgroup represented by the seven participants. Each participant was contacted and asked to participate in the study by email (see Appendix D for qualitative survey email). I explained the purpose of the study and possible implications of the findings of the study to each potential participant.

An informed consent statement for each participant was included in the interview protocol for the telephone interviews and provided to each participant at the beginning the interviews. I was the data collection tool during each interview. I audibly recorded each interview with two digital audio recorders and took notes during each interview. Each interview was limited to a maximum time of 30 minutes. At the end of the interview, I provided contact information for the participants to answer any questions or concerns. The qualitative interview was a cross-sectional study and did not require me to follow-up post-survey with any participants.

Data Analysis Plan: Quantitative Study

Data in this explanatory sequential mixed-methods study was collected in two phases to test the following hypothesis and null hypothesis:

Hypothesis (H_a1): Does work-related stress experienced by CSE and CSA investigators differ from that of other law enforcement subgroups because of different job demands and job controls?

Null Hypothesis (H_01): There is no significant difference in work-related stress caused by job demands and job controls experienced between CSE and CSA investigators and other law enforcement subgroups.

I collected quantitative data first. Descriptive statistics were used to describe and summarize data collected from the administration of the PSQ-Op and the PSQ-Org surveys. Multiple regression was used to explain the relationship between the multiple independent variables identified in the 20 questions of the PSQ-Op, the 20 questions of the PSQ-Org, the age, sex, rank, years of service, and the current duty position of each participant, and the dependent variables, operational and organizational stress. The statistical relationship between operational and organizational stress was measured using a Pearson's correlation coefficient test. Linear regression analysis was used to determine if the independent variables identified in the 20 questions of the PSQ-Op, the 20 questions of the PSQ-Org, the age, sex, rank, years of service, and the current duty position of each participant accurately predict the outcome variables, operational and organizational stress. Also, linear regression analysis was used to access which independent variables were significant predictors of the dependent variables.

Data collected during the quantitative phase of this study were analyzed using IBM SPSS Statistics Version 21 software. IBM SPSS Statistics Version 21 software contains an *"ADP command"* which allowed me to screen and clean data (IBM SPSS Statistics Version 21 software, 2016).

Data Analysis Plan: Qualitative Study

Qualitative data were collected secondly in this explanatory sequential mixed-methods study. During the data analysis phase of this transcendental phenomenological study, I identified and clustered themes to report the findings of the study. Deductive analysis of data from the qualitative study was conducted to determine if the data

supported the characteristics of the prior quantitative study. I completed first cycle coding and second cycle coding. During first cycle coding, I assigned codes to data. During second cycle coding, I grouped summary codes from the first cycle coding into smaller categories or themes. I used NVivo, a software tool from QSR International, to analyze, manage, and shape the qualitative data collected in this study. As part of testing the validity of this qualitative study, I conducted an examination to identify and analyze discrepant data. In the analysis of discrepant data, I probed supporting and discrepant data to determine if the data needed is to be retained or modified.

Threats to Validity: Quantitative Study

I considered internal and external threats to the validity of the study. During the assessment, I examined whether the selection of the participants could be an internal threat to the validity of the study. Creswell (2013) indicates that a researcher can address selection as a threat to internal validity by randomly selecting participants in the study, so characteristics of the population could be evenly distributed. I recognized this as a valid threat due to the purposeful selection of the participants.

Issues of Trustworthiness: Qualitative Study

I addressed qualitative validity, transferability, dependability, confirmability, and credibility in this study, by employing several qualitative validation techniques: triangulation, phenomenological reduction, reporting of negative or discrepant information, and generalizing the study.

Table 4

Addressing Trustworthiness in the Qualitative Study

Triangulation	The researcher used numerous resources to collaborate the finding in the study and justify the structure of the themes in the study.
Phenomenological Reduction	The researcher bracketed out his experiences with the phenomena to make transparent whether his experience will bias the collection, analysis, and articulation of data.
Negative/Discrepant Information	The researcher examined data to report any data contradictory to the themes in the study.

Note: Adapted from "Qualitative Inquiry & Research Design: Choosing among Five Approaches," by J. Creswell, Copyright 2013 by Sage Publications, Inc

Ethical Procedures

During the planning of this study, I considered three ethical principles outlined in the *Belmont Report – Ethical Principles and Guidelines for the Protection of Human Subjects of Research* (1979): respect for persons, beneficence, and justice.

Respect for persons: I provided each participant with information needed to make an informed decision whether to participate in the study. Also, I took precautions to safeguard the participation of each participant from threat, coercion, or promise.

Beneficence: I planned the study to capitalize on the benefits of researching while minimizing any psychological or physiological injury to each of the participants.

Justice: I planned the study in a manner to ensure that each participant, no matter their race, sex, sexual orientation, religion, physical condition, and duty position, was treated equally and fairly.

I addressed respect for persons, beneficence, and justice throughout the planning and execution of the study.

The purpose of the study and the possible implications of the findings were made clear to each participant. Although I did not work within the employing agency of the participants, there was a high likelihood that I worked with some of the participants in some capacity. I did not base selection of the sample in the study on my personal or working relationship with the participants. The purpose of this study was not to elicit the medical history of the participants, and I avoided techniques likely to elicit harmful information. The identity of each participant in this study is anonymous. I will retain all data collected during this study, in all forms, in a locked container for five years following the conclusion of the study and available for examination upon formal request. I distributed the results of this study to the chief of police of the organization from which the sample was taken. Each participant can receive a copy of the results of this study upon request.

I obtained permission to conduct this study from the Walden University Institutional Review (IRB) board. The Walden University IRB confirmed the study complied with university ethical standards as well as research regulations and guidelines set forth by the federal government (Walden University, 2017).

Summary

I provided an overview of the methodology of this study in this chapter. I used a purposeful sample of law enforcement officers from a medium sized law enforcement agency in eastern Washington State for this explanatory sequential mixed-methods study. The quantitative study was conducted first by administering a survey to purposefully selected law enforcement officers, followed by the qualitative study, which will consist of telephone interviews of purposefully selected law enforcement officers. I considered the numerous reliability, validation, and ethical concerns in the study. I provided an overview of this phenomenon and how he plans to address them in this chapter. I also provided an overview of how data were analyzed in this chapter, as well as how permission to conduct the study was granted by the Walden University's IRB.

Chapter 4: Results

Introduction

The purpose of this explanatory sequential mixed-methods study was to discover whether there is a correlative difference in work-related stress caused by job demands and job control in different duty-assigned subgroups within law enforcement agencies by comparing organizational and occupational stress of CSE and CSA investigators to other law enforcement subgroups. Furthermore, this study explored the following hypothesis, null hypothesis, and research question:

Quantitative

Hypothesis (H_a1): Does work-related stress experienced by CSE and CSA investigators differ from that of other law enforcement subgroups because of different job demands and job controls?

