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The Relationship Between Law Enforcement Agency Size and Police Stress

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Abstract

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Dissertation Submitted in Partial Fulfillment

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Abstract

Researchers have found that law enforcement officers often experience stress. The purpose of this quantitative study was to determine if the size of the law enforcement agency (small, medium, or large) had any significant influence on how police officers perceive stress in their profession from a cognitive appraisal perspective with regards to Administrative/Organizational Pressure, Physical/Psychological Threats, and Lack of Support. Members of law enforcement ($N = 144$) from Utah and New York were surveyed utilizing Spielberger et al.'s Police Stress Survey. Archival data were provided by the National Police Suicide Foundation. Stress index scores were calculated manually for each survey completed, and then 3 separate ANOVAs were conducted to test the hypothesis. The results showed that officers from medium-sized departments perceive greater amounts of stress than those in large or small departments in the area of administrative/organizational pressure, while officers from large police departments perceived greater amounts of stress than their counterparts in small and medium-sized agencies in the areas of physical/psychological threats and lack of support. This study has implications for positive social change: understanding the stressors that police officer's face each day can help forensic psychologists understand the methods necessary to repair the strained relationship between the community and members of law enforcement; understanding the stressors can also open a pathway for researchers to begin the process of developing more a productive dialogue between police officers, their departmental leaders, and the communities they protect, which should begin during the early phases of academy training.

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Dedication

I dedicate this personal and professional achievement to my wife, Tirsa, my children; Emily, Douglas, and Elisa who are my greatest source of inspiration, and my reason for doing and being. I also dedicate this work to my siblings, Batini, Norma and Grailing, who have always believed in me, every step of the way.

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Chapter 1: Introduction

Introduction

Stress is a universal concept and no living creature is immune to its effects. As human beings, stress begins from the moment of conception and is carried throughout the lifespan. Stress can affect relationships, job performance, academic achievements, and the ability to make healthy and rational decisions at the deepest emotional, and psychological levels (Anshel, 2000; Russell, 2014, Violanti et al., 2017). The profession of law enforcement comes with a series of inherent risk factors that perpetuate situational stressors and negative outcomes, such as burnout, marital strife, heart disease, or the potential for substance abuse (Aamodt, 2008; Violanti et al., 2017).

Police officers are more susceptible to workplace stress than any other profession, which include physical, emotional, and psychological discomfort, or a combination of all three (Anshel, 2000; Russell, 2014). The stressors that many police officers experience fall into three categories: administrative, physical, or lack of support, and within those categories are a number of more definitive subcategories (Spielberger, Westberry, Grier & Greenfield, 1981; Ma et al., 2015). Many researchers in this area have demonstrated that police officers are most likely to develop a series of maladaptive coping strategies in response to these perceived stressors, such as excessive use of drugs and alcohol, withdrawal, isolation, outbursts of anger, and sadly suicide. It is worth noting that not every police officer responds to these stressors the same way (Aamodt, 2008; Anshel, 2000; Biggs, Brough & Barbour, 2014; Miller, 2007; Schaible & Six, 2016; Snippe,

Dziak, Lanza, Nyklíček & Wichers, 2017; Violanti, 1983; Youssef-Morgan & Ahrens, 2017).

Several behavioral reactions, for example, isolation, self-protection, and solidarity within the ranks, are consistent with studies that have been conducted into the police culture since the 1940s (Terpstra & Schaap, 2013). These reactions have also contributed to an emotional disconnection from others, and an increased distrust of the public. Conversely, the public does not seem to understand, or appreciate the stress that police officers must endure on a daily basis, and therefore tends to vilify them or label police officers as being prejudiced against specific populations, which, in turn, tends to perpetuate the negative police-community relationship (Anshel, 2000; Terpstra & Schaap, 2013).

