

GENDER DIFFERENCES IN COMPASSION FATIGUE AND BURNOUT AMONG
SHERIFF'S DEPUTIES

by

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ABSTRACT

Law enforcement has a long and sordid history with mental health. Recently researchers have begun to dissect the effect of professional and occupational stressors on LEOs. I focused on secondary constructs, compassion fatigue and burnout, that contribute to mental health concerns. Compassion fatigue (CF) and burnout (BO) have been studied most thoroughly in medical settings, but less so in law enforcement settings. While most researchers study law enforcement as a genderless mass, I hypothesized that there is a gender difference in burnout and compassion fatigue levels among Sheriff Deputies (SD). Research aimed to identify how gender differences can contribute to more holistic and specific interventions and support for those deputies struggling with compassion fatigue and burnout. A convenience sample of deputies from Sheriff's Offices in Oregon completed an online demographic questionnaire, the Professional Quality of Life version 5 tool, which measures compassion satisfaction, burnout and secondary traumatic stress, both the Operational Police Stress Questionnaire and the Organizational Police Stress Questionnaire, which measure operational and organizational stress and the Copenhagen Burnout Inventory, which measures personal, work and client burnout. Research determined that there is no significant difference between female and male deputies when determining levels of compassion fatigue ($p=.751$) or burnout ($p=.689$). It was also determined that there was no significant difference between corrections and patrol deputies when determining levels of compassion fatigue ($p=.372$) and burnout ($p=.321$). Though this research did not find any disparities between genders and divisions (patrol and corrections) related to compassion fatigue and burnout, it did uncover that both genders and divisions have a high level of both compassion fatigue and burnout. This analysis stands in contrast to previous studies showing higher levels of compassion

fatigue in female than males. Further studies are needed to determine what other factors are currently unaccounted for that have a significant impact on BO.

Keywords: compassion fatigue, burnout, gender, law enforcement

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Dedication

This journey is dedicated to my husband, Kevin, who has navigated, financed, supported and slogged through all my crazy adventures, you are the ultimate gift. There isn't anyone I would rather do life with than you, always you. To my boys who forgave my long days and nights, homework filled vacations, missed sporting events and all the little things along the way. Dream big boys, there is no stopping you. Mom and Dad, thank you for always believing I could do anything and everything. The wonder woman mask worked. I love you and I'm done; I swear. To my brother, thanks for always making me laugh, you're the best tweedledum. Michelle, we have done a lot of life together and through it all you have supported me, cried with me, laughed with me, edited so many versions of this dissertation and prayed me through my darkest hours. There will never be enough words to thank you for your friendship, other than I love you friend. Lastly, to my girl gang, my prayer warriors, my shield maidens. God works miracles (you're reading one) and we are proof he answers prayers. Thank you, as heartfelt as it can be.

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CHAPTER 1: INTRODUCTION TO THE STUDY

Introduction

The traumatic events of policing make the front page of most media outlets, but the mundane of policing should be drawing the most attention (Bonner & Brimhall, 2021). First responders experience more cumulative trauma than the public, which can cause physical and mental health issues (Ahern et al., 2016; Hallinan et al., 2021). Repeated exposure to traumatic events can adversely impact LEOs' physical and psychological health. Conditions such as countertransference, vicarious traumatization, and secondary traumatic stress can result from these encounters (Hallinan et al., 2021). Current literature on law enforcement looks at the effects of exposure to traumatic situations (MacEachern et al., 2018) but does not look at compassion fatigue and burnout independently.

Background

Law enforcement remains male-dominated, with very little research on the difference between genders regarding compassion fatigue (CF) and burnout (BO). Information regarding gender differences is found as a result of another research question but rarely on its own. CF and BO are prevalent in helping professions, including law enforcement, but specific information regarding gender differences has not yet been targeted (Turgoose et al., 2017). A significant amount of data can be learned from both genders on handling CF and BO in law enforcement. In previous research, CF and BO have been linked to adverse health and occupational outcomes, such as depression, heart disease, stomach disorders, and alcohol and drug abuse (Brady, 2016; Pinki & Sandeep, 2021; Roach et al., 2018). Research has found that gender is significantly associated with predicting CF and BO levels, but this research has not been extended to LEOs (Page & Robertson, 2021). Although there is a robust amount of literature on CF and BO among

LEOs (LEO), very little research has investigated the role of gender with respect to CF and BO. One study on gender differences in law enforcement found that women are at a higher risk of BO due to their double roles, traditional trends, and responsibilities (García-Rivera et al., 2020).

Burnout

Literature rarely can agree on a specific definition of BO, but Perez et al. (2010) easily define it as a feeling of being at the end of one's rope. More specifically, it is defined as hopelessness, increased emotional exhaustion, and difficulty dealing with work stress effectively (Gonzalez et al., 2019). BO gradually develops due to accumulated stress (Levin et al., 2021) and includes emotional exhaustion, depersonalization, and reduced personal accomplishment (Page & Robertson, 2021). It is also considered an acute effect of working with the victims of traumatic events but not being physically involved in the traumatic events (Perez et al., 2010).

Recent research has found that LEOs in the United States and Ensenada, Mexico suffer from mental and emotional exhaustion and show warning signs of BO (García-Rivera et al., 2020; McCarty et al., 2019). Various psychosomatic problems and substance abuse result from BO and stress in LEOs (Pinki & Sandeep, 2021). More specifically, McCarty et al. (2019) found that a strong predictor for BO was workload and work/life balance. Even though BO occurs at a personal level, risk factors for BO can generate from organizational factors, occupational factors, lack of autonomy, and a lack of rewards and recognition (Hallinan et al., 2021; Masson & Moodley, 2019; Perez et al., 2010).

Compassion Fatigue

CF has several definitions, but the one that encompasses CF the best is a state of exhaustion the professional suffers from the negative impact of encounters with trauma survivors (Levin et al., 2021; Papazoglou et al., 2019). Often CF is researched in conjunction with

secondary traumatic stress (STS) or BO. Low levels of compassion satisfaction and higher levels of CF are significantly associated with feelings of low organizational support and being overwhelmed at work (Brady, 2016). Indirect exposure to trauma plays a significant role in BO and lower compassion satisfaction, whereas direct exposure has no relevant relationship with BO or compassion satisfaction (Brady, 2016). Brady et al. (2016) also suggest that it is possible to experience symptoms of STS and BO without the individual being aware of it.

Secondary traumatic stress consists of the problematic emotions and behavioral reactions that occur from indirect exposure to traumatic events (Brady, 2016). Interestingly the *Diagnostic and Statistical Manual of Mental Disorders, Volume 5 (DSM-5)*, now identifies STS as a form of Post-Traumatic Stress Disorder (PTSD). STS is also referred to as CF. Researching BO and CF is difficult because they are used interchangeably with STS and vicarious trauma (VT) throughout research (Page & Robertson, 2021). The interchangeable use of STS, CF, BO, and VT creates confusion and dilutes their characteristics and precise phenomenology (Page & Robertson, 2021). Literature suggests a more linear relationship between the frequency and duration of exposure to distressing materials and its impact on LEOs' STS, of which CF and BO are components (Denk-Florea et al., 2020). Even as research indicates that LEOs have adverse psychological outcomes, it remains a profession full of selfless, kind, and genuine individuals who regularly put their physical and mental health on the line for others and in doing so, may develop BO and CF.

Corrections and Patrol

One important characteristic that distinguishes the Office of the Sheriff from other law enforcement units is its historical roots. The sheriff came into existence before the year 700, which makes the Sheriff the oldest continuing non-military law enforcement entity in history.

The duties of the Sheriff included keeping the peace, collecting taxes, the maintaining of jails, arresting fugitives, maintaining a list of wanted criminals, and serving orders and writs for the King's Court. These duties remain much the same in current times.

In America, the office of Sheriff was modified over a period of time to fit democratic ideals. Following the pattern of English government, Sheriffs were appointed and the Office of Sheriff was the first county office established in the United States. In 1841 Oregon elected its first Sheriff and interestingly the first public building west of the Rockies was the jail in Oregon City. Originally, all counties functioned exclusively as agents of State Government and all their activities had to be authorized or mandated by state law. The Office of Sheriff is a constitutional office, having exclusive powers and authority. These powers are not subject to the dictates of a county manager or board of commissioners. The Sheriff's office is different than other law enforcement agencies as it is directly accountable to the citizens through the election of the Sheriff.

However, this is just a portion of the individuals who work in law enforcement. Unique to Sheriff's offices, there are two distinct divisions, patrol and corrections. In Oregon, both are staffed by sworn deputies and support staff. These divisions have drastically different work environments and, as such, have considerably different occupational stress. Both divisions experience a significant amount of trauma and stress, but those events or situations look differently due to their work environment. Those on patrol, the stressors consist of high-pressure traffic stops, traumatic community calls for assistance, car wrecks, missing people, and a substantial amount of other equally traumatizing situations with community members. Whereas the stressors experienced by those in corrections are maintaining the safety and security of a volatile population with no defensive weapons, continuous interaction with individual's who

suffer from significant mental illness, ongoing interaction with individuals who are at times manipulative, needy, and unable to advocate for themselves in conjunction with community members who express their frustration and concern in occasionally unhealthy ways. Working in a jail has been equated to working in an asylum, insinuating that the tools needed to work in a jail are not provided in the police academy, but inherent abilities to interact with humans during some of the worst days of their lives. For these reasons alone, researchers should look closely at the possible differences in operational and occupational stress between the divisions and the deputies who staff them. Throughout the research, unless expressly noted, LEOs are those individuals who wear a uniform and patrol the streets.

Gender and Law Enforcement

There is a robust library of research on law enforcement, but as the dynamics and culture of policing change, the need for more precise and diverse research increases. Most research into law enforcement focuses on the LEO as a genderless individual, and the research findings can be generalized to all LEOs regardless of their gender. Law enforcement remains male-dominated, but as women continue to grow and navigate the profession, a need for gender-specific research is evident. For example, CF and BO have become important constructs in law enforcement as they eat away at the LEO and the agency's stability (El Sayed et al., 2019; Greinacher et al., 2019; Hallinan et al., 2021; Miller & Unruh, 2019; Sherwood et al., 2019). Unfortunately, both CF and BO have been mistaken for each other and used interchangeably with secondary traumatic stress and vicarious trauma, making specific construct research difficult (Brady, 2016; Masson & Moodley, 2019; Page & Robertson, 2021; Papazoglou et al., 2019; Queirós et al., 2020; Turgoose et al., 2017).

Research in other helping professions has found that CF and BO are experienced differently by men and women; therefore, their responses are different (Bell et al., 2019; García-Rivera et al., 2020; Greinacher et al., 2019; Levin et al., 2021). Male LEOs have been found to show higher levels of stress and anxiety, tend to be more self-reliant and have personality traits that may lead to more relationship issues than female LEOs (du Plessis et al., 2021).

Research has found that women in law enforcement often take positions that allow for “second shift” work. Second shift is in reference to female LEOs who take care of their family and run their household, in addition to their first shift, which is their job as a LEO (Rabe-Hemp, 2009; Murray, 2020). This “second shift” is a source of stress for female LEOs and has been identified as a barrier to the recruitment and retention of females in law enforcement (du Plessis et al., 2021; Kurtz, 2012). Research by Kurtz (2012) indicated that female LEOs experience a higher level of stress than their male counterpart due in part to the load of the “second shift.” In conjunction to work related stress there is also the stress from familial obligations, which increases the pressure female LEOs endure both at work and at home. These two areas of stress create environments where the stress of one environment (work) exacerbates another environment (home) and vice versa (du Plessis et al., 2021; Kurtz, 2012). Even though this “second shift” causes more overall stress for female LEOs it also has brought a more empathetic and holistic work style to their employment. Women in policing embody a greater empathetic communication style, which has been shown to be a protective factor in BO, but a possible detriment when encountering CF (Rabe-Hemp, 2009; Murray, 2020).

With these findings, other first responders have benefited from gender-specific coping strategies, individual empowerment with knowledge, agency support, increased resiliency, and mental health programs (Bell et al., 2019; Levin et al., 2021; Masson & Moodley, 2019; Miller et

al., 2018; Queirós et al., 2020; Varadarajan & Rani, 2021; Winders et al., 2020). LEOs endure significant stress, vicarious trauma, secondary traumatic stress, BO, and CF, but they have yet to benefit from the research findings (Brady, 2016; Gonzalez et al., 2019; McCarty et al., 2019; Papazoglou et al., 2019; Turgoose et al., 2017). Most recent research on gender differences in law enforcement focuses on stress symptoms and BO and has found that women perceive and experience work-related stress more severely than males (Bonner & Brimhall, 2021; Murray, 2020; Pinki & Sandeep, 2021; Rabe-Hemp & Miller, 2018). Unfortunately, there has been even less research on CF and BO and law enforcement response based on gender. A lack of research in this area leaves both men and women LEOs without access to support and education specific to their gender and vocation. Lastly, preventative measures can be taken when information about the adverse outcomes is provided, which can save careers and lives (Bademci et al., 2016; Landers et al., 2019; Smith-MacDonald et al., 2021; Winders et al., 2020).

Biblical Foundation

Scripture affirms that "Blessed are the Peacekeepers, for they will be called the children of God" (Matthew 5:9, New International Version Bible, 2011). This view of law enforcement involves protecting the weak, providing justice, and holding peace for society. However, it goes further, requiring law enforcement agencies to be accountable to their communities and to partner with them to uphold their safety. In conjunction with being a peacemaker, law enforcement is also "God's servant for your good. But if you do wrong, be afraid, for he does not bear the sword in vain. For he is the servant of God, an avenger who carries out God's wrath on the wrongdoer" (Romans 13:4, New International Version Bible, 2011). It is the responsibility of individuals to obey the governing authorities. Those authorities are established by God to maintain order and punish wrongdoing.

Eirēnopoíós, or peacemakers, translates from Greek as those who bravely declare God's terms to those around them (Edwards, 2017). Interestingly, *eirēnopoíós* is only used once in the Bible, which is in Matthew 5:9, to declare God's terms and imbue the peacemakers with protectiveness over His people. Micah 6:8 emphasizes and encourages speaking up for those who cannot speak for themselves and defending the rights of the poor and needy. A call to protect the vulnerable and to walk humbly with God. Society's view of law enforcement may not include this, but it is the calling of community policing, both patrol and corrections, indicating that law enforcement does have a Biblical foundation.

Problem Statement

There is a robust library of research on law enforcement, but as the dynamics and culture of policing change, the need for more precise and diverse research increases. The stress and life-altering calls endured by LEOs contribute to not only CF and BO but a multitude of other mental health concerns (Domínguez Ruiz et al., 2022). Narrowing the lens of this research to examining specific constructs could provide more specific data to help preserve healthy mental health in LEOs.

Law enforcement remains male-dominated, but as women continue to grow and navigate the profession, a need for gender-specific research is evident. For example, CF and BO have become important constructs in law enforcement as they eat away at the LEO and the agency's stability (El Sayed et al., 2019; Greinacher et al., 2019; Hallinan et al., 2021; Miller & Unruh, 2019; Sherwood et al., 2019). Unfortunately, both CF and BO have been mistaken for each other and used interchangeably with STS and VT, making specific construct research difficult (Brady, 2016; Masson & Moodley, 2019; Page & Robertson, 2021; Papazoglou et al., 2019; Queirós et al., 2020; Turgoose et al., 2017).

Most research into law enforcement focuses on the LEOs as a genderless individual, and the research findings can be generalized to all LEOs regardless of their gender or the type of agency they work for. The oversimplification of gender and policing has primarily been seen through a masculine lens, negating the benefits that each gender brings to law enforcement (Silvestri, 2017). But more importantly, it does not consider the differences in the impact of gender and agency type on the CF and BO experienced by individual LEOs.

Research into other helping professions has found that CF and BO are experienced differently by men and women; therefore, their responses are different (Bell et al., 2019; García-Rivera et al., 2020; Greinacher et al., 2019; Levin et al., 2021). Female LEOs perceive and experience work-related stress more severely than males (Bonner & Brimhall, 2021; Murray, 2020; Pinki & Sandeep, 2021; Rabe-Hemp & Miller, 2018). Other first responders have benefited from gender-specific coping strategies, individual empowerment with knowledge, agency support, increased resiliency, and mental health programs (Bell et al., 2019; Levin et al., 2021; Masson & Moodley, 2019; Miller et al., 2018; Queirós et al., 2020; Varadarajan & Rani, 2021; Winders et al., 2020). Yet to date, there has not been sufficient research on CF and BO in LEOs based on gender to create gender-specific supportive programming. Furthermore, most of the research regarding LEOs focuses on patrol officers, leaving out the other half of a Sheriff's office, which is corrections. The research remains sparse when referring to Sheriff's offices, which is a population of LEOs that experience different occupational and operational issues than any other law enforcement agency. Currently there has been no research comparing the patrol and correction divisions of the Sheriff's Office, making this research unique. Having knowledge regarding the differences in CF and BO between patrol and corrections has the potential to provide information to tailor supportive programming based upon duty assignment.