Null Hypothesis (H_01): There is no significant difference in work-related stress caused by job demands and job controls experienced between CSE and CSA investigators and other law enforcement subgroups.

Qualitative

Research Question: How does work stress caused by job demand and job control differ between CSE and CSA investigators and other law enforcement subgroups?

In this chapter, I discuss the results of this study. I begin with a discussion of the quantitative analysis, followed by a discussion of the qualitative analysis, and conclude the chapter with a summary of the chapter.

Quantitative Study

Data Collection

An agency of 319 commissioned officers in eastern Washington State employed each of the 27 (*n*=27) participants in the quantitative portion of this sequential mixed-methods study at the time of the survey. I contacted each participant via email regarding the opportunity to participate in this doctoral study. Each participant completed a five-question demographic survey, the 20-question PSQ-org, and the 20-question PSQ-Op and returned them to me via email. I distributed the first round of surveys via email on November 30, 2017, to 37 potential participants. The second round of surveys was distributed via email on December 9, 2017, to 51 potential participants. The third round of surveys was distributed via email on December 13, 2017, to 50 potential participants. The fourth round of surveys was distributed December 15, 2017, to 40 potential participants. Finally, the fifth and final round of surveys was distributed December 17, 2017, to 31 potential participants. The total number of surveys emailed to potential participants was 209. I received the 27th survey on December 27, 2017. The response rate from November 30, 2017, to December 27, 2017, was 13%.

I provided each of the 27 (*n*=27) the five-question demographic survey, the 20-question PSQ-org, and the 20-question PSQ-Op on three Microsoft Word form fill documents via email. Each participant recorded their answers to the five-question demographic survey, the 20-question PSQ-org, and the 20-question PSQ-Op, electronically saved the documents, and returned it to me via email.

Demographics

As discussed in Chapter 3, I used commissioned members of a medium sized law enforcement agency in eastern Washington State as participants. At the time of the study, the agency employed 319 sworn law enforcement officers who were commissioned by the state of Washington. This quantitative study used 27 (*n*=27) participants from various duty-assigned subgroups within the agency. The 27 (*n*=27) participants represented 18 duty-assigned subgroups within the agency.

Table 5

Frequencies: Duty-Assigned Subgroups

Duty Position	Frequency	Duty Position	Frequency	Duty Position	Frequency
K9 Officer	1	Patrol Anti-Crime Team Officer	1	Internal Affairs Investigator	1
Patrol Officer	6	Major Crimes Unit Commander	1	Neighborhood Resource Officer	1
Traffic Officer	2	Sex Crimes Detective	2	Patrol Shift Commander	1
Patrol Supervisor	2	Community Outreach Officer	1	Task Force Officer	1
Administration	1	Major Crimes Detective	1	Police Academy TAC Officer	1
Domestic Violence Detective	2	Civil Enforcement Detective	1	Property Crimes Detective	1

Note. *n*=27

Patrol officers made up the highest number of participants, accounting for 22.2% of officers who participated in the study. The ages of the participants ranged from 26 to 55 years old, with the mean age of the participants being 45.74. Most of the participants (23 of the 27) were men or 85%. The average of the years of service for the participants was 21.67. The participant's years of service ranged from 3 to 34 years. The participants were composed of a diversity of ranks. One major, two lieutenants, three sergeants, eight detectives, one corporal, seven senior police officers, three at the rank of police officer first class, and two at the rank of police officer made up the sample.

As seen in Table 5, two participants were assigned to conduct sex crimes investigations. Sex crimes detectives in the agency are assigned to the Special Victims Unit (SVU) within the department (City of Spokane, 2018). The SVU, formed in 2002, is comprised of one sergeant and six investigators (City of Spokane, 2018). The investigators investigate crimes involving the sexual assault and sexual exploitation of victims whose ages range from infant to the elderly, to include persons with disabilities (City of Spokane, 2018).

Results

In this study, I examined the effects of organizational and operational stress on a purposeful sample of law enforcement officers. I used two established survey tools, the PSQ-Org and the PSQ-Op, to measure the effects of these two independent variables on 27 (n=27) commissioned law enforcement officers from the department. Both the PSQ-Org and the PSQ-Op contain 20 questions. I used IBM SPSS Statistics Version 21 software to conduct the data analysis for this study.

Cronbach's Alpha

I used Cronbach's alpha to test the reliability of the PSQ-Org and the PSQ-Op in this study. The PSQ-org and the PSQ-Op were both found to be highly reliable instruments for measuring organizational and operational stress in law enforcement officers. Cronbach's alpha for the 20 question PSQ-Org and the 20 question PSQ-Op were .89 (α=.89) and .90 (α=.90).

Table 6

Cronbach's alpha: PSQ-Org and PSQ-Op

Instrument	α
PSQ-Org	.89
PSQ-Op	.90

Descriptive Statistics

I used descriptive statistics to examine the mean of the answers given on the 7-point Likert scale PSQ-Org by duty-assigned subgroup. The mean score for all duty-assigned subgroups was 3.48, with a standard deviation of .98. The Patrol Anti-Crime Officer reported the lowest level of organizational stress, with a mean score of 1.7. The Police Academy TAC Officer reported the highest level of organizational stress, with a mean score of 4.95. Sex Crimes Detectives reported a mean score of 3.52, close to that of the overall mean of 3.48. Patrol supervisors, civil enforcement detectives, and domestic violence detectives reported organizational stress slightly higher than that of other duty assigned subgroups.

Table 7

Organizational Stress Means by Duty Assignment

Duty Position	Mean	Duty Position	Mean	Duty Position	Mean
K9 Officer	1.9	Patrol Anti-Crime Team Officer	1.70	Internal Affairs Investigator	3.15
Patrol Officer	3.28	Major Crimes Unit Commander	3.35	Neighborhood Resource Officer	2.55
Traffic Officer	3.73	Sex Crimes Detective	3.52	Patrol Shift Commander	3.45
Patrol Supervisor	4.25	Community Outreach Officer	3.45	Task Force Officer	3.55
Administration	3.65	Major Crimes Detective	2.25	Police Academy TAC Officer	4.95
Domestic Violence Detective	4.75	Civil Enforcement Detective	4.35	Property Crimes Detective	3.52

Also, I used descriptive statistics to examine the mean of the answers given on the PSQ-Op by duty-assigned subgroup. The mean score for all duty-assigned subgroups was 3.46, with a standard deviation of 1.05. The Patrol Anti-Crime Officer reported the lowest level of operational stress, with a mean score of 1.6. The Police Academy TAC Officer reported the highest level of operational stress, with a mean score of 5.2. Sex Crimes Detectives reported a mean score of 2.88, lower than that of the overall mean of 3.46. Domestic violence detectives reported the second highest level of operational stress, with a mean score of 4.8.