An example of this negative perception of police by the public was demonstrated during the now infamous Ferguson, Missouri incident, where a White police officer shot, and killed a young Black male. The public expressed outrage saying that the officer had acted improperly and without due process. According to a report by National Public Radio journalists, Peralta and Calamur (2014), the grand jury decided that after hours of deliberation, there was not sufficient evidence, or probable cause to indict Officer Wilson. As a result, many citizens saw all police officers as racist, thus prompting rioting, political, and civil outrage, negative media attention (CNN, NBC, CBS), and the formation of the Black Lives Matter movement (Shjarback, Pyrooz, Wolfe, & Decker, 2017). According to Shjarback et al. (2017), this sparked many police officers to modify their normal practices of enforcing the law. This modification in the normal practice of

police work has come to be known as *de-policing*, which will be explained in greater detail through the course of this paper.

For decades, understanding what stress is, how it is perceived, and how it affects members of the culture of law enforcement has been an area of concern for leaders in law enforcement, the public, families of police officers, and the officers themselves. How this perception of stress ultimately affects the way an officer copes with stress, either positively or negatively, is also an area of significant interest. Police work involves much more than the average citizen may understand or appreciate. While it is a generally accepted notion that the duties associated with the job are stressful, most police officers refuse to openly discuss their feelings about their jobs to their superiors, their families, and especially to the resident police psychologist for fear of stigmatization; they worry that their words will cost them in the long-run with regards to their careers (Miller, 2005, 2007; Violanti, 1983; Violanti et al., 2017).

Background

As researchers look to find a concrete definition of stress, it was best described as a reactionary state to an external event that causes an emotional, and/or psychological implosion that challenges an individual's innate ability to effectively cope with the perceived stressor (Violanti, 1983). The occupation of law enforcement is rife with inherent danger, such as the events that took place in Dallas (2016), where five officers were gunned down in cold blood by a sniper, or the murder of an officer in Baton Rouge just two days later. The stress associated with the profession is a series of situations and circumstances that oftentimes lead many police officers to develop and demonstrate a

series of maladaptive coping mechanisms that place them and the public safety at risk. Coping refers to one's ability to cognitively and behaviorally overcome those internal and external demands associated with the perceived stressor in a positive and amiable manner (Youssef-Morgan, & Ahrens, 2017). Reactivity to stress may lead not only to the development of depressive symptoms and other physiological issues but may put into motion a series of negative behaviors that will have equally or greater negative outcomes (e.g., alcoholism, excessive absenteeism, family conflict, suicide); (Snippe et al., 2017).

The cognitive appraisal theory suggests that individuals will all respond differently to external events; therefore, how officers perceive stress associated within the culture of their profession will greatly determine how they identify themselves, and how they perform their specific duties at specific times (Willis & Mastrofski, 2016). A great deal of research has been conducted on the negative effects of police stress; the research implies how the culture of law enforcement factors into the way stress is perceived but does not specifically identify the culture as a factor (Biggs, Brough & Barbour, 2014; Moon & Jonson, 2012, Violanti et al., 2017).

What researchers do not know is what officers perceive as the most stressful component of their specific culture: administrative/organizational pressure, physical/psychological threats, or lack of support. Vander Elst, De Cuyper, Niesen, Baillien, and De Witte (2013) suggested that one of the gaps in the literature centers around the fact that most of the studies on the phenomenon of stress tend to explore only a one-dimensional facet of it, but do not explore it from a primary and secondary point of view. This speaks to the evaluation of the stress by the police officer, and the subsequent

coping strategies (perceived control) that is used to ensure a positive outcome (Vander Elst et al., 2013).