LEOs – males and females, patrol and corrections – endure significant stress, VT, STS, BO, and CF, but they have yet to benefit from the research findings (Brady, 2016; Gonzalez et al., 2019; McCarty et al., 2019; Papazoglou et al., 2019; Turgoose et al., 2017). It is even more difficult to provide support to Sheriff's deputies, because the agency often provides support for sworn staff based on research specifically for LEOs that work the street and very little if any for those sworn staff who work in corrections. A lack of research in this area leaves both men and women LEOs without the data needed to create and sustain support and education specific to their gender and vocation. Preventative or curative measures can be best developed when information about the adverse outcomes linked to both BO and CF is provided, which can save lives and careers (Bademci et al., 2016; Landers et al., 2019; Smith-MacDonald et al., 2021; Winders et al., 2020).

Purpose of the Study

The purpose of this quantitative survey study was to examine how CF and BO affect Sheriff's deputies and if there was a difference in that impact between genders. In addition, this study also investigated how patrol and correction divisions differ in CF and BO in Sheriff's deputies (SD).

Research Questions and Hypotheses

RQ1: Do female deputies have higher CF levels than male deputies?

RQ2: Do female deputies have higher BO levels than male deputies?

RQ3: Does CF mediate the relationship between gender and BO?

RQ4: Do patrol deputies experience higher operational stress than correctional deputies?

RQ5: Do patrol deputies experience higher organizational stress than correctional deputies?

RQ6: Do patrol deputies have higher CF levels than correction deputies?

RQ7: Do patrol deputies have higher BO levels than correction deputies?

Hypotheses

Hypothesis 1: Female deputies will have higher CF than male deputies.

Hypothesis 2: Female deputies will have a higher BO level than male deputies.

Hypothesis 3: CF mediates the relationship between gender and BO.

Hypothesis 4: Patrol deputies will have higher operational stress than corrections deputies.

Hypothesis 5: Patrol deputies will have higher organizational stress than corrections deputies.

Hypothesis 6: Patrol deputies will have higher CF level than correction deputies.

Hypothesis 7: Patrol deputies will have higher BO levels than correction deputies.

Remove extra space.

Assumptions and Limitations of the Study

Researching CF and BO among SD yielded several challenges. The most pressing challenge was gaining cooperation from several different Sheriff's offices and then, from there, garnishing participation from the deputies themselves. By professional design, LEOs are naturally cautious and skeptical when asked to engage in any questionnaires or surveys, regardless of where they originated. There was a concern from LEOs that the information gathered was not confidential and would be traced back to them, resulting in disciplinary action or negatively affecting their future professional goals. Buy-in from not only the Sheriff and command staff but also the deputies themselves was not as difficult to gain as anticipated, but because the researcher was viewed as an outsider there was some initial resistance.

Another limitation was in the generalizability of the research. Oregon is clearly divided both geographically and politically. The west side of the Cascade Mountains is home to most of the state's population resulting in larger Sheriff's offices. Politically, the climate surrounding law enforcement is less favorable than on the state's east side. The east side is less populated but is geographically larger, resulting in smaller Sheriff's offices but more area to cover. Politically the climate on the east side of Oregon is more favorable towards LEOs, and community relations appear more positive. Using the geographical size of Oregon and the number of Sheriff's offices and sworn staff, it will be difficult to effectively generalize the research to more urban-covered, politically homogenous or diverse states. Secondly, the ratio of female to male deputies may not translate to other states. It is also doubtful that the ratio of female to male deputies will be similar within the Sheriff's offices in Oregon.

One assumption in data collection was that there will be response bias. The most probable response bias will be social desirability bias, in part to the mentality of LEOs and the belief that they must remain strong and stoic at all times. Self-report surveys are subject to response bias; even though this survey remains anonymous, there is the probability of participants responding with inaccurate or even false answers.

Another issue that arose within this research is the time needed to complete the survey. Law enforcement is a fast-paced profession and situations can arise that will interrupt the survey process leaving either an incomplete survey or no response at all. This was mitigated by using the most succinct and construct specific questionnaires available.

Another challenge was deciphering what the data was revealing. CF and BO are often used interchangeably and in place of several other constructs, such as VT and STS. Therefore, separating each construct and deciphering its relationship to SD and gender was slightly

complicated. This challenge was mitigated with clear and concise definitions of BO and CF, but the definitions should have also been provided at the beginning of the survey for the participants to read.

Theoretical Foundations of the Study

To study both BO and CF in law enforcement, the Sheriff's office in particular requires a theoretical model that combines explanations of shared factors and effects. The Job Demands-Resources Model (JD-R) is a theoretical model that focuses on the psychological phenomena within work environments (Dominguez Ruiz, 2022), specifically on the factors that influence worker well-being (Van den Broeck et.al., 2013). At the core of this model is the assumption that all organizations have their own unique environments, and those environments can be categorized into job demands and job resources. *Job demands* are defined as “those physical, psychological, social, or organizational aspects of the job that require sustained physical and/or psychological (cognitive and emotional) effort or skills and are therefore associated with certain physiological and/or psychological costs” (Bakker & Demerouti, 2007, p. 312). *Job resources* are defined as “those physical, psychological, social, or organizational aspects of the job that are either/or (1) functional in achieving work goals, (2) reduce job demands and the associated physiological and psychological costs, (3) stimulate personal growth, learning, and development” (Bakker & Demerouti, 2007, p. 312). Lastly, a work environment can have two simultaneous processes, a health impairment process and motivational process (Bakker & Demerouti, 2007). Bakker and Demerouti (2007) also stated that physical, psychological, social, or organizational aspects of the job that require both a sustained physical and a cognitive and emotional effort are associated with specific physiological and psychological costs.

Even though the JD-R was developed with the work engagement concept it is argued that the complex bureaucratic system of public organizations, such as a Sheriff's office, might influence work engagement. (Borst et al., 2019; Dominguez-Ruiz, 2022). This influence can be identified as the frequent changes of political leadership (Sheriff). Research by Borst et al., (2019) shows that "work engagement mediates the relationship between the job resources and personal resources of public servants on one hand turnover intention on the other hand" (p.389). JD-R model, in spite of several variations and adaptations, retains several core pieces. (1) Any occupation shares a series of traits definable as demands or resources, dependent on their effect on workers (Dominguez Ruiz, 2022; Van den Broeck et.al., 2013). (2) Work demands result in effort and exhaustion that provoke negative effect on the worker's health. Demands direct workers towards negative results such as burnout (Dominguez Ruiz, 2022). (3) Resources are positive benefits regarding the workers' health, such as autonomy, resilience and resources both organizational and personal (Dominguez Ruiz, 2022). (4) The dilemma facing the organization is understanding that positive resources demand balance leads to worker wellbeing, motivation and productivity, which is the maximization of resources and minimization of demands (Dominguez Ruiz, 2022).

JD-R's main strength lies in its ability to go below the surface of differences and identify shared characteristics that are commonly associated with work outcomes (Roskams et al., 2021; Van den Broeck et.al., 2013). Given this research depth, the JD-R may be able to explain burnout and compassion fatigue as potential outcomes of both individual and organizational job demands.

Definition of Terms

The following is a list of definitions of terms that were used in this study.

Anxiety- Anxiety is defined as an emotion characterized by apprehension and somatic symptoms of tension in which an individual anticipates impending danger, catastrophe, or misfortune (American Psychological Association, 2023).

Burnout – Burnout is defined as hopelessness, increased emotional exhaustion, and difficulty dealing with work stress effectively (Gonzalez et al., 2019).

Compassion Fatigue – Compassion fatigue is defined as a “state of exhaustion and dysfunction biologically, psychologically and socially as a result of prolonged exposure to compassion stress and all it invokes” (Figley, 1995, p.253).

Compassion stress – Compassion stress is defined as a unique form of stress that is defined as a normal reaction to helping and working with trauma survivors (Greinacher et al., 2019).

Correctional Officer and Correctional Deputy- Correctional officer and Correctional deputy are defined as the sworn individual who serves as the voice of authority, while also ensuring the safety and welfare of prisoners. These courageous law enforcement professionals disrupt violent confrontations, ensure order, and also work to help rehabilitate prisoners (Wiley University Services, 2023).

Depression- Depression is defined as a common but serious mood disorder that causes severe symptoms that affect how one feels, thinks, and handles daily activities, such as sleeping, eating, or working (National Institute of Mental Health, 2022).

Law Enforcement Agency- Law enforcement agency is defined as the entity in charge of law enforcement including the investigation, apprehension, and detention of individuals suspected of criminal offenses (U.S. Bureau of Labor Statistics, 2022).

Law Enforcement Officer- Law enforcement officer is defined as any officer or employee of the United States, any State, any political subdivision of a State, or the District of Columbia,

while engaged in the enforcement or prosecution of any of the criminal laws of the United States, a State, any political subdivision of a State, or the District of Columbia (*Crimes and Criminal Procedure*, 1992).

Patrol Officer and Sheriff Patrol Deputy- Patrol officer and Sheriff patrol deputy are defined as an individual who is tasked with maintaining order and protect life and property by enforcing local, tribal, state, or federal laws and ordinances. Perform a combination of the following duties: patrol a specific area; direct traffic; issue traffic summonses; investigate accidents; apprehend and arrest suspects, or serve legal processes of courts. Includes police officers working at educational institutions (U.S. Bureau of Labor Statistics, 2022).

Posttraumatic Stress Disorder- Posttraumatic stress disorder is defined as a disorder that develops in some people who have experienced a shocking, scary, or dangerous event (National Institute of Mental Health, 2022).

Secondary Traumatic Stress – Secondary traumatic stress is defined as “the stress deriving from helping others who are suffering or have been traumatized” (Figley, 1999, pg.10)

Sheriff’s Deputy- A Sheriff’s deputy is defined as a LEO who serves the public by preventing and intervening in crimes in a particular county, including multiple small towns and several larger cities (International Association of Chiefs of Police, 2018).

Stress- Stress is defined as a cognitive- phenomenological process in which individuals evaluated the demands placed on them by their environment to determine if they pose a threat to the individual’s well-being and, if so, whether they can deal effectively with the threat (Duxbury & Halinsk, 2018, p. 931).

Trauma- Trauma is defined as an emotional response to a terrible event (American Psychological Association, 2023).

Vicarious Trauma-Vicarious trauma is defined as described as a permanent and cumulative change of cognitive structures based on empathetic work with trauma survivors (Greinacher et al., 2019).

Significance of the Study

This research aimed to enhance both the personal and occupational well-being of LEOs concerning BO and CF. With this contributing literature and knowledge, ideas, concepts, coping skills, and future trainings could provide specific and vital information and support when experiencing either or both BO and CF. Research such as this could add to the skills and protective factors necessary to provide a lower emotional and mental health risk factor for long term employment.

BO and CF are foundational constructs in several mental health disorders, such as post-traumatic stress disorder and clinical depression. In conducting research that sheds light on the causes and responses to BO and CF, researchers are providing these populations with valuable information to help minimize or eradicate the effects of BO and CF. In doing so, SDs will be able to remain mentally and physically healthy and thrive in their profession. In addition, delving deep into the gender differences in CF and BO among LEOs would provide future deputies with the tools needed to excel at their work, experience longevity, and help maintain healthy relationships with friends and family. Though law enforcement has expanded, and female officers are continuing to advance and find success in their agencies, there are fewer female than male LEOs. In conjunction this study will also provide information needed to build mental health programs and specific coping skills that can be used to combat these two issues within law enforcement. In doing so, Sheriff deputies will be able to remain mentally and physically healthy and thrive in their profession.

Summary

Providing the most thorough and detailed research possible in a profession where daily activities offer unique and high-volume stressors is essential. It is imperative to also look at the different types of jobs and environments that LEOs work in. The occupational environments that SDs work in is varied due to the unique organizational structure of a Sheriff's office. This specific agency provides both the arrest and incarceration of individuals. Both divisions (patrol and corrections) work in highly volatile environments, but the tools provided to navigate those environments are drastically different. These differences may lead to variances in perceived levels of and the navigation of BO and CF.

CHAPTER 2: LITERATURE REVIEW

Overview

CF and BO are on the rise in law enforcement, with no end in sight. As a result, there is an increase in LEOs leaving the profession either of their own accord or due to the cumulative effects of CF and BO in their professional and personal lives. CF and BO are highly debilitating results of the cumulative impact of traumatic events that LEOs experience that are unique to their profession. These detrimental effects of BO and CF become apparent in their mental and career health.

This accumulative stress can lead to significant maladaptive coping skills, job dissatisfaction, and in extreme cases, suicide (Clark-Miller & Brady, 2012; Ellison & Caudill, 2020; Hunsaker et al., 2015; Meckes et al., 2021). LEOs have been plagued with a long list of maladaptive coping skills, such as excessive drinking, promiscuity, high rates of family discord, domestic violence, and mental health issues (Clark-Miller & Brady, 2012; Ellison & Caudill, 2020), that are directly linked to their job-related stress. These maladaptive coping skills contribute to considerable research on how officers cope with stress (Clark-Miller & Brady, 2012). Still, little research is specifically related to the differences between patrol and correction deputies and their unique position within the sheriff's office. In more recent studies, the research has turned to religion or religiosity in dealing with work-related stress, and less research is focused on the constructs of BO and CF. Even less research has been conducted on the differences in BO and CF levels between genders.

BO and CF are often mistaken for each other because they lack clear definitions, their relationship is unclear, and they have been viewed differently throughout research and literature (Henson, 2020; Hunsaker et al., 2015). Attributes of BO are different from CF, such as the

progressive development of feelings of exhaustion, cynicism, and hopelessness. BO can appear as subtle changes in personality, perspective, values, and behaviors (Demerouti et al., 2010; Henson, 2020; McCarty et al., 2019). Exploring the relationships among posttraumatic stress disorder (PTSD) symptoms, vicarious trauma (VT), and BO found high and significant correlations. Still, more importantly, the evidence indicated that PTSD symptoms, VT, and BO are related but not identical constructs (Waegemakers Schiff & Lane, 2019a). The definitions of BO are more closely correlated to environmental stressors, whereas the definitions of CF point more to the relational nature of the construct.

CF has been described as “emotional, physical, and spiritual exhaustion from witnessing and absorbing the problems and suffering of others” (Hunsaker et al., 2015). CF differs from BO in that BO is associated with feelings of hopelessness and apathy, whereas CF is the consequence of working with traumatized individuals. Characteristics of CF include chronic fatigue, irritability, lack of joy, aggravation of physical ailments, and dreading going to work (Potter et al. 2010). Unfortunately, CF emerges suddenly and without warning, coupled with feelings of helplessness and confusion. The long-term output of high energy and compassion over a prolonged period to those suffering is the fundamental cause of CF (Hunsaker et al., 2015). Various aspects of law enforcement have been subject to intense research, including CF and BO. However, there is a disturbing lack of research on the gender differences in the levels of and in response to CF and BO in this population. Research by Pinki and Sandeep (2021) indicated that female LEOs perceive and experience work-related stress more severely than male constables (English LEO). Their research also specified that “the gender of the police constables influence occupation stress and burnout” (Pinki & Sandeep, 2021), indicating that gender-specific research is still needed within law enforcement. Most research into mental health issues among LEOs

refers to LEOs as a genderless officer, negating the importance of gender-specific data. Most of the research into BO and CF has been done in nursing, with a minimal amount covering first responders and even less focused on LEOs. BO and CF have significant professional consequences and detrimental effects on personal well-being when left unattended.

Description of Search Strategy

To identify the research articles significant to the current research a literature search was performed between January 2021 and February 2023. To find relevant literature, the Jerry Falwell Liberty University online library was used. The search was narrowed to articles published from 2017- 2023 using the same search terms across the following databases: EBSCOhost, APA PsycNET, Counseling & Therapy, Mental Measurements Yearbook, Ovid, ProQuest and law enforcement databases. The search was limited to peer reviewed scholarly journals using the search terms BO and first responders (2,823 results); BO, CF and law enforcement, police (76 results); CF, vicarious trauma and first responders (227 results); BO, CF, vicarious trauma, Posttraumatic stress disorder (425 results); and deputies, BO and CF (64 results).