Table 8

Operational Stress Means by Duty Assignment

Duty Position	Mean	Duty Position	Mean	Duty Position	Mean
K9 Officer	2.5	Patrol Anti-Crime Team Officer	1.6	Internal Affairs Investigator	3.5
Patrol Officer	3.3	Major Crimes Unit Commander	3.7	Neighborhood Resource Officer	3.7
Traffic Officer	3.8	Sex Crimes Detective	2.9	Patrol Shift Commander	2.7
Patrol Supervisor	4.2	Community Outreach Officer	3.9	Task Force Officer	3.8
Administration	3.2	Major Crimes Detective	3.1	Police Academy TAC Officer	5.2
Domestic Violence Detective	4.8	Civil Enforcement Detective	3.9	Property Crimes Detective	2.3

Pearson Correlation

I reduced data results from both the PSQ-Org and the PSQ-Op into composite variables, organizational stress, and operational stress. The relationship between organizational stress and occupational stress was analyzed using the composite data. The relationship between duty-assigned subgroup and organizational and operational stress was also analyzed using the composite data. Using a confidence interval of 95% and a p-value of p=<.05, I found that organizational stress and occupational stress were significantly correlated: r (27) = .63, .000, 2-tailed. Using a confidence interval of 95% and a p-value of p=<.05, I found that organizational stress and duty assignment were not significantly correlated, r (27) = .91, .652, 2-tailed, supporting H_0 and rejecting H_1. Using a confidence

interval of 95% and a p-value of p=<.05, I found that operational stress and duty-assignment were not significantly correlated: r (27) = .03, .870, 2-tailed, supporting H_0 and rejecting H_1.

The correlative analysis of each question of the PSQ-Org and their relationship with duty assignment revealed that most of the variables in the questions and variable duty-assigned subgroup were not significantly correlated, supporting H_0 and rejecting H_1.

Table 9

Correlation Analysis: Duty Position and Organizational Stress

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	*.03*																			
2	.35	.55**																		
3	.20	.42*	.70**																	
4	**.04**	.19	.32	.10																
5	**.282**	.32	.51**	.36	.535**															
6	**.77**	.14	.32	.45*	.62**	.53**														
7	**.43**	.38	.51**	.47*	.77**	.67**	.78**													
8	.04	.35	.42*	.52**	.50**	.52**	.59**	.63**												
9	.15	.32	.37	.17	.19	.31	.04	.17	.34											
10	**.02**	.20	.00	**.05**	.37	.44	.30	.36	.52**	.17										
11	**.12**	.50**	.46*	.38	.37	.43*	.47*	.67**	.36	.24	.07									
12	**.02**	.34	.64**	.57**	.47*	.52**	.46*	.56**	.72	.23	.01	.52**								
13	.20	.20	.49**	.70**	.25	.23	.60**	.47*	.42*	.25	**.11**	.46*	.56**							
14	.26	.29	.57**	.61**	.20	.13	.46*	.39*	.28	**.01**	**.26**	.42	.50**	.52**						
15	.37	.29	.56**	.68**	.32	.26	.30	.48*	.56**	.17	.14	.45*	.48*	.47	.48*					
16	**.07**	**.13**	.37	.12	.15	.16	.16	**.02**	.07	.24	**.21**	-06	.32	.29	.14	**.06**				
17	.11	.23	.39*	.19	.07	.24	.12	.11	.11	.09	.20	**.06**	.03	**.15**	.30	.16	.13			
18	**.19**	.05	.16	.23	.17	.13	.31	.20	.04	**.25**	**.05**	.03	.03	.10	.47*	.21	.02	.50**		
19	.10	.03	.13	.57**	.30	.18	.22	.21	.38	.12	.30	**.05**	.05	.27	.11	.46*	**.29**	.23	.17	
20	**.03**	.12	.29	.57**	.30	.28	.48*	.41*	.40*	.13	.11	.37	.32	.51**	.38	.71**	.021	.14	.11	.52**

Note: Negative (-) linear correlation represented in bold.
***Correlation is significant at the .01 level (2-tailed)*
**Correlation is significant at the .05 level (2-tailed)*

The correlative analysis of each question of the PSQ-Op and their relationship with duty assignment also revealed that most of the variables in the questions and variable duty-assigned subgroup were not significantly correlated, supporting H_0 and rejecting H_1.

Table 10

Correlation Analysis: Duty Position and Operational Stress

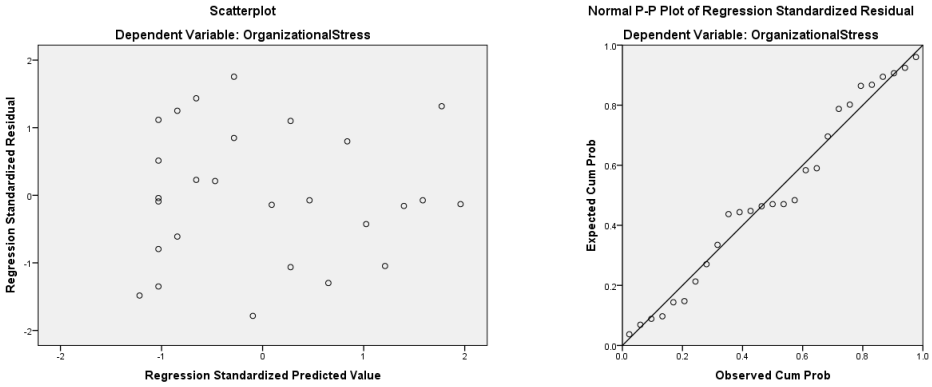
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
1	.032																			
2	.21	.56**																		
3	.23	.36	.59**																	
4	**.21**	.05	.34	.21																
5	**.11**	.13	.23	.58**	.41*															
6	.07	.02	.33	.47*	.52**	.39*														
7	**.16**	**.04**	.12	.34	.51**	.31	.43*													
8	**.32**	.06	.14	.29	.53**	.45*	.27	.72**												
9	**.18**	**.14**	.06	.26	.35	.48	.16	.43*	.49*											
10	.12	**.21**	.18	.16	.08	.07	.07	.36	.20	.43*										
11	.03	**.21**	.02	.20	.27	.06	.29	.60**	.44*	.54**	.76**									
12	**.10**	.30	.65**	.56**	.29	.28	.29	.43*	.49*	.24	.30	.31								
13	.30	.19	.53**	.25	.52**	.32	.54**	.24	.16	.07	.07	.15	.20							
14	.13	.23	.36	.24	.44*	.20	.69**	.49**	.24	.18	.16	.32	.21	.64						
15	.37	**.03**	.33	.29	.26	.06	.58**	.57**	.19	.23	.54**	.58**	.33	.46*	.56**					
16	**.06**	**.35**	.05	.21	.45*	.19	.49*	.43	.44*	.48*	.09	.28	.25	.30	.45	.34				
17	.06	**.05**	.32	.38	.46*	.46*	.71**	.36	.25	.32	.06	.09	.26	.58**	.67**	.42*	.67**			
18	.04	**.07**	.15	**.02**	.49**	.10	.42*	.44*	.26	.33	.03	.21	**.01**	.35	.61**	.43*	.59**	.55**		
19	.02	.05	.26	.54**	.16	.38*	.47*	.40*	.49**	.28	**.02**	.20	.35	.15	.39*	.20	.53**	.39*	.41*	
20	.03	.13	.30	.18	.28	.32	.37	.47	.27	.21	.07	.05	.11	.40*	.63**	.35	.28	.51**	.68**	.53**