Problem Statement

There is a significant amount of research on police stress, and the one thing that most researchers seem to agree on is that the occupation of law enforcement is one of the most stressful jobs in the world (Alves, Koch, & Unkelbach, 2015; Anderson, Papazoglou, Nyman, Koskelainen, & Gustafsberg, 2015; Biggs, Brough, & Barbour, 2014; Sharps, 2017; Violanti, 1983). As a part of their duties, police officers are often called upon to confront and respond to situations that are potentially deadly, or at the very least traumatic in nature, which can have a detrimental effect on the officer's psychological, emotional, or physical health—not to mention their overall careers (Anderson et al., 2015). An example of these potential effects took place on July 5, 2016, when two Baton Rouge police officers responded to a call about a man outside a convenience store who had been brandishing a weapon and making threats to a customer. Upon arrival at the scene, the two officers instructed the suspect, Alton Sterling to lay on the ground. The suspect was caught on video resisting the instruction and was tasered, but to no effect. The officers wrestled the suspect to the ground, and the weapon he had been carrying was spotted by one of the officers, resulting in the suspect being shot and killed (Visser, 2016). According to Visser (2016), in the days that followed, there were protests in multiple cities, including Baton Rouge and Dallas, where five officers were ambushed, and killed by a sniper, Micha Johnson, as an act of protest against white police officers. Just 10 days later, another lone gunman, Gavin Long drove from Kansas City to Baton

Rouge, and opened fire on five officers, killing three in response to the events that took place in Baton Rouge and Dallas (Visser, 2016).

These three examples may be considered extreme causes of stress in the life of a police officer. The problem is that there is no clear answer as to what a police officer identifies as stressful, nor does there seem to be any concrete solutions to their particular responses. Police officers must contend with life-and-death situations every day they wear the badge, and if you ask any cop, all she or he wants to do at the end of each shift is to go home to their loved ones. The primary question of this study is whether the size of the police department has any influence on what officers perceive as being the most stressful component of their profession?

Shjarback et al. (2017) informed researchers that as a result of incidents like the 2014 officer-involved shooting death of Michael Brown, an 18-year-old African-American male from Ferguson, Missouri; more and more police officers across the country are engaging in the act of de-policing, which has been defined as when officers disengage from the normal practices in which they are trained, in response to situations that could be perceived negatively by the public and media. This has become the preferred method of coping, or avoidance of further public scrutiny for many members of law enforcement across the United States (Shjarback et al., 2017). De-policing following the events of Ferguson, correlates with research conducted by Moon and Jonson (2012), with regards to an officer's lack of organizational commitment and deviation from accepted job norms. A recent event that encapsulates this concept would be the February 14th, 2018 Parkland school shooting, where the school resource officer did not engage the

shooter. This level of inaction resulted in the deaths of fourteen students and three faculty members, according to Jackman (2018). There has been a great deal of speculation as to why the officer did not follow his training, but one inference could be that the officer was somehow engaging in the act of de-policing. The proliferation of smartphones and social media has also been a contributing factor to this disengagement from active policing following the events of Ferguson, because images of police officers involved in "controversial" behaviors have been disseminated worldwide, thus exacerbating the already strained relationship between law enforcement and the community (Shjarback et al., 2017, p. 45).

Purpose of Study

The purpose of this research was to explore the experiences of stress on members of law enforcement utilizing Spielberger's et al. (1981) Police Stress Survey and connecting the findings to Lazarus and Folkman's (1984) Cognitive Appraisal Theory (CAT) to determine whether there are any significant differences among officers working in small, medium, and/or large departments. For instance, the city of New Orleans is unlike any other in the entire world. The music, the culture, the food, and the people are just some of the main attractions, which brings people from all over the world to see. As a result, many police officers are often called upon to monitor, and maintain order for any number of events taking place in the city (i.e., Jazz Fest, Mardi Gras, Essence Festival, Wrestlemania, and the Bayou Classic), which would be identified as extra-organizational stressors that have a negative impact on the officer and the department as a whole (Biggs, Brough, & Barbour, 2014).