Then the subject terms filter was added to the search term groups. Specifically, the search term filters of BO, stress, mental health, trauma, psychology, male, female, police, posttraumatic stress disorder, job stress, BO-professional were added to all databases (43 results). Lastly, the discipline filter of psychology was added across all databases and used in conjunction with search terms BO and first responders (827 results); BO, CF and law enforcement, police (43 results); CF, vicarious trauma and first responders (61 results); BO, CF, vicarious trauma, post-traumatic stress disorder (141 results); and deputies, BO and CF (12 results).

The biblical research was conducted in the same manner, but the search was initially narrowed down to the following databases: Christian Periodical Index, EBSCO QuickSearch, Atla Religion, Oxford Scholarship Online. The search was limited to the search terms peacekeepers (3 results); BO, CF and law enforcement, police (1 result); CF, vicarious trauma and first responders (2 results); CF, vicarious trauma and first responders (0 results); BO, CF, vicarious trauma, post-traumatic stress disorder (2 results); and deputies, BO and CF (0 results). The lack of research with the previous search terms led to widening the search, by adding different search terms. The search was widened to include the following search terms: God's character and compassion (0 results); God, CF and love (1 result); God, love and BO (1 result); Jesus and BO (1 result); Jesus, love and compassion (4 results); and fatigue, love and God (3 results). Due to a lack of results Google Scholar was also employed to research the search terms: God's character and compassion (2,510 results); God, CF and love (252 results); God, love and BO (459 results); Jesus, love and compassion (596 results); and fatigue, love and God (8312 results). The inclusion criteria for literature to be included in the review were as follows: (a) relevance to CF and BO constructs, (b) first responder articles, (c) written between 2017 and 2023, and (d) written in English. The reference list of selected articles includes a significant amount of research specifically focused on BO, CF, vicarious trauma, and law enforcement.

Review of Literature

Burnout

Herbert Freudenberger (1974) first used the term BO to describe what occurs following exposure to constant occupational stress over time (Henson, 2020). Maslach and Leiter (1997) later defined BO as “an erosion of engagement with the job, whereby energy turns into exhaustion, involvement turns into cynicism, and efficacy turns into ineffectiveness.” Even with

these two concise definitions, literature can rarely reach a consensus on BO. Still, generally speaking, it is a consequence of long-term stress and strain at work (Henson, 2020; MacEachern et al., 2018; Margi & Rosenbloom, 2021; Mojallal et al., 2022) and a feeling of being at the end of one's rope (Perez et al., 2010). BO is the outcome of work conditions and an individual's interaction with their environment (Mojallal et al., 2022), which is often the chronic stress associated with the intense work LEOs do. Even though BO is a work-related syndrome, it involves emotional exhaustion, depersonalization, and a sense of reduced personal accomplishment (Pirelli et al., 2020; West et al., 2018). Emotional exhaustion has long been the dominant domain of BO, but depersonalization aligns more strongly with the negative consequences of BO. Regardless of the definition used, the outcome remains the same: extreme levels of exhaustion and negative attitudes toward one's work (Demerouti et al., 2010; Margi & Rosenbloom, 2021; Mojallal et al., 2022). Individuals who work with people are more prone to developing BO than those who are not in a helping profession.

BO manifests as an ineffective, depressed, apathetic, and detached helper (Hunsaker et al., 2015; Pirelli et al., 2020). The results of long-term BO include low morale in the workforce, absenteeism, employment turnover, and apathy (Hunsaker et al., 2015; Potter et al., 2010). BO is seen as a response to environmental factors that one does not have immediate control over (Hunsaker et al., 2015), manifested as feelings of hopelessness and inability to perform job duties effectively. BO also displays as dysfunctional attitudes and behaviors that significantly affect the work product (Barthauer et al., 2020).

The gradual accumulation of stress in professionals who routinely interface with trauma and violence can develop symptoms related to VT, CF, and BO (Levin et al., 2021; Pirelli et al., 2020; Potter et al., 2010). Exposure to traumatic events among first responders can lead to

PTSD. Research by Meckes et al., (2021) found a lifetime prevalence of PTSD in first responders from 17-22%. The demands of daily life, a state of physical, emotional, and mental exhaustion caused by the inability to cope with one's environment, especially work (Potter et al., 2010), results in BO. Stress and BO among LEOs result in various psychosomatic problems and substance abuse (El Sayed et al., 2019; Pinki & Sandeep, 2021). A strong predictor of BO is workload and participants' feelings of insufficient time to manage their lives outside of work (Doherty et al., 2021; Henson, 2020; McCarty et al., 2019), along with the continuous strain of the work depletes the LEOs personal resources (Margi & Rosenbloom, 2021). Commitment to one's organization is also related to BO and emotional exhaustion (Demerouti et al., 2010; Doherty et al., 2021).

Research has shown that BO leads to CF when an individual cannot achieve their goals and experiences prolonged frustration, loss of control, diminished morale, and increased willful efforts (Cocker & Joss, 2016). BO has often been defined as a chronic stress syndrome but is actually seen more as a continuum ranging from acute fatigue to a rough day on the job (Dominic Ruiz, 2022). BO has also been seen as strictly job related, when in actuality BO is invasive and oftentimes is found throughout one's life. Some of those consequences are previously mentioned, such as emotional and physical exhaustion, but there are also cardiovascular conditions, Type 2 diabetes, and premature death (Dominic Ruiz, 2022). BO has been identified as related to CF as both an antecedent and a consequence (Henson, 2020; Ledoux, 2015). Work-related stress drives BO in helping professions and when these symptoms are not mediated by compassion satisfaction, CF results.

Although BO occurs on the personal level, risk factors for BO can manifest from occupational factors, organizational factors, lack of social support, lack of autonomy, and lack of

rewards and recognition (Hallinan et al., 2019; Masson & Moodley, 2019; Perez et al., 2010; Pirelli et al., 2020). Research has also shown a high correlation between BO and STS, often related to one's work environment (Pirelli et al., 2020; Waegemakers Schiff & Lane, 2019b). BO is distinct from both VT and CF as it develops gradually over time (Pirelli et al., 2020). According to recent research, BO affects between 13%-25% of developed countries' workforce (Mojallal et al., 2022).

Burnout in Law Enforcement

BO within the law enforcement community has been associated with environmental and organizational factors (El Sayed et al., 2019; Sherwood et al., 2019). Although law enforcement has organizational stressors, the operational stressors that are unique to law enforcement often cause the most damage. The exposure to traumatizing events, sometimes daily, results in higher rates of trauma-related psychopathy, such as BO and CF (Sherwood et al., 2019), in addition to the same individual factors that increase the risk of BO and CF in the general public. Levels of BO and CF are also increased by specific roles, such as being assigned to child exploitation units, emergency dispatchers, and domestic violence units (Brady, 2016; El Sayed et al., 2019; Margi & Rosenbloom, 2021; Sherwood et al., 2019).

Work-related factors that are distinctly related to law enforcement were also associated with higher BO levels (Brady, 2016; Garcia et al., 2020, Margi & Rosenbloom, 2021), which included a lack of participation in decision-making, job dissatisfaction, low work commitment, perceived dangerousness, and role stress (Clark-Miller & Brady, 2012; El Sayed et al., 2019; Margi & Rosenbloom, 2021; Pirelli et al., 2020; Sherwood et al., 2019). Job stress within law enforcement is primarily due to role conflict and ambiguity within their positions (Bhowmick & Mulla, 2020; Mojallal et al., 2022; Potter et al., 2010). In conjunction with work-related factors,

weekly emotional exhaustion is prevalent in LEOs (McCarty et al., 2019; Page & Robertson, 2021). Emotional exhaustion is commonly defined as the emotional demand related to working in human service, which exhausts the provider's ability to be involved with or respond to an individual's needs (Bhowmick & Mulla, 2020). These findings also suggested that the role of a LEO takes an emotional toll, adversely affecting mental health and possibly increasing sickness rates (Bhowmick & Mulla, 2020; Demerouti et al., 2010; Margi & Rosenbloom, 2021; Page & Robertson, 2021). For LEOs, BO undermines the quality of care and professional attention they can give their community (Bhowmick & Mulla, 2020; Mojallal et al., 2022).

Interestingly BO is considered an acute effect of working with victims. In contrast, BO results from working with victims but not being involved in traumatic events (Brady, 2016; Perez et al., 2010; Waegemakers Schiff & Lane, 2019a). Even as BO results from working with victims, the inability to clear severe events from one's memory has been found to negatively impact a LEO's mental and emotional health (El Sayed et al., 2019). In conjunction with traumatic events, moral BO results from chronic work stress, which LEOs are subject to regularly.

Research shows a relationship between the length of time working with disturbing media and BO (El Sayed et al., 2019; Perez et al., 2010; Sherwood et al., 2019). This is also similar to the findings of other studies where the participants were sexual assault counselors and detectives. Similarly, correctional LEOs suffer from psychological distress due to high demands, low decision latitude, low participation in decision-making, and low social support at work. Unsupportive supervisors, in conjunction with conflicting information or commands, the shifting priorities of the agency, and the inequitable assigning of both cases and job tasks, increase the

organizational stressors and compound the overall stress of law enforcement (El Sayed et al., 2019; Miller and Unruh, 2019; Pedro Gomes et al., 2022).

Organizational stress has been identified as a key stressor for LEOs, even more so than the dangers of the work itself (El Sayed et al., 2019; Sherwood et al., 2019). Employment longevity significantly predicts PTSD symptoms and major depressive disorder (Greinacher et al., 2019; Sherwood et al., 2019). Those LEOs who have a lower perception of their impact on the community and feel unappreciated and unsupported by their agencies are more likely to experience BO than those who feel appreciated and supported by their community and agency (El Sayed et al., 2019; Miller and Unruh, 2019; Perez et al., 2010). Also, among LEOs, empathy predicts greater burnout (McDonald et al., 2020). Constant workplace stress may overflow into their personal lives due to the difficulty some officers may experience in regulating their emotions after enduring an entire shift (up to 12 hours or more) of constant and anticipatory stress (El Sayed et al., 2019; Miller & Unruh, 2019).

Research has also reported that BO can be contagious within a team (Pedro Gomes et al., 2022) which is concerning because the employment design of law enforcement agencies is primarily group-oriented. Group BO can affect performance as a group and as individuals. BO, as previously mentioned, has dire consequences when disregarded. Not only do LEOs experience anxiety, depression, demotivation, exhaustion, and melancholy, but eventually, those symptoms lead to poor decision-making and in some cases, voluntarily leaving their position. BO has been identified as a main predictor for high turnover rates in law enforcement agencies (Pedro Gomes et al., 2022). When LEOs feel they are making a difference within their community, they are less likely to be distressed. Overall LEOs report higher rates of BO and job dissatisfaction than other civilian occupations (Mojallal et al., 2022). Different positions within a law enforcement agency

also impact a LEOs BO (Bourbonnais et al., 2007; Denk-Florea et al., 2020). Anecdotally, it is difficult to determine BO in LEOs, due to a culture of a “stiff upper lip,” where sharing traumatic incidents is frowned upon.

A significant but less discussed implication from BO is related to organizational turnover and major changes in one’s current broader career track (Barthauer et al., 2019). To minimize organizational turnover, recent research suggests that assessing predictors of BO, such as balance between job demand and job resources will help minimize the effects of BO (Barthauer et al., 2019).

Historically law enforcement has been dominated by White males. Current trends show an increase in female sworn LEOs. Even though women comprise approximately 50% of the United States workforce, according to the Bureau of Justice Statistics (2022), only 14% of full-time sworn LEOs are female. Subsequently, only 12% of full-time sworn deputies are female (Brooks, 2022; Donohue, 2020). The difference between these two agencies can be attributed in part to the area covered by an officer (city) versus a deputy (county), the time from the distress call to back up is longer in the county than in the city, and working with a partner (city) as opposed to working alone (county).

Within law enforcement, there are a variety of positions and posts. Traumatic events that may lead to BO vary in type, intensity, and frequency, dependent on the position and the post (Denk-Florea et al., 2020; Frazer et al., 2020). Even as females continue to progress and increase within the male dominant law enforcement sector, how they navigate day-to-day operations and occupational hazards is less known. Females entering law enforcement still find themselves entering male-dominated agencies that maintain role definitions and behavioral scripts designed

by and for men (Brown et al., 2020). Some research indicates that female LEOs adopt male behaviors, attitudes, and values over time (Frazer et al., 2020), as a means of fitting in.

Compassion Fatigue

To understand CF and its role in one's mental health, it is important first to understand compassion. Compassion is a concept derived from the philosophical theories of justice and virtue (Ledoux, 2015). The most commonly used definition of compassion is "a response to human frailty that informs and motivates our duties towards others, that by its very nature creates a desire to act on behalf of others" (O'Connell, 2009, p. 3). The difference between compassion and empathy or sympathy is that compassion moves to action, and empathy and sympathy do not. Therefore, CF is, in part, the fatigue of acting, or in this case, helping. Interestingly some research reports that empathy has shown to be a predictor of greater compassion satisfaction and lowering of STS and BO among helping professionals. Other research indicates that empathy is not protective and has no relationship with STS. Self-compassion, which is a form of empathy for self, is associated with lowering depression, anxiety, and stress and improving psychological well-being. When someone lacks self-compassion, an increase in the negative effects of stress become more apparent (McDonald et al., 2021)

Where CF occurs on the continuum remains a mystery. Ledoux (2015) suggests that CF may either occur before or after BO or that BO creates CF. Either scenario leaves the onset of CF at the hands of BO. Research cannot agree on the origin of CF either. Many studies on CF indicate that it results from STS, whereas others believe it to be from a combination of PTSD and BO (Ledoux, 2015). This inability to separate CF from BO, PTSD, and STS makes determining its ontology and etiology more difficult.

CF is rarely researched as a singular variable. It has various definitions and is often related to BO, STS, and VT. These concepts are often used incorrectly and interchangeably to describe stress phenomena (Cocker & Joss, 2016). Early research suggested that CF had replaced the term BO, but more recent research indicates that these terms are significantly different (Greinacher et al., 2019; Henson, 2020). In some research and publications, STS and CF are used interchangeably regarding context, while other researchers define CF as a combination of BO and STS symptoms (Greinacher et al., 2019). More recently, there has been a movement indicating that CF and BO are different because they define two distinct outcomes of exposure to traumatic events (Cocker & Joss, 2016; Henson, 2020). According to research, CF can be easily differentiated from BO because it encompasses not only physical, mental, and emotional exhaustion, but also feelings of hopelessness and disassociation (Dominguez Ruiz et al., 2022). Foley and Massey (2021) suggest that there are also four main factors of CF, which are poor self-care, previous trauma, lack of satisfaction within the workplace and lack of control in the workplace.

CF is important as a singular variable because it directly affects quality of life (Mottaghi et al., 2020). CF describes the “phenomena of stress resulting from exposure to a traumatized individual rather than from exposure to the trauma itself” (Cocker & Joss, 2016, p. 1). CF occurs instantly with little warning, resulting in immediate behavior changes (Henson, 2020; Ledoux, 2015) and develops as a self-protection measure (Hunsaker et al., 2015). The most commonly used definition of CF was coined by Figley (1995) as a “state of exhaustion and dysfunction biologically, psychologically and socially as a result of prolonged exposure to compassion stress and all it invokes” (p.253). Early research by Figley tells us that although STS, CF, and VT have distinctions in terms of theoretical origins and symptoms, they are all referred to as CF. Thus,

researching CF as a singular construct can be difficult and often confused with VT and STS symptoms and measurements (Ledoux, 2015). Interestingly CF is often overlooked, and the individual is unaware of its impact (Mottaghi et al., 2020).

The empathy that first responders extend to individuals during trauma or distress can impact the responder's physical and mental health. This is commonly referred to as emotional exhaustion, a characteristic of CF. Anger, exhaustion, irritability, negative coping skills, alcohol and drug abuse, and minimal feelings of sympathy and empathy are identified characteristics of CF (Cocker & Joss, 2016; Dominguez Ruiz et al., 2022; Denk-Florea et al., 2020; Mottaghi et al., 2020; Schaible, 2018). In conjunction with these characteristics, there is diminished satisfaction or enjoyment with work, increased inability to make decisions, and increased absenteeism (Cocker & Joss, 2016; Dominguez Ruiz et al., 2022; Greinacher et al., 2019; Mottaghi et al., 2020; Pirelli et al., 2020). High levels of CF are common in first-responder populations, especially females. This may result from more emotional involvement with community members (Frazer et al., 2020) and a desire to eliminate other's suffering, especially if that suffering is similar to the LEOs unresolved trauma history (Pirelli et al., 2020). Emotional involvement levels are strongly linked to CF and BO, suggesting that there is a possibility that female LEOs are more prone to CF and BO because of their increased emotional involvement with community members, especially with child and female victims.