Note: Negative (-) linear correlation represented in bold.
***Correlation is significant at the .01 level (2-tailed)*
**Correlation is significant at the .05 level (2-tailed)*

Linear Regression

Simple linear regression was used to test the relationship between the independent variable duty-assigned subgroup of each participant and the dependent variable organizational stress. I accessed normality through visual assessment of a P-P plot. The visual assessment revealed that all points were reasonably close to the line of best fit that dissects P-P plot chart; therefore, I discovered no deviation from normality, and the assumption was met. I accessed a scatter plot for the assumption of linearity. The visual assessment of the scatter plot between residuals and predicted values revealed a linear pattern; therefore, the assumption was met.

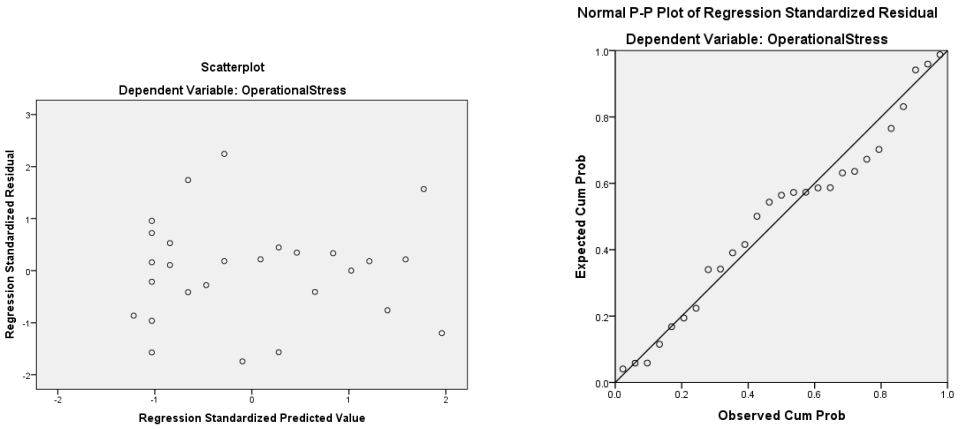
Figure 1. Duty-Assigned Subgroup and Organizational Stress Scatter Plot and P-P Plot



Regression results testing the relationship between organizational stress and duty-assignment were not significant: F (1,25) = .209, p = .65, supporting H_0 and rejecting H_1. The research sample was small, so there is no confidence in generalizing the sample to other law enforcement agencies.

Linear regression was also used to test the relationship between the independent variable duty-assigned subgroup of each participant and the dependent variable operational stress. I accessed normality through visual assessment of a P-P plot. The visual assessment revealed that all points were reasonably close to the line of best fit that dissects P-P plot chart; therefore, I discovered no deviation from normality, and the assumption was met. I accessed a scatter plot for the assumption of linearity. The visual assessment of the scatter plot between residuals and predicted values revealed a linear pattern; therefore, the assumption was met.

Figure 2. Duty-Assigned Subgroup and Operational Stress Scatter Plot and P-P Plot



Regression results testing the relationship between operational stress and duty-assignment were not significant: F (1.25) = .027, p = .87, supporting H_0 and rejecting H_1. The research sample was small, so there is no confidence in generalizing the sample to other law enforcement agencies.

Qualitative Study

Data Collection

I contacted each of the participants in the qualitative portion of this sequential mixed-methods study via email regarding the opportunity to participate in this doctoral study. I interviewed seven (n=7) commissioned law enforcement officers by telephone. Seven participants are a change from the proposed 10 participants and face-to-face interviews proposed in Chapter 3. The change was due to exhaustion of new and different data provided by each participant and inclement weather making it difficult and dangerous to travel for interviews. All interviews occurred between January 28, 2018, and February 14, 2018. Before each interview, each participant was read the consent statement from the *Recorded Interview Protocol* and consent to conduct the interview was verified verbally.

I recorded each interview with two digital audio recorders and saved both recordings electronically. During the interview, the interviewer (researcher) began each interview by collecting demographic on each participant.

The seven (*n*=7) interviewees were all male. The ages of the interviewees ranged from 28 to 53. The mean age of the participants was 39.85. The years of service of the interviewees ranged from 4-25 years of service. The mean of the years of service of the interviewees was 15.28. The ranks of the interviewees ranged from the rank of Police Officer to the rank of Sergeant. The duty position and duties of each participant varied. Two of the participants, Participant 5 and Participant 7, were purposefully chosen due to their assignment in the Special Victims Unit. Participant 5 monitors, registers, and tracks individuals required to register as a sex offender within the agency's jurisdiction. Participant 7 investigates incidents of human trafficking and focuses on juvenile victims.

Table 11

Demographic Data: Telephone Interview

	Age	Sex	Rank	Years of Service	Current Duty Position
Participant 1	42	M	Sergeant	21	Patrol
Participant 2	31	M	Police Officer	4	Patrol
Participant 3	40	M	Senior Patrol Officer	12	Task Force Officer
Participant 4	28	M	Police Officer	5	Traffic Officer
Participant 5	53	M	Detective	24	Special Victims Unit

(Continued)

	Age	Sex	Rank	Years of Service	Current Duty Position
Participant 6	37	M	Police Officer	16	Patrol Anti-Crime Team
Participant 7	48	M	Detective	25	Special Victims Unit

After obtaining demographic information, I asked each participant each of the following five questions in this exact order:

- What do you consider the most stressful aspects of working as a law enforcement officer?
- What is the impact of work-related stress on your family and friends?
- What are the effects of personal stressors on your job performance?
- What are the effects of stress experienced at work on your health and well-being?
- Is there any other information or aspects of work-related stress as it pertains to law enforcement that you would like to share?

Evidence of Trustworthiness

An online transcription company called Rev, at Rev.com, professionally transcribed all participants' digitally recorded interviews. Credibility and reliability of the subsequent retrieved data from Rev were checked by reading each of the transcripts several times for accuracy, comparing them to the recorded interviews for accuracy, and having each of the participants review the transcripts for accuracy. A few changes were made to ensure the reliability of the data. I addressed confirmability by using quoted

examples of responses from participants in the results section below to show that the results were obtained from data analysis and not from my opinion or bias. Data saturation occurred by asking all the participants the same five questions and coding the data until no further coding was reasonable. Dependability of the data obtained in this study was achieved through triangulation, meaning that I compared the results of this data with that of the numerous sources used to plan and conduct this study for accuracy. Generalization was achieved by comparing the results of this study with that of prior studies and scholarly writings and determining that the findings are consistent with that of previous studies of the population.