While each of these events would be considered enjoyable activities, there are other events that are not, for example, Hurricane Katrina, the deadly attacks on police officers in Baton Rouge and New Orleans., They placed a strain on officers, departmental resources, and had an adverse effect on the community in general. In many cases, police officers have little to no knowledge regarding the situation that they are about to walk into, and this uncertainty becomes an additional stressor to the one that they are about to face (Regehr, LeBlanc, Jelley, & Barath, 2008). However, acute external events are not the only source of an officer's stress. There are also internal stressors within the organization that can affect an officer's job performance and overall attitude toward his or her peers, superiors, and the public, which can oftentimes result in job dissatisfaction and burnout (Schaible & Six, 2016).

Research Questions and Hypotheses

This study sought to answer the following three research questions:

RQ1: Are there significant differences between department sizes on their level of officer's perceived stress as it relates to administrative/organizational pressure?

H_0: There is no difference between department size and perceived stress by members of law enforcement in relation to administrative/organizational pressure.

H_1: There is a difference between department size and perceived stress by members of law enforcement in relation to administrative/organizational pressure.

RQ2: Are there significant differences between department sizes on their level of officer's perceived stress as it relates to physical/psychological threats?

H_0: There is no difference between department size and perceived stress by members of law enforcement in relation to physical and/or psychological threats.

H_2**:** There is a difference between department size and perceived stress by members of law enforcement in relation to physical and/or psychological threats.

RQ3: Are there significant differences between department sizes on their level of officer's perceived stress as it relates to lack of support?

H_0: There is no difference between department size and perceived stress by members of law enforcement in relation to lack of support.

H_2: There is a difference between department size and perceived stress by members of law enforcement in relation to lack of support.

Theoretical Framework

The theoretical framework of this study was Lazarus and Folkman's (1984) CAT. It has been defined as a lens through which the differentiation between positive emotional experiences and negative emotional experiences are seen, and will often determine or compel, an individual to react to a given set of circumstances in a very specific way (Smith et al., 2014). Additionally, the CAT helps in understanding that for every person, his or her emotion will elicit a different response, and that these responses are based primarily on individual subjective interpretations, which are identified as valence

asymmetries. In these situations, it is generally the negative emotional response that wins over, as negative information tends to have a psychologically stronger impact (Alves, Koch, & Unkelbach, 2017).

Definition of Terms

Cop culture: Refers to the organizational culture that is structured with a series of social norms, and unwritten rules that dictate the way an officer functions and conforms (Miller, 2007).

De-policing: A term used to describe police officers purposefully withdrawing from "proactive styles of law enforcement" (Shjarback et al., 2017, p. 42).

Distress: a multidimensional, unpleasant emotional experience brought on by physical, psychological, social and/or spiritual symptoms (Fujinami, Sun, Zachariah, Uman, Grant & Ferrell, 2015).

Eustress: moderate or normal psychological stress interpreted as being beneficial for the experiencer (Hargrove, Becker & Hargove, 2015).

Extra-Organizational Stressor: any natural or human initiated occurrence that happens outside of the organizational boundaries and affect organizational functioning (Biggs, Brough & Barbour, 2014).

Neurophysiology: a branch of physiology and neuroscience that is concerned with the study of the functioning of the nervous system (Colman, 2015).

Phylogenetic: relating to the evolutionary development and diversification of a species or group of organisms, or of a particular feature of an organism (Colman, 2015).

Psychological Contract Breach: refers to an individual's perception that the organization he or she works for has failed to meet their expectations, and that there will be no reciprocity for their efforts (Vander Elst et al. 2013).

Stress: a state of mental or emotional strain or tension resulting from adverse or demanding circumstances (Merriam-Webster, 2016).

Stress Index: For each item on the PSS, the officer rates the perceived stressfulness of experiencing the event from 0 to 100 (0 = no stress, 100 = maximum stress), which creates a stress rating for each event. The officer also provides the frequency of occurrence of each event over the past month (total frequency in past month) and past year (total frequency in past year). Multiply the rating by the frequency for past month, and for past year to get both values, which is known as the "stress index" (Violanti, 2018).

Valence Asymmetries: describes the differences in how humans process positive and negative information (Alves et al., 2017).