Healthcare professionals, more specifically nurses, have been the research foundation for both CF and BO. Nurses have reported symptoms of stress in response to anxiety at work, errors in judgment, and difficulty sleeping, resulting in physical and emotional exhaustion. Research on physicians and BO also found that being female increases a physician's chances of developing BO between 20-60%. Another risk of BO is having a child younger than 21 years old, which

increases their risk by 54%. This is in conjunction with common characteristics such as personality and interpersonal skills (Mento et al., 2020; West et al., 2018).

Research has also found that frequently feeling overwhelmed at work and experiencing low organizational support is significantly associated with lower compassion satisfaction and higher CF (Brady, 2016). Brady (2016) also found that indirect exposure to trauma plays a more important role in BO and lower compassion satisfaction. In contrast, direct exposure has no relevant relationship with BO or compassion satisfaction. Some literature has also suggested no significant relationships existed between CF, STS, BO, and the demographic variables of age, gender, and ethnicity (Turgoose et al., 2017). There are protective factors that may reduce the onset of CF. These include greater trait-based emotional intelligence, healthy emotional management, and adaptive problem-focused coping strategies (Pirelli et al., 2020). CF can also be minimized by implementing strong professional boundaries, which help prevent being inundated with others' distress (Pirelli et al., 2020). CF can also be understood from not only an individual perspective, but also from an organizational viewpoint. According to Dominguez Ruiz et al. (2022), there might be a potential relationship between empathy, compassion, and occupational satisfaction and the reduction of BO and CF.

Stress

Workplace stress contributes to negative outcomes such as mental health issues and job dissatisfaction. Stress is a common occurrence for LEOs due to the nature of their employment, which includes life-threatening situations, violence, and crime (Landers et al., 2019; Queirós et al., 2020; Rief & Clinkinbeard, 2021; Roach et al., 2018). Stress is often conceptualized as a “cognitive-phenomenological process in which individuals evaluate the demands placed on them by their environment to determine if they pose a threat to individual well-being and, if so,

whether they can deal effectively with the threat” (Duxbury & Halinski, 2018, p. 931). Common and permanent exposure to stress could lead to an individual’s inability to empathize with those they serve (Mottaghi et al., 2020).

Policing is a complex profession that involves challenging situations across a multitude of settings. Police work includes working with the public, navigating administrative demands, and working for the public, influenced by the political and social climate (Rief & Clinkinbeard, 2021; Roach et al., 2018). Not all policing occurs in the community. A significant portion occurs in a jail, which has an uncommon number of stressors unique to a correctional setting. Stress comes in various forms, some of which are performance-enhancing and easy to adapt to. Those that are not easily adapted result in negative consequences such as mental health problems. LEOs are more exposed to acute and chronic life stressors at work and are more prone to develop symptoms of poor mental health, such as PTSD, anxiety, and depression (Roach et al., 2018). Due to the stressful nature of policing, LEOs have almost double the mental health problems of the general population (Rief & Clinkinbeard, 2021; Roach et al., 2018; Syed et al., 2020).

LEOs experience stress within the constraints of their job that does not allow for real-time processing of the experience, resulting in increased stress and the possibility of psychological challenges in the future. Often LEOs are onto the next call before they can process the events of their current call. In corrections, using force is often a drawn-out situation, as de-escalation techniques are exhausted before deputies engage in physical restraint, which can become violent and dangerous for all involved. Interestingly the danger associated with law enforcement work is perceived as one of the most rewarding aspects of the job (El Sayed et al., 2019; Rief & Clinkinbeard, 2021).

Work-related stress has historically been broken into two categories, occupational and organizational. New research suggests that there should be two more categories in conjunction with organizational and operational, which are personal and intrinsic to the specific organization (Roach et al., 2018). These new stress categories focus on the stressful event imposed on LEOs from the outside and in real time. Minimal research on the effects of a criminal investigation on those investigating has shown that emotional stress (Rief & Clinkinbeard, 2021; Roach et al., 2018; Varker et al., 2022) has been determined to be the most common influence on erroneous decision-making and investigation failure (Roach et al., 2018).

LEOs also contend with unique workplace stress heavily skewed toward organizational stressors. Organizational stressors are often seen as required but unnecessary, lending themselves to be perceived as problematic to LEOs (Queirós et al., 2020; Rief & Clinkinbeard, 2021). Most common organizational stressors are a lack of support, high pressure, and lack of resources (Miller & Unruh, 2019). Research has shown that work environment has a relationship to burnout and how employees handle traumatic events (Miller & Unruh, 2019). The response an employee gives to psychological stressors depends on several personal attributes, but also to their organizational environment (Miller & Unruh, 2019).

Those agencies that pay close attention to building healthy cultural values provide an environment that helps alleviate the detrimental effects of organizational stress. Shared cultural values help LEOs cope with their work (Rief & Clinkinbeard, 2021). When job stress becomes chronic, it interferes with a LEO's mental and physical health. Among sworn LEOs there has been an association made between occupational and organizational stress with reduced psychosocial well-being and increased mental health symptoms (Varker et al., 2022) Even though stress is common among LEOs, variations of stress exist based on race, ethnicity, and

gender and are strong predictors of LEO stress (Rief & Clinkinbeard, 2021). Female LEOs report more overall stress than males due to harassment, having to prove themselves, and lack of acceptance and support by their male counterparts and command staff (Rief & Clinkinbeard, 2021). Research on stress has also found that women experience more emotional exhaustion, less depersonalization, more stress, and feel policing stressors differently than men (Queirós et al., 2020).

LEOs work within a paramilitary environment with a command structure that allows access to command staff and the illusion of input, unlike the military. This includes aggressive management, ineffective bosses, a volatile work environment, and an unpredictable work schedule (El Sayed et al., 2019; Ellison & Caudill, 2020; Margi & Rosenbloom, 2021). Stress does not come from a traumatic event but builds from repeated experiences (Bonner & Brimhall, 2021). Chronic stress is closely linked to emotionally intense work, such as LEOs engage in daily. When there is a lack of resources to alleviate chronic stress, BO is often the result. A hallmark symptom of BO is depersonalization, which results in LEOs treating victims, community members, and perpetrators as objects rather than human beings (West et al., 2018). This callous approach to others results from a reduction in perceived personal accomplishment and feelings of ineffectiveness in helping others.

Recent research has found that coping strategies influence the consequences of critical incident exposure and psychological well-being (Civilotti et al., 2021). Coping is “cognitive and behavioral efforts to manage specific external and internal demands that are appraised as taxing or exceeding the person's resources” (Civilotti et al., 2021). Male and female LEOs may experience the stressors of the profession differently, along with employing different coping skills in response to stress (Bonner & Brimhall, 2021; Frazer et al., 2020).

Female LEOs also endure stressors unique from their male counterparts, such as sexual harassment, the “second shift” of family responsibilities after work, and negative attitudes toward female officers (Bonner & Brimhall, 2021; Todak et al., 2021). Research has determined that men and women experience stress differently, though, with law enforcement-specific events, male and female LEOs report similar stress levels. Women report higher levels of chronic stress. The difference between male and female LEOs can be found in their coping strategies and the amount of positive coping strategies used (Bonner & Brimhall, 2021).

Law enforcement is an extremely stressful occupation and keeps LEOs in a constant state of anticipatory stress, which research states may slow down decision-making in dangerous situations (El Sayed et al., 2019). This is common in helping professions, as there are frequent and highly emotional interactions with victims (Brady, 2016; Perez et al., 2010), and correctional deputies routinely have highly emotional interactions and are more prone to depression, health problems, and suicide (Bhowmick & Mulla, 2020; El Sayed et al., 2019; Margi & Rosenbloom, 2021). The constant and unmanageable stress may illicit negative mental and physical reactions. Research indicates that higher organizational stress levels are associated with lower job satisfaction and higher turnover rates.

Compassion stress is a unique form of stress defined as a normal reaction to helping and working with trauma survivors (Greinacher et al., 2019). It manifests as an enduring or cumulative exposure to compassion stress and may lead to CF. Common stressors may harm a person’s well-being, but chronic or acute stress is detrimental to a person’s well-being. Interestingly stress has also been found to positively affect motivation, but can only do so in healthy amounts, referred to as eustress.

Women in law enforcement encounter a considerable amount of stress due in part to the number of barriers they endure primarily related to their gender. Some of those barriers are a result of occupational issues such as accusations of affirmative action and favoritism in the hiring and promotional process (Sanders et al., 2022; Todak et al., 2021). These accusations either blatant or behind closed doors result in female LEOs waiting longer to advance in their career than men. The stress caused by these accusations and other barriers that female LEOs endure, such as a lack of family friendly organization policies, (Todak et al., 2021) may lead to early onset of BO. In conjunction with these barriers are the female LEOs unwillingness to become a token women supervisor, so many choose to bypass promoting in favor of putting their family over their work (Todak et al., 2021).

The benefit of having healthy family support is that it provides a buffer that reduces stress and BO in LEOs (Bonner & Brimhall, 2021). Research shows that LEOs who are in committed relationships report less stress, depression, and suicidal ideation than those who are not (Bonner & Brimhall, 2021; Vig et al., 2020). Social support has even been found to predict positive mental health outcomes (Vig et al., 2020). Social support can come from coworkers, family, friends, religious groups and things of the like.

Trauma

Law enforcement encompasses a wide variety of specialty positions. Each specialty position has a focus, and the level of trauma both witnessed and experienced differs significantly within that focus. Detective divisions share a disproportionate amount of both primary and secondary trauma. One of these areas of detective work is working on child sexual and physical abuse cases. These cases directly affect the well-being of the detectives working the case. The adverse effects of these challenging cases can influence the detective's emotional and physical

health (Ahern et al., 2016; Civilotti et al., 2021; Denk-Florea et al., 2020). This is partly due to the prolonged exposure to a polarizing range of emotions, from anger to distress and all emotions in between.

A recent study in the United Kingdom by Brewin et al. (2020) found PTSD to be prevalent in 8% of police officers. Whereas a national study in Australia (n= 14,868) by Kyron et al. (2022) of emergency service workers found a PTSD rate of 10.6% for sworn police officers. Even though LEOs are exposed to traumatic events, it does not mean they perceive these events as traumatic similarly. Many factors determine the response to traumatic events, such as life experiences, the presence or absence of support mechanisms, and environmental and genetic aspects (Civilotti et al., 2021; Landers et al., 2019). One's definition of a traumatic event or critical incident is foundational in how trauma is determined and reported. In addition to a personal difference in trauma perception, there is also the desensitization to repeated exposure to disturbing evidence. There is a direct relationship between repeated exposure to trauma and the strength and number of negative emotions experienced (Denk-Florea et al., 2020; Vig et al., 2020). Persistent distress is also associated with PTSD (Vig et al., 2020).

The various forms of trauma that LEOs face come from every angle of their profession. For those who work in specialty positions, the impact of trauma can be different than those who work either in corrections or patrol. Literature suggests a more linear relationship between the frequency and duration of exposure to distressing materials and its impact on LEO's secondary traumatic stress, of which CF and BO are components (Denk-Florea et al., 2020). A result of prolonged viewing of distressing material is desensitization. Desensitization impacts a person's general well-being, which leads to greater tolerance and enjoyment of violence and impaired interpersonal relationships (Masson & Moodley, 2019). Several participants in a study by Denk-

Florea et al. (2020) were concerned that desensitization would lead to changes in their “moral compass” and the development of an “unempathetic and flippant attitude.”

Vicarious Trauma

In law enforcement, one is given a front-row seat to some of the worst days of a person’s life. Vicarious trauma (VT) results from this front-row seat, which in other words, is an exposure to trauma. Rarely do LEOs experience only one traumatic event, but instead, a series of events are independent and interconnected. Vicarious trauma involves a transformation of self-image and worldview due to working with trauma victims (Perez et al., 2010). VT is also a permanent and cumulative change of cognitive structures based on empathetic work with trauma survivors (Greinacher et al., 2019). These changes in cognitive structures may no longer be compatible with existing cognitive structures, resulting in negative views of the world around them. In response to these changing cognitive structures, an individual may develop depression, cynicism, and pessimism (Greinacher et al., 2019). VT is also considered an intermittent issue, becoming more apparent and intrusive when not addressed (Hallinan et al., 2019).

Interestingly the severity of VT exposure, and the probability of being impacted by it, depends on the empathic connection with the victim (Greinacher et al., 2019; Hallinan et al., 2019). This is different across first responder disciplines. This particular finding was explored more, and participants agreed that there is a distinction between vicarious trauma and secondary traumatic stress. Vicarious trauma is more common in victim assistance personnel and occurs over cumulative exposure to people's traumatic experiences (Hallinan et al., 2021). At the same time, STS is more common in first responders as they directly witness a traumatic event or the aftermath of one (Hallinan et al., 2021). Research has shown that chronic stressors take a greater toll than singular events (Hallinan et al., 2019).

One of the contributing factors to VT is blame. The tendency to be blamed for unpleasant outcomes or to blame oneself for poor results, even if those outcomes were inevitable, regardless of the decisions made by both the participant and the victim(s). In conjunction with this is a lack of recognition, whereas mistakes are scrutinized by public opinion (Hallinan et al., 2021). Organizations are often under stress from outside parties, which unfortunately causes a chain reaction that the agency focuses inward on their employees. A lack of support or protection from undue scrutiny leaves employees battling the rollercoaster of reliving the traumatic event while being second-guessed and scrutinized by the agency and the public.

The effects of VT are felt both personally and as an agency. The most salient impact of VT is often a suicide or suicide attempt by a coworker. Research has found that suicide has a contagious effect. This can lead to a vicious cycle of retraumatization, as the suicide of a loved one can trigger suicide attempts by others (Hallinan et al., 2021). Suicide is seen as both an effect of VT and a source of VT (Masson & Moodley, 2019). The VT does not stop with the first responder. It can also trickle down to their partners and family members because the traumatic experiences of their LEO often impact them.

Previous research has shown a relationship between VT and individual mental health issues such as BO and CF. Unfortunately, that relationship leads to suicide, substance abuse, and employee turnover (Hallinan et al., 2021; Masson & Moodley, 2019). Often those LEOs who are affected by VT voluntarily leave the job, significantly impacting community crime control and, more importantly, their coworkers. There is also the stigma of reaching out for help that is ingrained in the first responder culture. Often LEOs will not reach out for help because they believe that their peers will judge them, consider them weak, and they will be relegated to less desirable positions due to their mental health diagnosis. There is also the possibility of self-

stigma related to their position within their agency and the perceived change in their professional identity (Masson & Moodley, 2019). When left unaddressed, these issues ruminate within an agency, resonating outward to the LEO families and the community they serve.

Secondary Traumatic Stress

There is a significant relationship between BO and CF, but even more so between BO and CF and STS. Historically STS has also been referred to as VT. As true with BO and CF, the differences between STS and VT are in how both affect a person. Like CF and BO, the nuances between STS and VT are important to differentiate between, if not a little more complicated. Chronologically it might be possible to identify exposure, vulnerability, and empathy as three key concepts that can lead to the development of STS (Mento et al., 2020). Research by Schiff and Lane (2019) reports that STS encompasses heightened anxiety, sleep disturbances, depression, avoidant behaviors, and intrusive thoughts. Whereas VT no longer sees the work as safe, issues of control, trust, intimacy, and self-esteem. VT is often an interaction with one's cognitive schema (Waegemakers Schiff & Lane, 2019a). Though CF, BO, VT, and STS are different constructs, they all negatively affect first responders. These four constructs can be seen as a hypothetical continuum of maladaptive responses to the stressors congruent with first responder work. Even though indirect exposure to trauma is inevitable in law enforcement, it is not without consequences for the LEO. A common outcome of indirect exposure to trauma is STS. The difference between secondary trauma and trauma is that secondary trauma does not include the sensory impressions of the traumatic event and is often time delayed, indicating that it accumulates over time (Greinacher et al., 2019).

Secondary trauma is often called secondary traumatic stress and has recently been recognized as a form of PTSD (Denk-Florea et al., 2020; Meckes et al., 2021; Mento et al.,

2020). STS may be similar to PTSD, except PTSD is most often a result of directly experiencing a traumatic event or witnessing one. In contrast, STS is in response to hearing a first-hand account of trauma happening to a victim. Being constantly exposed to the trauma of others and first-hand trauma is hard on the human psyche, leading to STS (Meckes et al., 2021; Waegemakers Schiff & Lane, 2019b). Conversely, it is also in response to listening to first-hand accounts of offenders describing the trauma they have inflicted (Rhineberger-Dunn & Mack, 2020).