Data Analysis

Data in this transcendental phenomenological study was analyzed using NVivo 11 Pro software. I analyzed each of the transcribed interviews for significant statements. After locating these significant statements, I generated meaning for each statement. Next, I coded these statements and developed themes. The four themes that I developed from the data analysis were operational stress, organizational stress, physiological effects, and psychological effects. Furthermore, I developed subthemes under each of these themes. I identified the subthemes of burnout, officer safety, dangerous job, and time commitment in the participants' responses regarding operational stress. Bureaucracy, the legal system, no interventions, and public scrutiny were prevalent subthemes regarding organizational stress. Psychological and physiological stress were found to have the biggest effect on the seven participants and contained the most subthemes: alcohol abuse, anger, diet, family concerned, friends concerned, headaches, family time, lack of sleep, physical fitness,

physiological damage, spill over stress, time commitment, and off-duty vigilance. The commonality in reporting by all participants yielded no evidence that work stress caused by job demand and job control differ between CSE and CSA investigators and other law enforcement subgroups.

Operational Stress

Four of the participants reported being affected by operational stress. Participant 7, a detective who investigates juvenile human trafficking cases, reported a feeling of burnout:

> Just the feeling of burnout, where it just ... Sometimes it can make you kind of have ... You do all this stuff, and the more you do the more you're going to get scrutinized or in trouble it seems like sometimes, so it can house that kind of a negative outlook, that it makes you justify not working as hard as you could.

Officer safety and the danger of the job were stress experienced by Participants 3, 4, and 5. All three of these participants have distinctly different duty assignments. Participant 3 is a task force officer, Participant 4 is a traffic officer, and Participant 5 is a detective assigned to track and register sex offenders. Participant 4, a traffic officer, stated, "I would say the most stressful that we unfortunately deal with every day when look back is safety, the officer safety aspects." Participant 3 indicated that the personal stressors can affect officer safety and the stress from home can spill over to the operational side of law enforcement:

> Obviously, there's an officer safety issue while you're trying to deal with bad guy, and you're worried about your bills, or your wife's mad because you have to work

> on the weekend, and you couldn't get your days off to go spend time with the family.

Organizational Stress

Six of the seven participants reported at least one organizational related stressor. Bureaucracy was reported as the most stressful of the organizational stressors by the participants. Participant 1, a patrol sergeant, reported, “I think the stress that affects us to the core is often self-generated within the profession because, sometimes within this profession it appears that we can eat our own.” Similarly, Participant 7, the human trafficking investigator, stated:

> You expect a certain amount of stress from doing any kind of work, but the stress seems to be internal stress, the politics, and the constant scrutiny that kind of goes with that type of job. Law enforcement chiefs and sheriffs are always under the most scrutiny, and it definitely passes down.

Participants 1, 5, and 6 identify the constantly changing legal system as a source of stress by. Participant 6, a Patrol Anti-Crime Team member, refers to the complexity of performing his duties as a law enforcement officer due to the legal system by stating, “The most stressful is probably dealing with the red tape that we have to go through to catch bad guys.” Participant 6 also stated:

> Sure, when [inaudible 00:02:49] stuff, and then to ... so, we can't search vehicles anymore off that court ruling. To get around that, it requires a lot more paperwork to do Search Warrants and stuff like that. Instead of just being able to move forward with your case, you kind of got to pause, tow a car, take an extra three to

> four hours ... or, hour, I don't know. Then, continue with all the paperwork to get you past all that stuff that we used to do. So, the changing laws, I guess, would probably be the best answer that I'm giving today.

The lack of primary interventions was discussed by Participant 7, the human trafficking investigator, as a source of organizational stress. Participant 7 states:

> It seems like admin in law enforcement could do a better job of trying to screen and limit stress to their troops rather than add on. It just kind of creates that environment where everyone is just trying to look out for themselves and get to the top and just kind of that type of a environment where the brown-nosing to move up and things like that ... It just creates a negative, unhealthy environment as a whole.

Constant scrutiny by the public was identified as a significant source of stress by Participants 4, 6, and 7. Participant 4, the traffic officer, speaks of the magnitude of this stress when he states:

> Stress at work. I would say, you're always worried. You're just always wanting to do the right thing. I guess the day and age that we live in of policing, everybody's watching. Everybody wants you to make a mistake, and then they want to jump on your mistake. I think that with that, it makes it a little more stressful. Even though you're doing the right thing, somebody might want to scrutinize it or try to say something about it when you had no other choice or there weren't many other options and you went with the choice you went with. It's not that you live with the fact that it was a bad choice. It's just tiring to just get beaten up. It's just because

> you're a police officer, you wear a uniform, you're a target. You're an easier target. That's the biggest stress.

Likewise, Participant 7, the human trafficking investigator, states, “I'd say kind of the politics and the public, just the constant let's say scrutiny from the public, where you feel like you're kind of living in a glass bubble sometimes.”

Psychological and Physiological Effects

Numerous psychological and physiological effects of work-related stress were reported by the participants to affect not only them but also their families. Participant 3 and 5 discuss the use of alcohol in law enforcement to deal with or mitigate stress. Participant 3, a task force officer, states:

> Disengaging and just kind of sitting there watching TV and drinking. I mean, obviously alcohol is a huge problem in our workplace, and a lot of guys will use that as a ... I can't think of the name of it, but they'll use it as a self-medication a lot of times…

Participants 2, 3, and 7 reported anger as being a significant effect of work-related stress. Participant 7, the human trafficking investigator, states, “It seems like I do get pissed off and angry easier over the years.” Participants 2 and 3 reported that anger caused by work-related stress not only effects them but also their families. Participant 2, a patrol officer, states:

> I would say that the biggest thing that's impacted my family is I probably get more angry at little things than I should sometimes. Just because I don't ... I deal with people whining and stuff all day and it's kind of hard to come home to that.

Similarly, Participant 3, the task force officer, states:

> I would say, there's a lot of disengagement. I caught myself on several occasions trying to not take out my frustrations on my family, and not by anything physical, but as far as being short with your children, or your wife.

Lack of sleep related to work was identified by Participants 2, 3, 6, and 7 as having substantial effects on their health and well-being. Participant 7, the human trafficking investigator, states:

> I'd say the biggest one that I struggle with from time to time is just lack of sleep. I definitely notice that on a night where I know I don't have to work the next day, going into the weekend as an example, I sleep a lot better than during the week, where I don't have to go to work the next day.