Assumptions

This study was subject to two assumptions. One was that regardless of demographics, police officers will identify with an equal amount of stress across all three categories of the Police Stress Survey— administrative/organizational pressure, physical/psychological threats, and lack of support—and that the way an officer perceives stress will be greatly determined by the culture of law enforcement. This study also assumed that all participants would be candid in their responses, without fear of reprisal by their respective peers, divisions, or department. As Schaible and Six (2016) have

indicated, internal stressors within the organization that can have an adverse effect on an officer's relationship with his or her supervisors. Miller (2006) also informed us that police officer's generally hold the appraisal of their superiors in high regard, and frequently seek their approval; therefore, an officer may not wish to be candid in their responses on the survey for fear of alienating themselves.

Scope of Study

This quantitative study utilized a nonprobability convenience sampling technique, where 245 officers from various law enforcement agencies were randomly selected at a voluntary training with the National Police Suicide Foundation. With convenience sampling I could obtain a sample from available members of a population (Frankfort-Nachmias, Nachmias, & DeWaard, 2015). While nonprobability samples are generally considered nonrepresentative of an overall population, this sample was considered representative because all participants were active duty members of law enforcement.

Limitations

The study's primary limitation was gaining access to other members of law enforcement from multiple regions across the country in order to compare and contrast the data from previous studies that used the PSS. Because this study was a survey design and the sample participants were randomly selected through the process of a convenience sampling, the major limitation of the study was ensuring that the participants would actually be members of law enforcement. However, since the participants are police officers attending voluntary training with the NPSF, this limitation was nullified.

Scope and Delimitations

The delimitations of this study were understanding the interpretation of stress among members of law enforcement. An invitation was sent out to the National Police Suicide Foundation by the researcher and his supervising Chair, requesting their participation. The study focused on the three subscales of the Police Stress Survey (Spielberger et al., 1981): administrative/organizational pressure, physical and/or psychological threats, and Lack of support, which was the instrument used in the study to measure and quantify the research questions.

Significance of Study

The culture of law enforcement is heavily guarded and avoidant of contact with individuals outside of their circle of trust. The concept of stress is nothing new to the world of law enforcement but helping them to achieve a level of personal awareness and identify their reactions to stress have not been the subject of any investigation so far. By having a greater understanding what members of law enforcement identify as stressful, police leaders can now target those problem areas and develop more effective programs and offer more resources to officers in order to cope and implement positive change within their respective departments. The study could also be helpful for those individuals currently or potentially at risk for the development of a myriad of negative outcomes, because it could provide the necessary insight into how to recognize the symptoms of stress, implement effective coping strategies, improve job performance and reduce absenteeism.

Social Change

Bandura said that "Psychology cannot tell people how they ought to live their lives. It can however, provide them with the means for effecting personal and social change" (Bandura, 1977). For decades, the American public has held the institution of law enforcement in either of two perspectives: positive or negative. Over the last several years, the number of extraorganizational stressors encountered by members of law enforcement has increased exponentially, which has had an adverse effect on the relationship between the community and the police, resulting in "personal and societal damage" (Biggs, Brough, & Barbour, 2014, p. xxx).

For the average citizen, the life of a police officer may seem risky, but are generally unaware of the depth of stress that police officers experience on a daily basis, or the sacrifices these men and women make in order to protect human life and preserve public safety. The stress associated with such scrutiny from the public can ultimately affect the way an officer performs his or her duties and may also have a negative impact on his or her personal life (i.e., marriage, family, alcohol or drug abuse). Therefore, from a positive social change perspective, if an officer is able to better cope with perceived stress on the job, it stands to reason that this research could improve the police–community relationship, which has been severely damaged over the past several years by a number of high-profile, critical incidents. This can thereby have the effect of reducing or eliminating the negative perception the public has of the police.