Figley (1999) was the first to define secondary traumatization “as the stress deriving from helping others who are suffering or have been traumatized” (pg. 10). More recent research indicates that the effects of STS go beyond the immediate contact with victims to encompass exposure to traumatic events through digital content (Denk-Florea et al., 2020; MacEachern et al., 2018). STS is a natural consequence of exposure to another first-hand trauma which is common in law enforcement. The symptoms of STS are similar to PTSD, such as intrusive, depressive, and anxious symptoms (Mento et al., 2020). Increased anxiety, anger, depression, and guilt negatively impact LEO’s lives (Denk-Florea et al., 2020; Hunsaker et al., 2015; Mento et al., 2020; Potter et al., 2010). The emotional and somatic effects of STS create significant physical and psychological distress (Mento et al., 2020). The onset and severity of STS depend on several factors, one of which is the LEO themselves and their level of engagement in coping strategies, the type of coping strategies used, and their social support both inside and outside their job (Denk-Florea et al., 2020).

Trauma research has found that the prevalence of PTSD is higher in women than in men, but there appears to be very little difference between LEO males and females regarding PTSD onset (MacEachern et al., 2018). Law enforcement agencies also play a part in the LEO’s STS

levels. Those agencies that require an excessive caseload have poor supervisory support and do not support self-care, increasing the likelihood of developing and increasing the STS a LEO experiences. It is important to point out that not every LEO will develop STS over their career. STS is born out of a culmination of exposure to traumatic events without the benefits of healthy coping skills, stable and healthy family relationships, and social support. Risk factors for STS have been identified as both psychological and interpersonal styles, including cynicism, pessimism, and unrealistic expectations of oneself (El Sayed et al., 2019; Mento et al., 2020). Individuals drawn to the helping professions often are survivors of their own adverse childhood trauma, which increases their vulnerability to developing STS (Waegemakers Schiff & Lane, 2019b). STS is also a result of an unhealthy preoccupation with the suffering of others, that one is closely working with.

Research has shown that being male and feeling supported outside of work results in lower levels of secondary trauma (Brady, 2016). STS is also related to job duration and rank of the individual. The longer an individual is employed as a LEO and the higher they climb in the agency, the more acute and significant their levels of STS are (Masson & Moodley, 2019). A study by Foley and Massey (2020) in which they surveyed 16,841 police officers in England and Wales, found that 79.3 % of their sample experienced feelings of stress, such as low mood, anxiety, and other mental health and general well-being issues over the previous 12 months. The authors referred to these findings as the cost of caring.

The symptoms used to describe STS, and the cost of caring are similar to those used to describe PTSD. These include intrusive symptoms, avoidance, hyperarousal, and depressive and anxiety symptoms, which are not dependent on gender (Greinacher et al., 2019; MacEachern et al., 2018; Masson & Moodley, 2019; Mento et al., 2020). Though research indicates no

difference among genders concerning STS, there has been data that shows that even though there is no difference between males and females, females are more likely to have higher levels of STS than their male counterparts (MacEachern et al., 2018). Unfortunately, these symptoms are inherent to being a LEO and most first responders. STS is considered an occupational injury caused by providing direct services to people who have experienced trauma (Mottaghi et al., 2020). Higher levels of STS result in lower relationship satisfaction, an increase in negative communication patterns, withdrawal, and avoidance (Masson & Moodley, 2019). Those LEOs struggling with STS may also experience increased tobacco and alcohol use.

Organizational factors and support play a significant role in the development of STS. According to recent research, work-related stressors best predict individual distress (Masson & Moodley, 2019). One of the correctional organizational consequences of STS is lower employee productivity, which may be perceived as inadequate supervision of offenders, a lack of empathy, and a negative rapport with offenders (Rhineberger-Dunn & Mack, 2020). A qualitative study of probation officers by Rhineberger-Dunn and Mack (2020) found that female probation officers experience STS as anxiety over their physical and psychological safety. In contrast, male probation officers felt isolated and unsupported by their male coworkers. In conjunction with these findings, the longer tenure and experiencing threats of harm by offenders resulted in greater secondary trauma (Rhineberger-Dunn & Mack, 2020). Greater levels of STS were also predicted by one's position in the organization, decreased overall health, contact hours with offenders, rural location, and negative perception of one's training.

STS is also closely related to CF with regard to psychological symptoms. Both CF and STS are linked to the psychological reaction to acute stress. This is where the similarities end between STS and CF. CF is a more specific response to victim care. STS results from a traumatic

experience or exposure to traumatic facts, whereas CF is characterized by spiritual, emotional, and physical exhaustion. The greater the empathetic concern, the greater the level of STS (Mcdonald et al., 2021) Recent research has described CF as “the progressive, cumulative, continuous, intense discomfort that exceeds healthcare work’s endurance levels” (Mento et al., 2020, p. 3). The symptoms experienced from STS, CF, VT, and BO ripple throughout a LEO’s personal and professional life.

Not all responses to STS are negative. Some LEOs report that because of their experience working with victims, they have become more understanding of others, more empathetic, and can detach from situations in a healthier way (MacEachern et al., 2018). LEOs may also feel deep satisfaction when they identify that their contribution to a situation resulted in a positive difference for the victim. Job satisfaction helps buffer an individual from negative feelings, reactions, and experiences (MacEachern et al., 2018).

Depression

It is not just the tragic life-altering calls or traumatic events that lead to mental health issues such as depression in LEOs. Organizational risk factors also add to and complicate depression (Sherwood et al., 2019). Depression is most commonly defined as a common but serious mood disorder that causes severe symptoms that affect how one feels, thinks, and handles daily activities, such as sleeping, eating, or working (National Institute of Mental Health, 2022b). A study by Bedemci et al. (2016) of correctional officers in Turkey found that those who work in jails or prisons are often overwhelmed by organizational stressors they cannot control. Many stressors are intrinsic to the job and its role in the organization. Those stressors are out of their control, such as lack of opportunities for promotion, unsatisfactory supervisory relationships, the conscious and unconscious anxiety of life in a prison environment, and increased feelings of BO

and depression (Bademci et al., 2016). Unfortunately, this study and several others found that correctional officers' mental health status is significantly poorer than the general population.

Depression is a leading factor in suicide attempts and completions. Law enforcement as a profession has an increased risk for suicide completion, most likely due in part to the easy access of their service weapon (Carlson-Johnson et al., 2020). Research also indicates that LEOs are more likely to die by suicide than by being killed in the line of duty. According to Blue H.E.L.P. completed suicides by LEOs in 2022 was 193, which is 1.6% more than 2021 (First H.E.L.P., Inc., 2023). In 2019 250 LEOs died by suicide, which was more than line of duty deaths (First H.E.L.P., Inc., 2023). The cumulative effects of trauma, in conjunction with a lack of organizational support is fertile grounds for negative outcomes, such as suicide (Carlson-Johnson et al., 2020). Research shows that even though LEOs are generally more resilient, the effects of both organizational and operational stressors put them at risk for mental health issues, including suicide (Carlson-Johnson et al., 2020).

A literature review by Sherwood et al. (2019) found that gender was associated with depression in various studies. For those LEOs that worked with child abuse cases, female officers were more than twice as likely to experience depression as their male counterparts. The most prevalent psychological illnesses experienced by correctional LEOs are PTSD, depression, and suicide.

Depression affects many areas of a LEOs life, from interpersonal relationships to sleep hygiene. Those LEOs with personality traits such as introversion and neuroticism are positively associated with depression, conscientiousness, and a lack of agreeableness (Sherwood et al., 2019). Social support is also an integral part of combating depression. When a LEO has a lower social standing in their community and among their friends, less support from their command

staff, and increased loneliness, they are at a higher risk for depression. Unfortunately, specific coping skills, such as problem-focused coping, passive coping, and avoidance, can also increase depressive symptoms.

Agencies also play a significant role in the onset of depression. As changes occur in both agencies and law enforcement, the increasing inability to make decisions independently, more job demands, and poorer relationships with colleagues are associated with depressive symptoms (Bourbonnais et al., 2007; Sherwood et al., 2019). Depressive symptoms can also be in response to cultural respect or lack of respect, stigma of being a LEO, and how community members view their position. Negative social stereotyping of correctional officers leads to adverse consequences and difficulties that emerge from the work. Several participants in the qualitative research by Bademci et al. (2016) shared that just telling someone they were a correctional officer causes them (participants) a sense of shame about their work.

Frequently correctional officers internalize negative public perceptions of their profession. More recently and congruent with even more recent literature, correctional officers can positively impact their field of work by talking about it with pride and describing it as a decent and valuable field (Bademci et al., 2016). However, even as correctional officers take a more positive outlook on their profession, there remains a negative correlation between depressive symptoms and their experience of perceived organizational support. This negative correlation and lack of organizational support add to the ever-increasing stress a LEO may experience on the job. This stress can also filter into their personal lives, increasing symptoms related to depression and anxiety.

Anxiety

The most researched area of mental health in law enforcement has been the effects of exposure to traumatic events (Perez et al., 2010). Many of these studies have focused on the risk of developing post-traumatic stress disorder (PTSD) from these repeated exposures. PTSD is an anxiety disorder that involves the continued re-experiencing of a traumatic event, avoidance of reminders of the trauma, intense fear, helplessness, and hypervigilance in the aftermath of a distressing (traumatic) event (Perez et al., 2010). The dearth of literature and research does not specifically look at anxiety as an independent construct concerning policing. Anxiety is more likely to be seen as part of a bundle of constructs that make up PTSD or VT. Of the literature reviewed, anxiety is seen as a result of acute or chronic life stressors (Roach et al., 2018). The American Psychological Association (2023) defines anxiety as an emotion characterized by apprehension and somatic symptoms of tension in which an individual anticipates impending danger, catastrophe, or misfortune. Anxiety, by its definition alone, describes the daily lives of LEOs. LEOs are at a greater risk of developing symptoms of poor mental health, such as PTSD, depression, and anxiety (Roach et al., 2018), more so than other professions.

Women in Law Enforcement

Even as law enforcement enjoys a long and proud history, some areas of law enforcement have only recently become areas of interest. The underrepresentation of women in policing is widely recognized, but the reason why this is remains unknown. Some researchers suggest that the lack of diversity and misconceptions about women and their ability to lead contribute to this faulty belief (Rabe-Hemp & Miller, 2018; Sanders et al., 2022). The proverbial glass ceiling has greatly affected the number of women in law enforcement. According to a study by Todak et al. (2021) only 9.7% of police sergeants, 7.5% of intermediate supervisors, and 2.9% of chiefs in 2016 were women. Women are also less likely to be promoted, experience lower retention rates,

and endure a more hostile work environment than men (Frazier et al., 2022; Sanders et al., 2022). Women also report higher levels of verbal and written harassment, hazing, sexual advances, assaults, bullying and coworker hostility than their male counterparts (Frazier et al., 2022). These numbers have remained the same for over 20 years, according to Todak et al.'s (2021) research.

A small body of literature provides context for understanding policewomen's experiences within the agency but very little in regard to their responses to the trauma they endure in their profession (Agocs et al., 2014; Ahern et al., 2016). Some research has found that there are individual risks to CF and BO, such as being female, having a prior history of or a family history of psychopathology, personality type, adverse childhood experiences, and negative coping styles (Sherwood et al., 2019).

Research has also shown that women experience a higher level of CF and BO than men (Frazer et al., 2022). This could be attributed to the increased emotional involvement of females (Frazer et al. 2022). Women also endure more trauma in their personal lives than men, which often translates to higher levels of PTSD than their male counterparts. In a study by Frazer et al., (2022) 58% of the female first responders were classified as having moderate BO. Furthermore, this same study found that a "lack of workplace trust" and respect/justice increased BO in females first responders. Even though research may have noted several areas that increase BO, CF and PTSD in women, it also indicates traits that are inherent to women, such as empathy, which uniquely contribute to their ability to excel as a LEO and first responder.

In addition to these variables, the "second shift" is unique to female LEOs, which includes housework, cooking, cleaning, and caring for their children. This second shift is exhausting and is done on top of their already fast-paced, emotionally and physically exhausting job as a LEO. In conjunction with this exhaustion is the repeated exposure to a crime that shapes

how police mothers construct and employ danger protection strategies at home (Agocs et al., 2014).

One significant consequence of this dual shift work is the parenting choices that result from the trauma experienced by the policewomen and how it affects their children. In an attempt to control their child's surroundings (in an attempt to keep them safe), female LEOs often create a fear of "everything." This secondary stress is seen in policewomen and their children as they attempt to protect them from danger (Agocs et al., 2014; Denk-Florea et al., 2020)).

Some changes have been made in the way that women are recruited for positions within law enforcement. Community policing is part of the framework for increasing female applicants and officers. This type of policing promotes diversity, emphasizing higher female representation within an agency that reinforces equality for all community residents (Donohue, 2020). The increase in specific recruitment styles geared toward women and minorities has seen some success. As research continues to explore this area, more information becomes available that helps pave the way for female and minority recruits. With the increase in diversity within law enforcement agencies, the need for both preemptive and post-trauma education and support tailored to gender and ethnicity becomes more apparent. Along with this, a growing need exists to help alleviate stress, anxiety, and depression that quickly lead to CF and BO.

Female LEOs are less likely to use excessive force or be named in a civil lawsuit, which reduces organizational stress and increases community support (Brown et al., 2020; Sanders et al., 2022). Females are also more likely to pursue advancement through higher education and drive organizational change through community policing than their male counterparts (Donohue, 2020). Women bring unique characteristics to law enforcement compared to male LEOs, such as greater empathy, better communication skills, and few undesirable behaviors (Brown et al.,

2020; Rabe-Hemp, 2008; Sanders et al., 2022). Unfortunately, the areas of community policing that thrive with these characteristics, such as serving women and children victims, are historically viewed as not “real police work,” which devalues the importance of not only this type of work but also the female LEOs. Not surprisingly, there is also a disconnect between leadership (command staff) and female LEOs, in part because leadership is filled by predominately white male LEOs.

There are few role models of the same gender that women can identify with and who can help navigate the unique barriers that women LEOs face regarding promotion, post assignments, and balancing their career and “second shift” responsibilities. Research has also shown that female LEOs who support other female LEOs are chided by their male counterparts and encouraged not to socialize with other female LEOs outside of work (Rabe-Hemp, 2008). The isolation that is inherent to law enforcement is even more so for female LEOs, which impedes the LEOs ability to reach out for social support, possibly increasing their stress load.

There is a benefit to being female in law enforcement, but it often does not translate to the skills determined to be most effective by male-dominated agencies. One benefit is the coping strategies that tend to be more gender divided than most other areas of law enforcement. Bonner and Brimhall (2021) found that women favor emotion-based coping skills and seek social support more than men.

Patrol versus Corrections

Law enforcement can be divided into two divisions at the county level: patrol and corrections. Sheriff’s Office’s unique organizational setup allows for examining two different divisions and the response to BO and CF dependent on gender and the division they are assigned. Research has found that age and gender were predictor variables for BO, reiterating that there is

a relationship between gender and BO (Page & Robertson, 2021). These two divisions' daily duties and stressors are more different than they are alike. The CF and BO rate also varies between the two-division.

The work environment of the corrections deputy is unique. It can only be compared to the environment of a psychiatric facility (Bourbonnais et al., 2007). In contrast, the work environment of a patrol deputy allows for movement throughout the community and the freedom of disengaging from community members on a positive note. Correctional deputies endure a 12-hour shift with only their verbal skills, oleoresin capsicum (OC) spray, and maybe a baton to protect themselves. The duties of a correctional deputy are varied within the correctional facility, but when faced with danger, there are few tools at their fingertips. Most tools that render an inmate unable to attack, such as a pepper ball gun, taser, and 40-millimeter foam baton rounds, are only available if provided by a sergeant or lieutenant. The most employed tool is that of compassion and empathy, coupled with a listening ear and authenticity, not the OC spray or baton.

Biblical Foundations of the Study

CF and BO are synthetic constructs, but compassion is integral to God's character. This revelation of his character was a revealing of his heart. In Proverbs 27:19 humankind is reminded that the "heart of a man reflects man" (New International Version Bible, 2011). If humankind is made in the image of God, and he reveals his heart to them, then the heart of God, reflects God, and his grace and redemption are made clear through his love for humankind. In Exodus 34:6-7 Moses reminds humankind of God's compassion, graciousness, love, and forgiveness. These characteristics show humankind what is important to God.

Repeatedly Jesus reminds his followers to have compassion for others. Jesus' embodiment of compassion is a template for those who follow him and for those who are called to service. As humans are not God, they often succumb to the fatigue of service. Humans give out of love but fail to follow Christ's example of solitude, recharging, and connecting back to the Father. Several times throughout the New Testament, Jesus removes himself from the crowd and the disciples, so he can seek rest in silence and connection with his father. The template that Jesus provides his followers is that he removes himself to recharge after hard work (Mark 6:30-32), to work through grief (Matthew 14:1-13), to make important decisions (Luke 6:12-13) when in distress (Luke 22:39-44) to pray and prepare for a major task (Luke 4:1-2, 14-15, 5:16). Jesus knew when he needed to reach out to the Father.