Likewise, Participant 2, the patrol officer, states:

> I feel like that lack of sleep probably has a lot to do with some problems that happen, because I know the days I work I sleep really well, but the days that I'm off, I'm up all night long and then trying to spend time with the family gets effected because I'm tired and I don't feel like doing anything.

The difficulty of maintaining a healthy diet was reported as a stressor effected of work by Participants 1 and 3. Family and friend's concern for the safety of the officer was reported by Participant 4. Headaches caused by work-related stress were reported by Participant 6. The lack of family time was reported by Participant 3. Finding time to exercise and stay physically fit was work-related stressor identified by Participants 1 and 3. Personal stress spilling over to work was an issue identified by Participant 1 and Work-

related stress spilling over to home life was an issue identified by Participants 1, 4, and 5. Finally, Participant 3, the task force officer, identified vigilance while off duty as a source of stress:

> Just you're walking down in the mall, or somewhere with your family, and you see a goblin, or a bad guy, excuse me, that you arrested once, and he's eyeballing you, and there's that stress. You're always on some kind of vigilant level and your body can only take so much of that before it starts graying, and losing hair, and gaining weight, things of that nature.

Summary

In this chapter, I discussed the quantitative and qualitative studies. In the quantitative study, 27 (n=27) law enforcement officers completed both the PSQ-Op and the PSQ-Org to examine operational and organizational stress in law enforcement. The sample represented 18 duty-assigned subgroups. Cronbach's alpha was used to test the reliability of the PSQ-Op and the PSQ-Org, and they were found to be reliable. Descriptive statistics, Pearson Correlation, and linear regression were used to analyze the quantitative data. After conducting the quantitative, I conducted the qualitative study. I conducted a telephone interview of seven (n=7) law enforcement officers. Each of the interviews was digitally recorded and later transcribed. The transcribed data were examined using NVivo 11 Pro. I developed themes and subthemes, and all the data were exhausted. I discussed the themes operational Stress, organizational stress, physiological effects, and psychological effects. Also, I discussed the subthemes of burnout, officer safety, dangerous job, time commitment, bureaucracy, legal system, no interventions,

public scrutiny alcohol abuse, anger, diet, family concerned, friends concerned, headaches, family time, lack of sleep, physical fitness, physiological damage, spill over stress, time commitment, and off-duty vigilance. In the next chapter, I will provide an interpretation of the findings of the study. Additionally, I discuss limitations, recommendations, and implications of the study.

Chapter 5: Discussion

Introduction

The purpose of this sequential mixed-methods study was to discover whether there is a correlative difference in work-related stress caused by job demands and job control in different duty-assigned subgroups within law enforcement agencies by comparing organizational and operational stress of CSE and CSA investigators to other law enforcement subgroups. The results of this study may support the need to identify and address the diverse psychological and physiological needs of law enforcement officers by their duty assignments. Also, the results of this study may identify the need for organizational policies addressing the specific mental and physical health requirements of law enforcement officers.

In the quantitative portion of this study, 27 (n=27) commissioned law enforcement officers completed a demographic survey, the PSQ-Org, and the PSQ-Op. An analysis of the data obtained from the completed surveys revealed no significant relationship between work-related stress and the duty-assignment of the participants. Furthermore, the mean score of the CSE and CSA investigators on both the PSQ-Org and the PSQ-Op were nearly parallel to that of the mean of all of the duty-assigned subgroups combined. The qualitative study results support the results of the quantitative study. In the qualitative study, I interviewed seven (n=7) commissioned law enforcement officers by telephone. I asked each participant five questions related to work-related stress. Just as in the quantitative study, analysis of the data obtained in the qualitative study revealed no significant relation between work-related stress and duty assignment. The CSE and CSA

investigator in the qualitative study reported work-related stress and psychological and physiological effects of work-related stress similar to that of the other six participants. In this chapter, I discuss and interpret the findings of the study. Also, I discuss the limitations of the study and recommendations for further research. Finally, I discuss the implications of this study.

Hypothesis and Research Questions

This study explored the following hypothesis, null hypothesis, and research question:

Quantitative

Hypothesis (H_a1): Does work-related stress experienced by CSE and CSA investigators differ from that of other law enforcement subgroups because of different job demands and job controls?

Null Hypothesis (H_01): There is no significant difference in work-related stress caused by job demands and job controls experienced between CSE and CSA investigators and other law enforcement subgroups.

Qualitative

Research Question: How does work stress caused by job demand and job control differ between CSE and CSA investigators and other law enforcement subgroups?

Interpretation of the Findings

Quantitative

In the quantitative portion of this study, 27 (n=27) commissioned law enforcement officers completed a demographic survey, the PSQ-Org, which measures

organizational stress within law enforcement officers, and the PSQ-Op, which measures operational stress within law enforcement officers. The 27 (n=27) participants represented 18 duty-assigned subgroups. Two of the participants were members of the SVU, where they investigated incidents of CSE and CSA. A descriptive statistics analysis of the mean score by duty-assigned subgroup revealed the CSE and CSA investigators of the SVU had a mean score on both the PSQ-Org and PSQ-Op that was nearly parallel to that of the other 17 subgroups. The descriptive statistical analysis was the first indication that there was no correlative difference in work-related stress experienced by CSE and CSA investigators and law enforcement officers in the other 17 duty assigned subgroups.

A Pearson's correlation analysis of the completed PSQ-Org and the PSQ-Op revealed a significant correlation between organizational stress and operational stress; however, the analysis found no significant correlation between organizational and operational stress and duty-assigned subgroup. Furthermore, a Pearson's correlation analysis of each question in both the PSQ-Org and the PSQ-Op suggested that the variables measured in the questions on both tools were not significantly correlated with the duty-assignment of each officer. These findings supported the null hypothesis (H_0) proposing that there is no significant difference in work-related stress caused by job demands and job controls experienced between CSE and CSA investigators and other law enforcement subgroups and rejecting the hypothesis (H_1). The Pearson's correlation analysis of the PSQ-Org and the PSQ-Op produced no evidence that the work-related stress caused by job demands and job controls experienced between CSE and CSA investigators was different from that of other law enforcement subgroups.

I used linear regression analysis to test the relationship between duty-assignment and organizational and operational stress. The linear regression analysis showed that the relationship between duty-assignment and organizational and operational stress was not significant. Just as with the Pearson's correlation analysis, these findings supported the null hypothesis (H_0). In the null hypothesis, I proposed that there is no significant difference in work-related stress caused by job demands and job controls experienced between CSE and CSA investigators and other law enforcement subgroups. The linear regression analysis of the PSQ-Org and the PSQ-Op also produced no evidence that the work-related stress caused by job demands and job controls experienced between CSE and CSA investigators was different from that of other law enforcement subgroups.