Summary

The concept of stress is nothing new to the men and women of law enforcement. Every day brings with it new challenges, and these challenges do not always take place on the streets; oftentimes these challenges occur in the office or squad room. How that stress is resolved is generally determined by the written and unwritten norms of the cop culture. Stress can be either acute or it can be experienced over a period of time. What is considered stressful to one officer may seem mundane to another. As a result, these valence asymmetries dictate the responses to these perceived stressors.

Regardless of when stress occurs or how it may be perceived, it has a significant effect on the officer's mood, attitude, and performance—both on the job and at home, in terms of how an officer attends to the needs of their spouses, children or families. There is still no clear answer about what officers find or perceive to be the most stressful aspect of their profession. While there are many programs designed to assist members of law enforcement in coping with these stressors, they come after a crisis has already developed, rather than before a problem develops. Many researchers have explored the effects of stress, but little has been done on the cause in order to develop preventative measures that could reduce issues of negative coping strategies, such as alcohol/substance abuse, excessive absenteeism, family conflict and poor relations with the community. This study seeks to identify those causes in order to find a correlation and determine if there is just one area of stress or if there are multiple areas that are experienced by officers, regardless of their professional demographics.

Chapter 2 will be a review of the literature that establishes the groundwork for this study, which identifies how stress is inherent in the profession of law enforcement; the theoretical framework for the study that discusses how each person will interpret and respond to stress differently; the physiological effects of stress; an exploration into the culture of law enforcement and how it influences the perception of stress by police officers; and identify the gaps in the current literature. Chapter 3 will discuss the methodology of the study and the rationale behind the study's design. Chapter 4 will discuss the results of the study, the demographics, data collection process and analysis. Chapter 5 will discuss the interpretation of the findings, limitations of the study, and recommendations for future research.

Chapter 2: Literature Review

Introduction

The concept of stress is not only one of the most researched topics in the field of psychology, but it is also the most widely debated among researchers in terms of what it is, how it affects individuals, and the methods utilized to manage it among individuals and/or groups of people (Frydenberg & Reevy, 2011). The most significant difference in the research previously conducted on the subject of stress is how an individual perceives stress. While the American Psychiatric Association Diagnostic and Statistical Manual of Mental Disorders – Fifth Edition (2013) defines stress as an exposure to "actual or threatened death, serious injury, or sexual violation," it only identifies stress from a symptomological perspective. Violanti (1983) on the other hand, defines stress as a "perceived imbalance between social demands and perceived response capability; under conditions where failure to meet demands have important consequences" (Violanti, 1983, p. 211).

It is becoming an increasingly accepted concept that the profession of law enforcement has numerous external stressors, which can include organizational stressors, negative public perception, the threat of being seriously injured and/or death (Aaron, 2000; McCoy & Aamodt, 2010; Violanti et al., 2017). Some of the behavioral responses by members of law enforcement to these stressors may have long-lasting effects, which include divorce, alcoholism, excessive absences from work, physical health issues, burnout, family discord, and/or leaving the force (Aaron, 2000; Pereira, Queirós & da Silva, 2015, Violanti et al., 2017). However, the severity of the stressor greatly depends

on how the officer perceives the situation, as well as her or his ability to cope with the situation (Anderson, Litzenberger, & Plecas, 2002). The effect of such stress can have a significantly negative impact not just on the officer experiencing it, but on the department as a whole. Thus, greater training in resiliency is needed (Andersen, Papazoglou, Nyman, Koskelainen & Gustafsberg, 2015).