Research on CF and BO is valuable because it allows researchers to illuminate the disconnect from God and identify ways to reconnect, release, and continue to serve those around them. Law enforcement pays a high price for the service they provide their communities, and sometimes that price goes beyond them and derails their relationships with their spouses, children, family, and friends. Synthetic concepts such as CF and BO, remind us that humans have chosen or forgotten how to recharge, how to work through grief, pray and release the burden of other's pain.

Summary

Law enforcement has been described as many things and has held multiple meanings and names throughout history. Often public safety refers to fire/rescue, dispatchers, emergency medical services, and law enforcement. Thus, research on the effects of various mental health constructs and their effect on public safety, refers not only to law enforcement but to various first responders and dispatch. These agencies all serve roles to protect the community, but they

experience it differently (Miller and Unruh, 2019). Research specific to mental health constructs and SD is needed, because their agency is unique because it covers both patrol and corrections.

Throughout literature, one thing remains the same: LEOs endure significant stress that can manifest into life-altering mental health issues. BO and CF are two constructs that can disrupt a LEO's occupational, organizational, and personal lives. All research aimed at helping LEOs is important, but there is value in narrowing down that research to specific constructs. The building blocks of mental health in LEO needs all of the constructs previously mentioned, but there is merit in parceling them out and examining them as single constructs that contribute to the mental health of LEOs. Understanding the impact BO and CF have on the mental health of a LEO helps researchers continue to narrow down the research parameters needed to provide authentic and effective resources. Integrating both a scientific and a biblical approach to research allows for a spiritual and intellectual perspective on how to move forward to support LEOs.

The importance of *eirēnopoios* has woven itself throughout history, reminding humanity of the importance of LEOs and their standing in societies. Like most things in society, *eirēnopoios* has been tainted and twisted by humankind's definition, and the effect not only a strained relationship with the community they serve, but also a significant amount of mental health concerns among LEOs. The amount of trauma digested by LEOs daily is an unnatural result of the society they serve and the continuous demise of society's mental health and that of the LEOs. Previous research has focused on mental health constructs as a whole, with minimal research on specific constructs, which do not allow for a specialized response to a specific construct. Research that is specifically focused on CF and BO may hold a few answers on how to provide support, resources, and answers to the mental health crisis surrounding law enforcement.

CHAPTER 3: RESEARCH METHOD

Overview

Law enforcement careers have changed significantly over the past five years. The push to determine how to best support LEOs has led to extensive research into the many areas of law enforcement. Looking at the various issues facing law enforcement today has led researchers to look closer at the mental health of LEOs. Within this area of research law enforcement has been lumped into one entity, when in actuality each law enforcement type (city, county, state, federal) engage in different operational duties. This difference in duties is foundational to the types of mental health concerns LEOs have. Historically this would be an adequate way to determine mental health concerns, but as the levels of law enforcement take on additional duties, the difference between both their organizational and operational stressors change. Specifically, the research conducted within this study used a sample group of deputies from Sheriff's offices, thus providing data explicit to this law enforcement type.

Research Questions and Hypotheses

RQ1: Do female deputies have higher CF levels than male deputies?

RQ2: Do female deputies have higher BO levels than male deputies?

RQ3: Does CF mediate the relationship between gender and BO?

RQ4: Do patrol deputies experience higher operational stress than correctional deputies?

RQ5: Do patrol deputies experience higher organizational stress than correctional deputies?

RQ6: Do patrol deputies have higher CF levels than correction deputies?

RQ7: Do patrol deputies have higher BO levels than correction deputies?

Hypotheses

Hypothesis 1: Female deputies will have higher CF than male deputies.

Hypothesis 2: Female deputies will have a higher BO level than male deputies.

Hypothesis 3: CF mediates the relationship between gender and BO.

Hypothesis 4: Patrol deputies will have higher operational stress than corrections deputies.

Hypothesis 5: Patrol deputies will have higher organizational stress than corrections deputies.

Hypothesis 6: Patrol deputies will have higher CF level than correction deputies.

Hypothesis 7: Patrol deputies will have higher BO levels than correction deputies.

Research Design

The design for this research study was non-experimental and correlational, testing hypothesized correlations of six different variables (CF, operational stress, organizational stress, personal BO, work related BO, client related BO) with gender and type of deputy (patrol or corrections). These hypotheses were tested quantitatively.

Participants

A purposive sample was collected through the Oregon State Sheriff's Association (OSSA), as correction and patrol divisions reside within the county law enforcement agencies within the state of Oregon. The foundational qualification to become a sheriff's deputy are relatively the same throughout the 36 counties. Each county reserves the right to add to those qualifications and job descriptions. Eligible participants included male and female full time active-duty Sheriff deputies.

Inclusion criteria was the following: 1) sworn deputy of a Sheriff's office, 2) over two years on the job, and 3) must be eligible for inclusion in the deputy's union. The reasoning for these inclusions was to make sure that the individual is a sworn deputy, which means they fulfill the duties required of a deputy and have over two years of experience because the first 18 months are a probationary period that consists of in-field training. In addition, field training requires a field training officer to be with them during each shift, which can cause another layer of employment stress. Lastly, being eligible for the deputy's union requires that one does not hold any ranking above deputy to be a member.

Exclusion criteria was more specific to allow participants to be similar to other Sheriff Offices. Therefore, the following exclusion criteria were employed; 1) the deputy may not be in a specialty assignment, 2) currently on disciplinary or part of an active internal investigation 3) on light duty and 4) less than full time employment. First, these criteria were chosen because the work environment of specialty assignments differs significantly in both stress and duties. Secondly, being on disciplinary or part of an active internal affair investigation can skew one's perception and opinion about their employment and agency. Both light duty and less than full time employees are excluded due to less time in continuously stressful work environments.

Once the respective Sheriffs gave their permission to conduct research within their agency, an email (Appendix A) was sent to the deputies within the participating agencies. Participants were assured anonymity by the nature of the collection and their response to each of the questions cannot be determined. Those who agreed to participate signed a digital informed consent form (Appendix B) which was provided within the

email and then again on the SurveyMonkey platform at the beginning of the survey. At the bottom of the introductory email there was a link to the questionnaires which were imported into a password-protected and private SurveyMonkey platform.

Based upon effect size information gathered from Gonzales et al. (2019), an effect size of 0.60 for group differences (gender and job type) was used. Given that effect size, an alpha of 0.05, a sample size of 122 (61 in each group) will yield 95% power. Similarly, a correlation of 0.30 is expected for the mediation analyses, which will also yield 95% power at alpha 0.05 and a sample of 112. Therefore, my target sample size was 122, with an equal representation of males and females, and patrol and correction.

Study Procedures

An introductory email (see Appendix C) was sent to the Sheriffs of the county agencies within the state of Oregon. Each participating agency had the opportunity to respond to the introductory email or call the researcher with any questions, concerns, and clarification of the data collection process. Once a Sheriff consented to contacting LEOs (deputies) within the agency, potential participants were contacted via electronic mail. An introductory email included information about the study, their anonymity, and the reason for the research. The surveys were linked within this email, so they could participate, if desired, immediately. Disqualifying questions were provided first; if any are answered affirmatively, the survey would continue, but the participant's survey would be flagged for further review by the researcher. When a participant finished the disqualifying questions, which doubled as demographic information, such as if they were in a special assignment, their current rank, and disciplinary status, they were forwarded to the survey portion. A secondary email was sent two weeks later to potential participants, as a

reminder, with a link embedded within the email. Finally, a tertiary email was sent to potential participants who had yet to respond, with a deadline and embedded link to the surveys within this email.

Within the email there was a link to the Professional Quality of Life Version 5 (Pro-QOL-5), a 30-item self-report measure of the positive and negative effects of working with people who have experienced highly stressful events. The Pro-QOL-5 contains three subscales measuring CF, BO, and Compassion Satisfaction. The Operational Police Stress Questionnaire (PSQ-Op) is a 20-item self-report questionnaire that is psychometrically sound to measure the operational stressors that are inherent to policing. The Organizational Police Stress Questionnaire (PSQ-Org) is a 20 item self-report questionnaire that focuses on operational stress, which encompasses physical health, stress, and psychological well-being. Lastly, the Copenhagen Burnout Inventory (CBI) is a 19-item self-reported measure of BO. It contains three sub-scales measuring personal BO, work-related BO, and client-related BO. All three sub-scales are self-reported measures using a Likert scale and are easy to navigate.

Instrumentation and Measurement

Professional Quality of Life Scale-5

The ProQOL-5 is a 30-item self-report measure which aims to assess the concepts of compassion satisfaction, BO and CF. The benefit of the ProQOL-5 for this research study is that it breaks down the concept of CF into two components: BO and secondary traumatic stress. The Pro-QOL-5 is displayed in Appendix D. Permission to use the ProQOL-5 can be found in Appendix E. The Pro-QOL-5 measures symptoms of compassion satisfaction and CF related to one's job that have been experienced in the

past 30 days. Participants rate their responses on a 5-point Likert scale ranging from (1) *never* to (5) *very often*. The measure is comprised of 3 subscales: compassion satisfaction, BO, and STS. The scoring process contains standard and reverse scoring calculation to achieve the final score that categorizes an individual's sub-scales.

Research on the ProQOL-5 has demonstrated adequate internal consistency for the BO subscale, $\alpha = .75$. The ProQOL-5 has also demonstrated good construct validity with the CF scale showing moderate negative correlations with secondary traumatic stress scale ($r = -.23$) and BO scale ($r = -.14$). Although the BO scale and STS scale have demonstrated positive correlation with one another ($r = .58$) they still appear to measure different constructs as the secondary traumatic stress scale assesses for fear whereas the BO scale does not. There is currently no data available on law enforcement specific norms for the ProQOL-5, but the developers of the measure stated in the manual that the ProQOL-5 is appropriate for use with anyone who has the possibility of being exposed to another person's trauma as a result of their work, including LEOs (Stamm, 2010).

Operational Police Stress Questionnaire

The Operational Police Stress Questionnaire (PSQ-Op) is a 20-item measure created to monitor operational stress (McCreary & Thompson, 2004). It not only measures police stress, but also psychometrically measures stressors associated with policing. The PSQ-Op was designed to produce a single summary score, which is the average of all 20 items. The PSQ-Op is displayed in Appendix F. Respondents rate their responses on a 7-point Likert scale ranging from 1 = "no stress at all" to 7 = "a lot of stress." Research by McCreary and Thompson (2006) indicate that even though the survey was designed for the Canadian police force, it is not specific to this policing

culture, so the generalizability of the findings is positive for other countries. Further research on the PSQ-Op found that it was highly reliable $\alpha > .93$, with corrected item total correlations between .41 and .73. The PSQ-Op has shown to be positively correlated ($r = .50$ or less) with other general stress measures. These reliability statistics suggest that the PSQ-Op has excellent internal consistency.

Organizational Police Stress Questionnaire

The Organizational Police Stress Questionnaire (PSQ-Org) is a 20-item measure created to monitor organizational stress (McCreary and Thompson, 2004). The PSQ-Org was designed to produce a single summary score, which is the average of all 20 items. The PSQ-Org is displayed in Appendix G. Respondents rate their responses on a 7-point Likert scale ranging from 1 = “no stress at all” to 7 = “a lot of stress.” Similar to the PSQ-Op, the PSQ-Org was designed for the Canadian police force and has a positive generalizability to other countries (McCreary and Thompson, 2004). Research on the PSQ-Org, which was conducted in tandem with the PSQ-Op reported that the PSQ-Org is also highly reliable $\alpha > .92$, with corrected item total correlations between .50 and .70. Like its partner survey, PSQ-Op, the PSQ-Org also has excellent internal consistency.

Copenhagen Burnout Inventory

The Copenhagen Burnout Inventory (CBI) is a 19-item measure created to monitor personal BO, work BO, and client BO. The CBI was designed to produce summary score for each of the three sections of the survey, which is an average of the questions in that section (Kristensen et al., 2005). The CBI is displayed in Appendix H. Respondents rate their responses on a 25-point Likert scale ranging from 0 =

“never/almost never” to 100 = “always.” The measure is comprised of 3 subscales: personal BO, work BO and client BO.

Part one of the CBI covers personal BO, identified by a summary score of the six-item measure. This section has a reliability of $\alpha >.87$ and an item total correlation between .49 and .64. The last section is the client BO, which is identified by a summary score of the last six-item measure. Client BO has a reliability of $\alpha >.83$, with an item total correlation between .35 and .57. The CBI has a positive generalizability, because it was designed to be used in a number of countries. Overall, the CBI has good reliability and validity.

Operationalization of Variables

Gender – this variable is a nominal variable and will be measured by the researcher created demographic questionnaire asking participants to select the category (male or female) they fall in.

Type of deputy – this variable is a nominal variable that will be measured by the researcher created demographic questionnaire asking participants to select the category (correlational or patrol) they fall within.

Secondary Traumatic Stress- this variable is a ratio variable and will be measured by total score of the STS scale in the ProQOL-5 (Stamm, 2010).

Burnout- this variable is a ratio variable and will be measured by total score of the BO scale in the ProQOL-5 (Stamm, 2010).

Compassion Satisfaction- this variable is a ratio variable and will be measured by total score of the compassion satisfaction scale in the ProQOL-5 (Stamm, 2010).

Personal burnout- this variable is a ratio variable and will be measured by the summary score of the personal burnout (subscale one) six- item measure (Kristensen et al., 2005).

Work-related burnout- this variable is a ratio variable and will be measured by the summary score of the work-related burnout (subscale two) seven- item measure (Kristensen et al., 2005).

Client-related burnout- this variable is a ratio variable and will be measured by the summary score of the client burnout (subscale three) six- item measure (Kristensen et al., 2005).

Organization Stress- this variable is a ratio variable and will be measured by the average of the 20 items on the PSQ-Org (McCreary and Thompson, 2006).

Operational Stress- this variable is a ratio variable and will be measured by the average of the 20 items on the PSQ-Op (McCreary and Thompson, 2006).

Data Analysis

To investigate the research questions, a between-groups Analysis of Variance (ANOVA) was conducted to assess if there were any statistical differences between gender and type of deputy in the dependent variables (BO, CF, personal burnout, work related burnout, client related burnout, organization stress, and operational stress). If gender significantly predicted BO, then a mediational analysis would be performed entering CF as a covariate to determine the reduction in variance.

Delimitations, Assumptions, and Limitations

The assumptions of this study include the participants being sworn sheriff deputies, that participants will provide honest answer, and will complete the survey one time. Even though CF and BO are not as concerning to the LEO as PTSD, suicide,

depression, or substance abuse, both can still be daunting. The historical culture of law enforcement agencies includes a fear of stigmatism, disruption to career paths or an unfavorable response (suspension, medical retirement, loss of promotion, loss of job) from the agency (Carlson-Johnson et al., 2020). Even as the awareness of mental health rises in law enforcement agencies there still remains a fear of seeking medical or mental health treatment, especially for issues such as CF and BO. In response to these fears, it is imperative that anonymity is reinforced throughout the entire process. To ensure that anonymity remains, there will be no gathering of identifying demographic information, aside from gender and type of deputy (patrol or corrections). Even as these safeguards were in place some participants remained concerned, which possibly resulted in bias or null responses and uncompleted surveys.

A limitation to the study was a lack of demographic information. Research has shown that some LEOs do not develop CF, BO STS or VT (Domínguez Ruiz et al., 2022). These individuals may have characteristics that provide safeguards against these constructs. Without their identifying information this research lacks internal data that might lead to information regarding intrinsic skills or characteristics that could be associated with the ability to prevent CF, BO, STS or VT. In conjunction with this limitation is the lack of research into Sheriff Offices as a sole participant sample. The lack of common understanding of the special organizational duties of a Sheriff's office makes this research study one of only a few focusing on this law enforcement agency specifically, as opposed to lumping it in with both city and state agencies. When using a

specific participant pool, the possibility of not gathering a sufficient sample size due to lack of Sheriff approval, available agencies, and participant pool, was a possibility.