Qualitative

I obtained qualitative data by conducting a telephone interview of seven (n=7) commissioned law enforcement officers. One of the seven participants in the interviews is a member the SVU, where their main responsibility is CSE and CSA investigations. The seven participants were asked five questions from a tool I developed. By examining the themes and subthemes that I developed during the data analysis, I found that the responses to the five questions by the CSE and CSA investigator were similar to that of the other six participants. The data analysis found no significant difference in the reported work-related stress and effects of work-related stress experienced by the CSE and CSA investigator and the other six members of different duty-assigned subgroups. The data gleaned from the qualitative study supported the findings of the quantitative study.

Comparison to Similar Studies

Although the quantitative data were not analyzed to directly measure the effect of work-related stress on each law enforcement officer, the themes and subthemes that were developed during the data analysis supported evidence from past and present studies related to organizational and operational stress and the psychological and physiological effects of the phenomenon on law enforcement officers that were discussed in Chapter 2. Researchers in these studies report higher than normal incidents of work-related injuries, anxiety, depression, alcoholism, sleep disorders, disorders in the immune system, PTSD, cardiovascular disease, interpersonal violence, suicide, turnover, and absenteeism. These studies also report displeasure in the bureaucracy within police agencies, excessive stress over career ambitions, and excessive stress over administrative battles by law enforcement officers. Additionally, the lack of primary SMIs has been identified by researchers in past and present studies and related to work-related stress within the law enforcement career field. The participants reported burnout, officer safety, the danger of working as a law enforcement officer, and the time commitment required to work in the career field as significant operational stressors.

The participants in the qualitative portion of this study reported department bureaucracy, legal system issues, the lack of departmental stress interventions, and constant public scrutiny as significant organizational stressors. The psychological and physiological effects of working as a law enforcement officer appeared to have the heaviest effect on the seven participants. Alcohol abuse, anger, dietary issues, concerns of family members and friends, headaches, lack of family time, lack of sleep, physical

fitness concerns, physiological damage, spill over stress, and off duty safety concerns were reported by the participants. As noted above, these effects of organizational and operational stress and the psychological and physiological of the phenomenon reported by the participants are well documented in past studies and related to organizational and operational stress and the psychological and physiological effects of the phenomenon on law enforcement officers.

Limitations of the Study

There are numerous limitations to this study. I obtained the data in both the quantitative and qualitative studies from law enforcement officers one medium sized law enforcement agency. The correlative analysis conducted in the quantitative portion of the study using a statistical power of .80, an alpha level of .05 (α=.05), and an effect size of .52 (r^2=.52) called for a sample size of 27 (n=27), which is relatively small compared to the 319-commissioned officer make-up of the agency and the approximate 11,000 commissioned officer population of the state of Washington. The sample taken from the agency was small, so there is no confidence in generalizing the sample to other law enforcement agencies. The agency is a medium-sized police department, which may limit the number of duty-assigned subgroups to examine.

Conducting telephone interviews did not allow for the noting and documentation of the kinesics of each participant. Using email as a method to distribute and collect the demographic survey, the PSQ-Org, and the PSQ-Op may have negatively affected the response rate. Researchers have shown that response rates for email surveys are lower than that of other conventional methods, with response rates of 25% to 30% in some

studies (Fincham, 2008; McPeake, Bateson, & O'Neil, 2014). This study had a 13% response rate, with a nonresponse bias of 87%. The low response rate may be due to cultural differences that create barriers between researchers and law enforcement officers (Alpert, Rojek, & Hansen, 2013). Researchers have also shown that response rates of law enforcement officers have declined over time, primarily due to surveys not being administered in person (Nix et al.,2017). Some studies have revealed, however, that inviting large numbers of officers to participate in studies is associated with low response rates and low response rates are not sufficient grounds alone to dismiss a study (Nix et al.,2017).

Recommendations

Although there has been a vast amount of research dedicated to exploring the effects of work-related stress on law enforcement officers, there has been little research that examines the effects of work-related stress on officers by exploring the phenomenon within duty-assigned subgroups. There is a need to examine stress within law enforcement by looking at how stress effects officers while performing certain duties and whether there is a difference in stress experienced by officers within different duty-assigned subgroups. I used a relatively small sample in this study compared to the number of law enforcement officers within the state of Washington. I recommend researchers in future studies use a larger sample from more than one agency or use a sample from a large law enforcement agency with a larger number of duty assigned subgroups within.

I used mixed methods to obtain data in this study, and recommend that future studies exploring the effects of work-related stress on law enforcement officers employ mixed-methods to examine the phenomenon. Using mixed-methods allowed for a broader understanding of work-related stress within the sample in this study. Researchers have shown that work-related stress within the law enforcement field is a complex problem; therefore, using qualitative or quantitative research alone may be an inadequate method to completely understand the problem. The qualitative data obtained in this study provided a rich understanding of how work-related stress is perceived and experienced by the participants.

Possibly the most beneficial recommendation gleaned from this study is the importance of fostering a relationship or partnership between researcher and law enforcement agency before conducting research. In this study, I built a working relationship and trust with the chief of police regarding the study; however, I failed to establish a trustful and respectful relationship with the possible participants. Future research into work-related stress should be based on cooperation, coordination, and collaboration. Cooperation, coordination, and collaboration during the research process can enhance the fruitfulness of the research (National Institute of Justice, 2005). Forming a relationship or partnership with the individual personnel who serve as possible participants may soothe the belief that participating in research distracts from their duties and data obtained during research is useless for law enforcement officers (National Institute of Justice, 2005). Furthermore, relationships and partnerships with possible law enforcement research participants may eliminate the belief that the results of a study may

be used against them by their agency (National Institute of Justice, 2005). A 2005 National Institute of Justice report titled, *Establishing & Sustaining Law Enforcement Research Partnerships: Guide for Researchers* states, "By helping police personnel see what they can get out of research, researchers can help to defuse the suspicions of police personnel and begin to engage them in the research process." (p.11) This may be especially beneficial to younger or less experienced law enforcement officers who may be reluctant to participate in research, as seen in this study.

Implications

Law enforcement is an inherently hazardous occupation that has extended negative psychological and physiological effects due to work-related stress. Many law enforcement officers have access to secondary and tertiary SMIs; however, past and present studies have identified the absence of primary SMIs within law enforcement agencies. Data obtained in this study support past findings that leaders and administrators in law enforcement agencies are failing recognize and provide adequate primary SMIs for officers. Past studies, such as a study published in 2018 by Arble et al., indicates that less is known about the effects of primary SMIs on trauma experienced by law enforcement officers than secondary and tertiary SMIs. Just as Arble et al. suggests in their study, this study suggests employing primary SMIs could reduce, restructure, or elevate aspects within the law enforcement career field that adversely affect law enforcement officers' health (Babatunde, 2013). Furthermore, this study suggests the need to implement and make readily recognizable and available secondary and tertiary SMIs within law enforcement agencies for all law enforcement officers, regardless of what duties they

perform. This study may also provide evidence for further improvement of and access to secondary SMIs such wellness programs, physical fitness programs, and time/self-management programs to mitigate stress soon after exposure. Also, this study may also provide evidence for further improvement and access to tertiary SMIs such as treatment, therapy, and counseling. Access to treatment, therapy, and counseling should be established with the understanding that tertiary SMIs cause lingering negative psychological and physiological distress before an officer can find reprieve. With that said, relying on tertiary SMIs as a form of addressing work-related stress alone is not effective.