Smoktunowicz et al. (2015) explained that there is a correlation between counterproductive work behaviors (CWB) and burnout with members of law enforcement, which has had the effect of costing agencies across the United States over $1 trillion annually in losses (e.g., theft, workplace violence, fraudulent activities). Smoktunowicz et al. (2015) identified that CWB may stem primarily from the quantitative workload or from organizational demands made by the organization on the employee (i.e., long hours, mandatory overtime, paperwork), which is considered to be most common source of stress for employees and has been evidenced, according to Smoktunowicz et al. (2015), by numerous researchers (Bakker, Demerouti, De Boer, & Schaufeli, 2003; Keenan & Newton, 1985; Balducci, Schaufeli, & Fraccaroli, 2011). This becomes a significant area of interest as Smoktunowicz et al. (2015) identified *burnout* as the mediating factor of CWB. The concept of burnout is loosely defined as one's perception of "dissatisfaction and psychological and physical distress" in the workplace (Burke, 2016).

Over the past several years there have been many high-profile attacks on members of law enforcement, such as the deadly June 2016 attack in Dallas, Texas, that left five police officers dead, or the November 2009 shooting deaths of four police officers in a

Parkland, Washington, coffee shop (Hickman, Fricas, Strom & Pope, 2011). According to a recent report from the Federal Bureau of Investigation (FBI), a total of 118 police officers were killed in the line of duty in 2016, where 66 police officers were victims of felonious acts, which is 25 deaths higher than in 2015 (FBI, October 2017). The report by the FBI (2017) showed that of the 66 officers killed, 17 had been ambushed, 13 were responding to calls involving domestic violence, 9 were killed while investigating suspicious activities, 3 were victims of unprovoked attacks, and 4 officers were killed while performing routine traffic stops (FBI, 2017). These statistics support the notion of many high-profile experts that law enforcement is perhaps one of the most dangerous occupations in the world (Pereira, Queirós, & da Silva, 2015).

When it comes to identifying what stress is as it relates to law enforcement, it is important to distinguish between occupational stress, and organizational stress. Occupational stress refers to situations of responding to critical incidents, which is defined as any stressful, or "potentially traumatic" event that can cause an officer to experience symptomology associated with mental illness, and challenge their ability to effectively cope (Brucia, Cordova, & Ruzek, 2016). Hickman et al. (2011) explained that events such as high-speed chases, making decisions to use excessive and/or deadly force are also considered sources of occupational stress; whereas organizational stress typically refers to lack of support, being passed up for promotion, working long hours, erratic shift work (Hickman et al., 2011).

The Culture of Law Enforcement

To understand the stress associated with the culture of law enforcement, we must first endeavor to understand ourselves as a species; how we interact with others is generally dependent upon what we already know, and what we learn through those interactions is what oftentimes gives each person a sense of meaning in their lives (Crank, 2014). Culture is defined by many experts as a "set of values and beliefs people have about how the world works as well as the norms of behavior derived from that set of values" (Gorodnic & Roland, 2016, p. 1). Furthermore, Cordner (2016) explained that the term culture is not a cut-and-dry concept, but rather an extensive menagerie of different ideas and philosophies that are "neither tightly defined nor readily measured," but can influence the behaviors of entire populations either positively or negatively (Cordner, 2016, p. 14). As it relates to the culture of law enforcement, Aamodt (2018) stated that there is no research that he is aware of that provides "a clear definition as to what it is, but it is generally defined based on personal observations" (M. Aamodt, personal communication, January 29, 2018).

Aamodt (2018) agrees with Cordner's (2016) assertion that there is are many misperceptions regarding the culture of law enforcement by the general population, and that these misperceptions are not limited to just the public, but may also include police officers both young and old who are not fully "aware or conscious" of all the inner workings of their culture, or they may be simply reluctant to open up with others as a means of remaining "socially acceptable" (Cordner, 2016, p. 14). Miller (2005) informed us that almost all members of law enforcement have a deep-seeded need for approval,

especially among fellow officers, the public in general, and loved ones, which is why this becomes an obstacle when considering this research topic, in that the participants, or potential participants may interpret the study itself as a threat to their professional careers, or their *heroic image* (Miller, 2005). In a recent conversation with Miller (2018), he further explained the heroic image as being "those expectations that members of law enforcement have created for themselves of being representatives of societal authority, and society's expectations of police being protectors of the community; however, these expectations often exceed reality" (L. Miller, personal communication, February 6, 2018).