Delimitations unique to this study included the sample participants and specific law enforcement type. First this research included only SDs, because they are a law enforcement agency that has very little literature and research devoted to them specifically. Secondly, only sworn deputies who were appointed to patrol and corrections were allowed to participate in the study. Those deputies who were assigned to specialized units, such as detectives, courts or programs were removed through the preliminary research questions. The reason for this was that those who are in specialized units have different levels of daily and organizational stress. Their hours, job descriptions, chain of command and response to the organization are most likely distinctly different than those who are not in specialized units. This also disqualified any sworn deputies above the rank of deputy. Organizational and operational stress is more unique and those individuals above the rank of deputy no longer spend a significant amount of time fulfilling traditional operational duties, thus making them outside the parameters of this study.

Summary

Using the ProQOL-5, PSQ-Op, PSQ-Org and CBI allow for data collection specific to CF, STS and BO. Even though demographic information was not used, other than gender and type of deputy, value remains in the information provided through the surveys. LEO specific surveys such as the PSQ-Op and PSQ-Org identify operational and organizational data that is unique to law enforcement. Even though the ProQOL-5 and

CBI are not specific to law enforcement they measure specific constructs, BBO, CF and STS in a variety of life areas not measured by the PSQ-Op and PSQ-Org.

The psychological wellbeing of LEOs is often attacked by traumatic events either witnessed or expressed second hand. The constant expectation of being ready and available to their communities often leaves them without the time and tools to reconcile the endured traumatic events. The ability to measure significant and specific constructs, that previous research has determined contributes to the demise of the mental health of helpers (helping professions) and being able to tailor it to LEOs is an important step in determining useful predictors of first responder's professional and personal quality of life (McDonald et al., 2020).

CHAPTER 4: RESULTS

Overview

The purpose of this quantitative survey study was to examine how CF and BO affect Sheriff's deputies and if there is a difference in that impact between genders. In addition, this study also investigated how patrol and correction divisions attribute to CF and BO in Sheriff's deputies (SD).

RQ1: Do female deputies have higher CF levels than male deputies?

RQ2: Do female deputies have higher BO levels than male deputies?

RQ3: Does CF mediate the relationship between gender and BO?

RQ4: Do patrol deputies experience higher operational stress than correctional deputies?

RQ5: Do patrol deputies experience higher organizational stress than correctional deputies?

RQ6: Do patrol deputies have higher CF levels than correction deputies?

RQ7: Do patrol deputies have higher BO levels than correction deputies?

Descriptive Results

Initially a total of 246 deputies participated in the survey. Of these, 52% successfully completed the survey, generating 128 completed responses, from the original 246. Despite the reduced sample size, it remained robust and representative of SDs, displaying an even distribution across corrections a patrol, as well as among female and male respondents. These responses included those participants who met the inclusion criteria, provided consent and completed the survey. The gender distribution among participants revealed 65 male participants (50.8%) 63 female participants (49.2%) and 1

participant who identified as neither gender. Unfortunately, the participant who identified as neither gender failed to complete the survey in its entirety, so those results could not be included in the research. Both corrections (65) and patrol (63) departments were represented almost equally among participants. Table 1 presents the demographics for the participant sample.

Table 1

Demographic Characteristics Table

Sample characteristic	<i>n</i>	%
Gender		
Female	63	49.2
Male	65	50.8
Division		
Patrol	63	49.2
Corrections	65	50.8

Note N=128

Study Findings

A quantitative correlational method was conducted to examine the association between CF, BO, compassion satisfaction, operational stress, occupational stress, and gender among patrol and correction deputies with a total of 128 participants (N= 128).

RQ1: Do female deputies have higher CF levels than male deputies?

H01: There is no difference in CF levels between female and male deputies.

An analysis of variance (ANOVA) was conducted to determine if female deputies have higher CF levels than male deputies. The ANOVA revealed that there is no significant statistical difference between genders $F(1,126) = .102, p = .751, R^2 = .001$. The

coefficient of determination (R_2) indicated that a no percentage of variance in CF can be explained by gender. The mean CF of female deputies (N=63, M= 50.30, SD= 8.53) was similar to the mean CF of male deputies (N=64, M= 49.72, SD= 11.59). The mean difference is .58, 95% CI [48.15, 52.45] between female and male deputies. There was not enough statistical evidence to reject the null hypothesis, therefore the research fails to reject the null hypothesis.

RQ2: Do female deputies have higher BO levels than male deputies?

H02: There is no difference in BO levels between female and male deputies.

An ANOVA was conducted to determine if female deputies have higher BO than male deputies. The ANOVA revealed that there is no significant difference in BO levels between genders $F(1,126) = .161, p = .689, R_2 = .001$. The coefficient of determination (R_2) indicated that none of the variance in BO can be explained by gender. This is a small effect size. The mean BO of female deputies (N=63, M= 1185.45, SD= 37.68) was similar to the mean BO of male deputies (N=64, M= 1205.23, SD= 24.58). The mean difference is 19.78, 95% CI [1146.76, 1244.07] between female and male deputies. There is not enough evidence to reject the null hypothesis, therefore the research fails to reject the null hypothesis.

RQ3: Does CF mediate the relationship between gender and BO?

H03: There is no significant effect of CF on BO through gender.

An ANOVA was used to investigate whether CF mediates the relationship between gender and BO. The results from the ANOVA $F(1,126) = 0.166, p = .684, R_2 = .001$ indicated that there is no significant proportion of the variance in BO that can be explained by gender, therefore a mediational analysis was not completed. CF was

correlated with BO (*Pearson's r* = 0.68, $p < 0.00$). The Intercept p value (< 0.001) indicates that there most likely exists other factors that are currently unaccounted for that have a significant impact on BO. None the less, there is not enough evidence to reject the null hypothesis.

RQ4: Do patrol deputies experience higher operational stress than correctional deputies?

H04: There is no difference in operational stress between patrol and correction deputies.

An ANOVA was conducted to determine if patrol deputies had a higher operational stress than correction deputies. The ANOVA revealed that there was no statistical significance of operational stress between patrol and correction deputies $F(1,127) = .903, p = .344, R_2 = .007$. The effect size is small. The coefficient of determination (R_2) indicated that less than 1% of the variance in operational stress can be explained by the deputy's employment division (patrol/corrections). Mean operational stress of correction deputies ($N=65, M= 74.12, SD= 24.68$) was almost the same as Patrol deputies ($N=63, M= 78.07, SD= 22.31$). The mean difference was 3.95, 95% CI [68.00, 80.23]. The mean operational stress of both corrections and patrol deputies falls within the moderate range, per the PSQ-Op. The analysis did not yield enough statistical evidence to reject the null hypothesis. Therefore, the research study fails to reject the null hypothesis.

RQ5: Do patrol deputies experience higher organizational stress than correctional deputies?

H05: There is no difference in the level of organizational stress between patrol and correction deputies.

An ANOVA was performed to determine if patrol deputies exhibited higher levels of organizational stress than correction deputies. The results indicated that there was no statistical significance in organizational stress between patrol and correction deputies $F(1,126) = .003, p = .956, R^2 = .000$. The coefficient of determination indicates that there is no variance of operational stress that can be explained by the deputy's division (patrol/corrections). Furthermore, the Levene's test did not show significance, indicating the mean organizational stress for corrections ($N=65, M= 74.90, SD= 28.38$) was similar to patrol ($N= 62, M= 74.64, SD= 24.98$), showing a minimal mean difference of .26. The mean organizational stress of both corrections and patrol deputies falls within the moderate range, per the PSQ-Org. There is not enough evidence to reject the null hypothesis, therefore the research fails to reject the null.

RQ6: Do patrol deputies have higher CF levels than correction deputies?

H06: There is no difference in the level of CF between patrol and corrections deputies.

An ANOVA was conducted to determine if patrol deputies have higher levels of CF than correction deputies. The results indicated that there was no statistical significance in CF between patrol and correction deputies $F(1,126) = .802, p = .372, R^2 = .006$. The mean CF for corrections ($N=64, M= 49.21, SD= 9.65$) was similar to patrol ($N= 63, M= 50.82, SD= 1.34$), showing a minimal mean difference of 1.61, 95% CI [48.22, 51.79]. Correction's mean of 49.21 and patrol's mean of 50.82 suggests that both divisions have a significantly high level of CF.

RQ7: Do patrol deputies have higher BO levels than correction deputies?

H07: There is no difference in levels of BO between patrol and correction deputies.

An ANOVA was conducted to determine if patrol deputies have higher levels of BO than correction deputies. The results indicated that there was no statistical significance in BO between patrol and correction deputies $F(1,126) = .994, p = .321, R^2 = .008$. Incidentally, the Levene's test did not show significance, indicating the mean Total BO (from both the CBI and ProQOL-5) for corrections ($N=64, M= 1171.10, SD= 276.06$) was similar to patrol ($N= 63, M= 1220.12, SD= 278.11$), showing a minimal mean difference of 49.02, 95% CI [1146.76, 1244.07]. Correction's mean of 1171.10 and patrol's mean of 1220.12 suggests that both divisions have a high level of total BO.

Exploring both measurements individually, the CBI total mean for corrections ($N= 65, M= 1122.30, SD= 267.66$) is similar to the total mean for patrol ($N=63, M= 1169.31, SD= 267.66$), again showing a minimal mean difference of 47.01, 95% CI [.000, .064]. These results suggest that correction's mean of 1122.30 is indicative of a moderate level of BO and patrol's mean score of 1169.31 is interpreted as a high level of BO (0-380= none, 381-760= minimal, 761-1140= moderate, 1141-1520= high, 1521-1900= extremely high).

Reviewing the ProQOL-5 BO scale, the research indicated that the total mean for patrol ($N=63, M= 50.81, SD= 10.51$) is almost the same as correction ($N=64, M= 49.22, SD= 9.51$), revealing an even more minimal mean difference of 1.59, 95% CI [48.25, 51.77]. Evaluating these results indicates that patrol's mean of 50.81 and correction's

mean of 49.22 is interpreted as a high level of BO. This is determined to be similar to the CBI total, because they both reveal a high level of BO for both corrections and patrol.

Summary

The purpose of this quantitative survey study was to examine how CF and BO affect Sheriff's deputies and if there is a difference in that impact between genders. In addition, this study also investigated how patrol and correction divisions attribute to CF and BO in Sheriff's deputies (SD). In this chapter, data findings and analyses were presented, demographics and variable of interest and a sequence of ANOVAs were discussed to address the research questions. Collectively, neither gender nor division significantly predicted BO or CF. All seven-null hypotheses for the research questions failed to be rejected. In Chapter 5, data analysis findings will be explored in relation to the reviewed literature.

CHAPTER 5: DISCUSSION

Overview

The purpose of this quantitative survey study was to examine how CF and BO affect Sheriff's deputies and if there is a difference in that impact between genders. In addition, this study also investigated how patrol and correction divisions attribute to CF and BO in Sheriff's deputies (SD). The results will allow law enforcement agencies, specifically Sheriff's offices to see the effects of BO and CF on their deputies and allow for further investigation into possible strategies to reduce both within their agencies. This includes the deputies in both the patrol and correction divisions.

Summary of Findings

The results of this study were not anticipated. The results indicated that there was no significant difference between BO, CF levels between genders or Sheriff's office divisions (patrol and corrections). Neither gender nor division significantly predicted CF or BO. Consequently, no significant differences were found in CF, BO, operational stress or organizational stress between patrol and correction deputies. All seven null hypotheses were rejected, indicating that there were no clear distinctions based on gender or division.

Discussion of Findings

This research study, when designed, set forth to examine if there was a difference in the impact of CF and BO between genders and divisions. What the research determined, across all research questions, was that there was little to no difference between genders or divisions in regard to the impact of CF and BO. Research questions 1 and 2 looked at the levels of CF and BO between genders. Both determined that there was no significant difference between genders. This is in contrast to previous research

that found that gender was a predictor variable for BO (Page & Robertson, 2021) as was CF.

Research by Cocker and Joss (2016) indicated that BO leads to CF and that singularly BO has also been recognized as both a precursor to and a result of CF (Henson, 2020; Ledoux, 2015). Thus, exacerbating the difficulty of distinguishing them as separate constructs. These two constructs may be too intertwined as they are currently defined to determine if there is a significant difference between the two. These results would indicate that determining levels of BO and CF is not difficult, but that one's gender does not increase one's level of either variable. Concurrently the questionnaires used may not have been the appropriate questionnaires to distinguish between BO and CF.

What the research did find was that regardless of gender, both BO and CF are high for both male and female deputies. These findings are not supported by previous LEO gender research, where females were found to have higher CF than males. This finding could be in part due to the onset of the worldwide pandemic and a decline in community and nationwide support for LEOs. In addition to these possibilities there is also the lack of "second shift" questions in the questionnaire. Previous research indicated that the second shift contributes significantly to the overall stress of female LEOs.

This participant sample was deputy specific, which encompasses a larger and more diverse work environment. This larger work environment (county versus city) could minimize the differences between genders, as the work is more expansive and stressful for all deputies.

These findings could be discouraging, as they do not show any difference between genders, but what they do show is more important to law enforcement agencies. The high levels of both BO and CF indicate that there is a warranted concern regarding SDs mental health. Research by Cocker and Joss (2016) shows that prolonged BO leads to CF as a result of prolonged frustration, loss of control, decreased morale and an increase in willful efforts. In combination with this are the risk factors that increase BO within organizations, such as a lack of social support, lack of autonomy and a lack of rewards and positive recognition (Hallinan et al., 2019; Masson & Moodley, 2019; Perez et al., 2010; Pirelli et al., 2020). Though not its intended outcome, this study concurs with previous research that specific work-related elements unique to LEOs are linked to elevated levels of BO.

Research question 3, assessed if CF mediated the relationship between gender and BO. However gender did not significantly contribute to the variance in BO, therefore there was no cause to explore CF as a mediator. Interestingly CF and BO had a strong positive correlation. This concurs with research by Ledoux (2015) that suggests that CF occurs before or after BO or that BO creates CF. These two constructs are so intricately linked together that determining one from the other appears to be drastically difficult. In contrast to this some research suggests that it is easy to differentiate the two, because CF encompasses physical, mental and emotional exhaustion, along with hopelessness and disassociation (Dominguez Ruiz et al., 2022), whereas BO involves emotional exhaustion, depersonalization and a reduced sense of accomplishment (Pirelli et al., 2020; West et al., 2018). Highlighting as previously mentioned, making a clear distinction

between BO and CF may need more in-depth research and clearer, more concise definitions.

The work environment of LEOs is drastically different than the work environment of the general public. Work related factors unique to LEOs have been linked with higher BO levels (Brady, 2016; Garcia et al., 2020, Margi & Rosenbloom, 2021). Research questions 4 and 5 attempted to address both operational and organizational stress between genders and divisions. This study found that neither gender nor division (corrections or patrol) have any statistical significance on either operational or organizational stress. The mean operational stress of correction deputies was 74.12, whereas patrol's mean operational stress was 78.07. Using the scales provided by the PSQ-Op the mean operational stress scores indicate a moderate level of operational stress. This finding is interesting, because the operations of corrections versus patrol are drastically different. Corrections operate within a structure, maintaining safety and security of inmates, with only their verbal skills and a few non-lethal tools to attain that. Meanwhile, patrol deputies operate throughout the county, making their scope of operations vaster and dealing with rules and regulations that are not as clearly defined. Similarly, the mean organizational stress for correction deputies was 74.90 and for patrol deputies their mean organizational stress score was 74.64. Again, indicating a moderate level of stress for both divisions.

This result is not surprising, as both corrections and patrol work for the same agency adhering to the same organizational rules, resulting in similar organizational stress. Moderate stress levels are not uncommon, given what a LEO encounters every day on the job. Research has found that there is a positive relationship between work related

stress and BO. Interestingly previous research reported that correction LEOs have a higher level of organizational stress than patrol LEOs (El Sayed et al., 2019; Miller & Unruh, 2019; Perez et al., 2010). This was not corroborated by this study.

Lastly, Research questions 6 and 7 took a closer look at BO and CF levels between correction and patrol deputies. No statistical significance was found between divisions for either BO or CF. What the research did find was that both divisions had a high level of BO and CF. In contrast, Page and Robertson (2021) found that CF and BO rates vary between patrol and corrections. There is little research between corrections and patrol, which makes it difficult to determine if these findings are in line with current research or not.

Implications

These results suggest that even though there is not a difference in CF and BO between genders or divisions, there is a significantly high level of both CF and BO in both genders and divisions. Tackling this unhealthy disadvantage to being a SD would ultimately help Sheriff's offices with employee retention, job satisfaction and longevity. In conjunction with this adoption of self-care policies would benefit both the agency and the SDs. As in most para military environments a top-down approach would be needed to implement lasting self-care policies. Modeling good self-care, while also providing and encouraging SDs to engage in self-care activities is an excellent way to help SDs avoid BO and CF. Law enforcement agencies are starting to understand the need for a collective self-care policy and plan, along with voluntary participation.