This study may also support the need for law enforcement agencies to focus more on the agencies relationship with the community. I suggest through data obtained in this study that a great deal of stress experienced by law enforcement officers is related to public opinion, approval, and disapproval of police actions. This may be a separate function or go beyond the traditional concept of Community Oriented Policing (COP) and may branch out into law enforcement agencies relationship with media and social media outlets that carry weight in public opinion in society. Lastly, there have been few studies that examine work-related stress in law enforcement by examining the effects of the phenomenon in the context of duty-assignment. This study may identify the need for additional studies that examine stress within the law enforcement career field within specific duty assigned subgroups and support the need to examine the phenomenon from a larger context.

Conclusion

This study was conducted to discover whether there is a correlative difference in work-related stress caused by job demands and job control in different duty-assigned subgroups within law enforcement agencies by comparing organizational and occupational stress of CSE and CSA investigators to other law enforcement subgroups. Data obtained in both quantitative and qualitative studies revealed that there is no correlative difference in work-related stress experienced by the participants in the study. Furthermore, the reported stress of the CSE and CSA investigators closely paralleled that of other law enforcement officers in varying duty-assigned subgroups.

Law enforcement will continue to be a hazardous and demanding profession. Past and present studies reveal the increased psychological and physiological effects of work-related stress on law enforcement officers. The participants in this study provided detailed information that supports prior studies indicating the increased psychological and physiological effects of work-related stress on law enforcement officers. Although there was no correlative difference detected in this study, organizational and operational stress did appear to have a significant effect on the participants. I discovered that the participants were unhappy with the lack of SMIs within their agency during the study. Researchers in past studies identify SMIs as essential to employee health and wellness. This study, along with prior studies, suggest that law enforcement agencies need to include preemptive measures to mitigate and manage psychological and physiological effects work-related stress by addressing the mental and physical health needs of all officers through SMIs, resources, and dedicated programs.

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Appendix A: Qualitative Interview Protocol

Police Stress: An Analysis of the Impact on Child Sexual Exploitation Investigators
A Mixed-Methods Study

Recorded Interview Protocol

Start Recording

This is Damon Simmons, a Walden University Doctoral Student, and I am the interviewer for today's interview. The date is_____ and the time is _____. This interview is taking place at _____.
I am currently with the interviewee.

Name: _____

Age: _____
Sex:

Rank:_____

Years of service_____

Current duty position:_____

Sir/Ma'am, this interview is voluntary. You are free to participate or not participate. No one at the Spokane Police Department will treat you differently if you decide not to participate in the study. If you decide to in the participate in this study, you can still change your mind and stop at any time. Do you understand that this interview is voluntary and wish to participate? *Yes/No*.

Thank you for agreeing to participate in the study. During this interview, I will ask you several questions related to stress on your job. Please answer the questions as truthfully and fully as possible. If there is a question that up do not wish to respond to, please advise me that you would rather not answer the question. This interview should take no longer than 30 minutes.

I. First, let me get some information about you.
   a. What is your employing agency?
   b. What is your age?
   c. What is your current rank?
   d. How many years have you served as a law enforcement officer?
   e. What is your current duty position?

II. Main and follow-up interview questions:

   a. What do you consider the most stressful aspects of working as a law enforcement officer?
   b. What is the impact of work-related stress on your family and friends?
   c. What are the effects of personal stressors on your job performance?

d. What are the effects of stress experienced at work on your health and well-being?
e. Is there any other information or aspects of work-related stress as it pertains to law enforcement that you would like to share?

I would like to thank you for participating in this study. If you have any questions related to this interview or the study, I can be contacted at damon.simmons@waldenu.edu. Questions may also be directed at the researcher's dissertation chair, Dr. Greg Koehle at gregory.koehle@mail.waldenu.edu.

Note Page

Appendix B: Quantitative Email Packet

Police Stress: An Analysis of the Impact on Child Sexual Exploitation Investigators
A Mixed-Methods Study

Demographic Survey

Please answer the below questions:

Age:

Sex: M ☐ F ☐

Years of Service:

Rank:

Current Duty Position:

Operational Police Stress Questionnaire

Below is a list of items that describe different aspects of being a police officer. Please check the box indicating how much stress it has caused you over the past 6 months, using a 7-point scale (see below) that ranges from "No Stress At All" to "A Lot Of Stress":

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☐

2. Working alone at night 1☐2☐3☐4☐5☐6☐7☐

3. Over-time demands 1☐2☐3☐4☐5☐6☐7☐

4. Risk of being injured on the job 1☐2☐3☐4☐5☐6☐7☐

5. Work related activities on days off (e.g. court, community events) 1☐2☐3☐4☐5☐6☐7☐

6. Traumatic events (e.g. MVA, domestics, death, injury) 1☐2☐3☐4☐5☐6☐7☐

7. Managing your social life outside of work 1☐2☐3☐4☐5☐6☐7☐

8. Not enough time available to spend with friends and family 1☐2☐3☐4☐5☐6☐7☐

9. Paperwork 1☐2☐3☐4☐5☐6☐7☐

10. Eating healthy at work 1☐2☐3☐4☐5☐6☐7☐

11. Finding time to stay in good physical condition 1☐2☐3☐4☐5☐6☐7☐

12. Fatigue (e.g. shift work, over-time) 1☐2☐3☐4☐5☐6☐7☐

13. Occupation-related health issues (e.g. back pain) 1☐2☐3☐4☐5☐6☐7☐

14. Lack of understanding from family and friends about your work 1☐2☐3☐4☐5☐6☐7☐

15. Making friends outside the job 1☐2☐3☐4☐5☐6☐7☐

16. Upholding a "higher image" in public 1☐2☐3☐4☐5☐6☐7☐

17. Negative comments from the pubic 1☐2☐3☐4☐5☐6☐7☐

18. Limitations to your social life (e.g. who your friends are, where you socialize) 1☐2☐3☐4☐5☐6☐7☐

19. Feeling like you are always on the job 1☐2☐3☐4☐5☐6☐7☐

20. Friends/family feel the effects of the stigma associated with your job 1☐2☐3☐4☐5☐6☐7☐

Organizational Police Stress Questionnaire

Below is a list of items that describe different aspects of being a police officer. Please check the box indicating how much stress it has caused you over the past 6 months, using a 7-point scale (see below) that ranges from "No Stress At All" to "A Lot Of Stress":

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