Additionally, command staff may want to provide additional professional development or trainings for SDs focused on self-care and ways to mitigate BO and CF.

In conjunction and possibly more importantly agencies may want to offer seminars to the spouses, partners and families of SDs. Research shows that a supportive family helps alleviate CF in LEOs. Offering trainings that align with the SDs “warrior mentality” is more likely have a more lasting effect than attempting to diminish this aspect of their personality, which is inherent to this profession.

Limitations

This study experienced a few unseen limitations. First, there was the difficulty in recruiting female deputies. This was harder than anticipated and took up the bulk of the time allotted for data gathering. Previous research indicates that only 12% of sworn deputies are female, which most likely attributed to the struggle with finding female participants (Brooks, 2022; Donahue, 2020). Another limitation, though less consequential was the number of deputies engaged in either an internal investigation or not having the required two years on the job. Both of these requirements removed more participants from the sample than anticipated.

A third limitation that became more apparent as the data gathering stage continued included a lack of demographic information. Not knowing how long a person has been on the job or how many agencies they have worked for opens up more questions in terms of operational and organizational stresses contribution to or mitigation of BO and CF. The research study as it was designed does not address these possible variable relationships. According to research by Masson and Moodley (2019), STS (which has a significant relationship with BO and CF) is related to job duration and rank of the LEO. Most likely there is an abundance of information that has been left untapped due to a lack of demographical information.

A fourth limitation was that the participant sample was taken from all the counties in Oregon. The agency size varies drastically within the state of Oregon, from 3 deputies to over 400 deputies. This size disparity may contribute to organizational and operational stress, as smaller agencies have a more family like atmosphere and larger agencies are not only para military, but also follow a business model that is more rigid. In conjunction with this Oregon has a wide variety of urban, suburban and “wild west” agencies, which have their own cultural norms, behaviors, and expectations. All of which contribute to the overall stress of working for an agency.

The most significant limitation that was known, but unaddressed is the confusion between BO and CF. Historically, both CF and BO lacked clear definitions and were often used interchangeably by researchers. Their relationship has remained unclear for a long period of time (Henson, 2020; Hunsaker et al., 2015) and up until recently the definitions used for both CF and BO were too similar to be seen or researched as separate constructs. In conjunction with the confusion between definitions is the sudden onset of CF, which can be confused with long standing BO, increasing levels of BO, while not necessarily contributing to levels of CF. The suddenness of the onset in the midst of compounded BO could be construed as another level of BO, if the definitions are not clearer and more concise (Hunsaker et al., 2015). This confusion, though not directly seen within this research study, may have contributed to similar levels of both CF and BO among both genders and divisions. This limitation most likely had the greatest impact on the study’s findings.

Recommendations for Future Research

After reviewing the literature and current research study it is apparent that there needs to be more specific research on the effects of BO and CF on LEOs. The majority of the recent research has chosen, this study included, to look at specific constructs, when it appears that the more important and useable data might be hidden within broader research studies. For instance, a research study that looks at several different constructs, such as CF, BO, STS, and PTSD, along with the coping skills employed to tackle them. That would probably produce more useable data in terms of contributing to policy and programming changes.

Even though the current research did not find any difference between genders in levels of BO and CF, there is literature that suggests that males and females react differently to both (Pinki & Sandeep, 2021). With this in mind research into how male and female deputies respond to BO and CF would provide a plethora of information on both adaptive and maladaptive approaches to alleviating BO and CF. This information coupled with current research would provide a vast array of information that could be combined to build professional development programs to provide both information and skills to SDs that help alleviate both BO and CF.

Future researchers could examine the impact of BO and CF gender and division, removing the limitations of rank and adding demographic information such as length of service, and number of agencies worked for. Studies could seek to assess if length of service or number of agencies worked for could affect one's BO and CF.

Additionally, other researcher may want to conduct this study within one agency, especially if they include length of service as a variable. The differences between agency operational styles, size of agency, state and the area of the country the agency is in can all

impact the answers provided by participants. Agency culture varies between counties and states, adding to cultural norms for both CF and BO.

Summary

The purpose of this quantitative survey study was to examine how CF and BO affect Sheriff's deputies and if there is a difference in that impact between genders. In addition, this study also investigated how patrol and correction divisions attribute to CF and BO in Sheriff's deputies (SD). In this chapter, the summary and discussion of results of each research question, the limitations, and recommendations for future research were presented.

While BO and CF continue to be issues for SDs, due to the nature of the job and the judicial system, the impact of each individually remains moderately unknown. Research has been scarce when looking specifically at SDs and their levels of BO and CF. This study revealed that both CF and BO levels are high in SDs, regardless of gender or division. The relationship between BO and CF is intricately intertwined making research difficult. Future research would benefit from adding several other variables such as length of duty, STS and PTSD along with focusing on a specific agency for cohesiveness of operational and organizational stress.

Deputies would benefit from finding a self-care program that meets their personal needs to relieve stress, CF and BO, while also encouraging overall wellness. This would need to start with the Sheriff and flow down the ranks from there to have lasting organizational change. As seen both BO and CF are high among deputies and even though the job will only become more chaotic, stressful, and traumatic there are ways to

help mitigate the effects of the job. This may help reduce not only CF and BO, but also operational and organizational stress.

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APPENDIX A: EMAIL TO PARTICIPANTS

Charity Creech
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

June 1, 2023

Hello. My name is Charity Creech and I am a Psychology student at Liberty University. Currently I am conducting research for my Doctoral dissertation which involves the exploration of gender differences in compassion fatigue and burnout among law enforcement officers. This research will be conducted under the supervision of Dr. Laura Rolen (Liberty University, Virginia).

This study aims to find out the effects of burnout and compassion fatigue on sheriff's deputies. I chose this population for two reasons. The first is that I have worked at Deschutes County Adult Jail for the last 11 years as a therapist and have watched first-hand how "the job" can affect deputies and my hope is to use the research to find ways to help alleviate the effects of compassion fatigue and burnout in deputies. The second is because Sheriff offices have both a patrol and corrections division adding a robustness to the research and generalizability to other law enforcement agencies.

If you are interested in participating, please first read the attached consent form, which is needed to participate. Please take a moment to read through it and sign it electronically. You can send it to me as a response and then select the link at the bottom of this email if you are interested in participating in the research study. This link will take you to the questionnaire platform SurveyMonkey, where the entirety of the survey is. It is broken into 4 sections and each section is a separate survey. Each section contains a self-report survey, with specific instruction on how to complete the survey, along with definitions of several items, for clarity. The entirety of the survey should take approximately 30 minutes or less. Please take your time and read the instructions for each section as there are changes within the Likert scales.

Thank you so much for taking the time to examine my request to participate in my research. I assure you that all protocols will be followed, and privacy regulations adhered to. This is an anonymous survey and there is no way to link your answers to your name, rank or agency. If you have any questions or concerns, my contact information is [REDACTED] or [REDACTED].
Sincerely,

Charity Creech

<https://www.surveymonkey.com/r/NWXX39N>

APPENDIX B: CONSENT TO PARTICIPATE IN RESEARCH

CONSENT TO PARTICIPATE IN RESEARCH

You are being asked to participate in a research study conducted by Charity Creech, doctoral candidate from the Psychology Department at Liberty University. The results will be used as part of a dissertation. In order to participate in this study, you must be 18 years of age or older and must currently be a sworn Sheriff's Deputy. We ask that you read this form, click agree if you do in fact agree to participate, and contact the principal researcher with any questions you may have prior to participating in this study.

Purpose of the Study

The purpose of this quantitative survey study is to examine how gender difference in compassion fatigue and burnout in law enforcement officers. In addition, this study will also investigate how patrol and correction divisions affect compassion fatigue and burnout in Sheriff's deputies (SD).

Procedures

If you decide to participate in this study, we will ask you to do the following:

- Electronically read and sign this consent form
- Complete the confidential online survey(s) as honestly as you can (approximately 30 minutes to complete).

Potential Risks and Discomforts

The study will be asking about sensitive personal topics including trauma exposure and burnout. Some people may become emotionally upset while completing the questionnaires. If you feel any discomfort in answering a question(s), you may skip it or withdraw completely at any time. All responses to the survey will be anonymous and confidential, meaning that your responses to the questions will not be traced back to you nor will they be shared with anyone including your employer. Participation in this study is entirely voluntary. If you decide to participate, you are free to refuse to answer any question or withdraw at any time without jeopardizing your employment in any way.

Potential Benefits to Participants and/or to Society

There are no direct benefits anticipated from participation in this study. Still, this research may be helpful to law enforcement at large and the scientific community's understanding of Sheriff Deputy mental health. The research may influence improved psychological and/or medical support as awareness regarding the costs increases as a result of the research. In addition, this study may contribute to future research studies for better understanding of the impact of a career in law enforcement, on those who serve.

Payment for Participation

There is no monetary compensation for participating in this survey. Compensation would require identifying information and would risk confidentiality. The records of this study will be kept private and confidential to the extent permitted by law. The anonymous

survey link provided to respondents prevents the tracking of identifying information (No IP addresses). Therefore, the ability to identify an individual subject is highly unlikely. Additionally, in any sort of report we might publish, we will not include any information that will make it possible to identify a subject. Finally, research records will be stored securely as password protected documents and only researchers will have access to the records for research purposes only.

Participation and Withdrawal

Participation in this study is entirely voluntary. Your decision whether or not to participate will not affect your current or future relations with Liberty University, local or national police organizations, or your employer. If you decide to participate, you are free to refuse to answer any question or withdraw at any time without affecting those relationships.

Identification of Investigators

If you have any questions or concerns about the research, please feel free to contact Charity Creech at [REDACTED] or Dr. Laura Rolen, dissertation chair, at [REDACTED].

Rights of Research Participants

You may withdraw your consent at any time and discontinue participation without penalty. You are not waiving any legal claims, rights, or remedies because of your participation in this research study. If you have questions regarding your rights as a research participant, contact Charity Creech at [REDACTED].

SIGNATURE OF RESEARCH PARTICIPANT OR LEGAL REPRESENTATIVE

I understand the eligibility criteria and procedures described above. My questions have been answered to my satisfaction, and I agree to participate in this study.

APPENDIX C: INTRODUCTORY EMAIL TO SHERIFF

Charity Creech
[REDACTED]
[REDACTED]
[REDACTED]
[REDACTED]

June 1, 2023

Sheriff Nelson
[REDACTED]
[REDACTED]
[REDACTED]

REQUEST FOR PERMISSION TO CONDUCT RESEARCH

Dear Sheriff Nelson,

My name is Charity Creech and I am a Psychology student at Liberty University. I am writing to request permission to conduct a research study at your agency. The research I wish to conduct for my Doctoral dissertation involves the exploration of gender differences in compassion fatigue and burnout among patrol and correction deputies. This research will be conducted under the supervision of Dr. Laura Rolen (Liberty University, Virginia).

I am seeking your consent to recruit (through a standard email) deputies from your agency to anonymously complete a set of surveys (copies attached). The survey process will be sent via email, with links to a secure SurveyMonkey powered website that is connected to my research. This entire process should not take more than 30 minutes to complete, dependent on the participant.

I have included a copy of my dissertation proposal which includes copies of the surveys, consent form and introductory information to be used in the research process, as well as a copy of the approval letter which I received from the Institutional review board at Liberty University. This information will also be provided to the participants.

Thank you so much for taking the time to examine my request to conduct research at your agency. I assure you that all protocols will be followed, and privacy regulations adhered to. If you have any questions or concerns, my contact information is [REDACTED] or [REDACTED]

Best Regards,

Charity Creech

APPENDIX D:

PROFESSIONAL QUALITY OF LIFE SCALE VERSION 5 (PROQOL-5)

When you help people you have direct contact with their lives. As you may have found, your compassion for those you help can affect you in positive and negative ways. Below are some questions about your experiences, both positive and negative, as a helper. Consider each of the following questions about you and your current work situation. Select the number that honestly reflects how frequently you experienced these things in the last 30 days.

1=Never	2= Rarely	3= Sometimes	4= Often	5= Very Often
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- __1. I am happy
- __2. I am preoccupied with more than one person I help.
- __3. I get satisfaction from being able to help people.
- __4. I feel connected to others.
- __5. I jump or am startled by unexpected sounds.
- __6. I feel invigorated after working with those I help.
- __7. I find it difficult to separate my personal life from my life as a helper.
- __8. I am not as productive at work because I am losing sleep over traumatic experiences of a person I help.
- __9. I think that I might have been affected by the traumatic stress of those I help.
- __10. I feel trapped by my job as a helper.
- __11. Because of my helping, I have felt "on edge" about various things.
- __12. I like my work as a helper.
- __13. I feel depressed because of the traumatic experiences of the people I help.
- __14. I feel as though I am experiencing the trauma of someone I have helped.
- __15. I have beliefs that sustain me.
- __16. I am pleased with how I am able to keep up with helping techniques and protocols.
- __17. I am the person I always wanted to be.
- __18. My work makes me feel satisfied.
- __19. I feel worn out because of my work as a helper.
- __20. I have happy thoughts and feelings about those I help and how I could help them.
- __21. I feel overwhelmed because my case [work] load seems endless.
- __22. I believe I can make a difference through my work.
- __23. I avoid certain activities or situations because they remind me of frightening experiences of the people I help.
- __24. I am proud of what I can do to help.
- __25. As a result of my helping, I have intrusive, frightening thoughts.
- __26. I feel "bogged down" by the system.
- __27. I have thoughts that I am a "success" as a helper.
- __28. I can't recall important parts of my work with trauma victims.
- __29. I am a very caring person.
- __30. I am happy that I chose to do this work.

APPENDIX E:

PERMISSION TO USE PROFESSIONAL QUALITY OF LIFE SCALE-5 (ProQOL-5)

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APPENDIX F: OPERATIONAL POLICE STRESS QUESTIONNAIRE

Operational Police Stress Questionnaire

Below is a list of items that describe different aspects of being a police officer. After each item, please circle 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 public	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

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APPENDIX G: ORGANIZATIONAL POLICE STRESS QUESTIONNAIRE

Organization Police Stress Questionnaire

Below is a list of items that describe different aspects of being a police officer. After each item, please circle 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 (eg. 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

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APPENDIX H:
COPENHAGEN BURNOUT INVENTORY (ENGLISH VERSION) USED IN THE
PUMA PROJECT

NB: The questions of the CBI are not being printed in the questionnaire in the same order as shown here. In fact, the questions are mixed with questions on other topics. This is recommended in order to avoid stereotyped response patterns.

Part one: Personal burnout

Definition: Personal burnout is a state of prolonged physical and psychological exhaustion.

Questions:

1. How often do you feel tired?
2. How often are you physically exhausted?
3. How often are you emotionally exhausted?
4. How often do you think: "I can't take it anymore"?
5. How often do you feel worn out?
6. How often do you feel weak and susceptible to illness?

Response categories: Always, Often, Sometimes, Seldom, Never/almost never.

Scoring: Always: 100. Often: 75. Sometimes: 50. Seldom: 25. Never/almost never: 0.
Total score on the scale is the average of the scores on the items.

If less than three questions have been answered, the respondent is classified as non-responder.

Part two: Work-related burnout

Definition: Work-related burnout is a state of prolonged physical and psychological exhaustion, which is perceived as related to the person's work.

Questions:

1. Is your work emotionally exhausting?
2. Do you feel burnt out because of your work?
3. Does your work frustrate you?
4. Do you feel worn out at the end of the working day?
5. Are you exhausted in the morning at the thought of another day at work?
6. Do you feel that every working hour is tiring for you?
7. Do you have enough energy for family and friends during leisure time?

Response categories: Three first questions: To a very high degree, To a high degree, Somewhat, To a low degree, To a very low degree.

Last four questions: Always, Often, Sometimes, Seldom, Never/almost never.
Reversed score for last question. Scoring as for the first scale.

If less than four questions have been answered, the respondent is classified as non-responder.

Part three: Client-related burnout

Definition: Client-related burnout is a state of prolonged physical and psychological exhaustion, which is perceived as related to the person's work with clients*.

*Clients, patients, social service recipients, elderly citizens, or inmates.

Questions:

1. Do you find it hard to work with clients?
2. Do you find it frustrating to work with clients?
3. Does it drain your energy to work with clients?
4. Do you feel that you give more than you get back when you work with clients?
5. Are you tired of working with clients?
6. Do you sometimes wonder how long you will be able to continue working with clients?

Response categories: The four first questions: To a very high degree, To a high degree, Somewhat, To a low degree, To a very low degree.

The two last questions: Always, Often, Sometimes, Seldom, Never/almost never. Scoring as for the first two scales.

If less than three questions have been answered, the respondent is classified as non-responder.