Most police officers take their roles in the community, duties, and positions within their departments very seriously; to the extent that they tend to become extremely defensive if their integrity, and investment in personal-identity is either threatened, or called into question, especially by the media (Miller, 2005). Police officers in general tend to incorporate their own cultural beliefs into that of law enforcement, which may include an "all-or-nothing, good versus evil, us vs. them" attitude that resonates well with their contemporaries (Miller, 2005, p. 102).

Nevertheless, if one is to find a viable definition of the culture of law enforcement, then one might look to the culture of today's United States Armed Forces as a basis of comparison. From recruitment, to training of specific duties, patrolling, socialization, and organizational structure, which includes chain of command, police culture virtually mirrors that of the military. Workman-Stark (2017) explained that many cultures may "evolve" into an organizational culture (i.e., law enforcement, military), and

that these cultures may overlap one another, and take on specific characteristics of the other, especially if individuals within one culture are "trained in the same way with the same values" of the other (Workman-Stark, 2017, p. 20). However, the culture of law enforcement has generally been regarded by the public, and numerous media outlets as being primarily negative, "monolithic," and is one that exudes a great deal of chauvinism, violence, racial prejudice, and is largely centered around the need for control, and authority (Cordner, 2016, p. 11; Crank, 2014; Terpstra & Schaap, 2013; Workman-Stark, 2017, p. 20). An example of this, which will be discussed further in this chapter, would be the events that took place in Ferguson, Missouri, where a white officer shot, and killed a black male. According to Kochel (2015), prior to the shooting and subsequent civil unrest, the culture of the black community was already distrusting with regards to procedural justice, and lacked confidence in the legitimacy of law enforcement, and this event seemed to only exacerbate that negative attitude (Kochel, 2015).

This negative attitude toward law enforcement has had the effect of causing many members of the public to resist such authority, sometimes resulting in what may be considered questionable arrests, or influence officers to use or aggressive tactics, which only furthers to exacerbate the tenuous relationship between the police and the community (Terrill, Paoline III & Gau, 2016). It is worth noting, that according to Kochel's (2015) study, while there was a significant racial divide in their view of the police, 2% of the overall population were actually appreciative of the police, and maintained their trust of members of law enforcement, and 35% of the residents agreed with the response to the event by the police (Kochel, 2015). Another caveat of Kochel's

(2015) study showed that the perceptions of police by residents that lived farther away from where the events took place was more positive than those that lived closer to the epicenter of the event (Kochel, 2015).

During a recent telephone conversation with police expert, Michael Aamodt (M. Aamodt, personal communication, January 2018) stated that another common misconception regarding the culture of law enforcement is that "cops spend more time with cops," which suggests that police officers value strong solidarity. It can also be inferred from this perception that police officers will maintain "secrecy and silence" in order to protect their brothers in blue during investigations into alleged misconduct; however, Workman-Stark (2017) explained that this perception does not hold true for every officer, and that in a study of thirty-one departments located in Canada, 66% of the study participants stated that they would indeed report any misconduct of their fellow officers if discovered (Workman-Stark, 2017).

Looking further into how the term culture is defined, Crank (2014) expounded that culture is how we think as individuals, or groups of people; and how we respond to our own values and social identities (Crank, 2014). However, due to certain negative, very public events that have become fodder for certain media platforms, these events have been blamed solely on the culture of law enforcement. Crank (2014) cites Waddington (1999), in which he reminds us that such research is not meant to change the way law enforcement thinks; but offer an opportunity for reform of certain practices within the culture in order to alleviate the negative perceptions of the public and improve the dwindling relationship with the community at large (Crank, 2014).

Willis and Mastrofski (2017) explain that the need for reform within the culture of law enforcement is a topic that has garnered a great deal of attention over the last several years, but researchers, as well as advocates of police reform have been met with much resistance from the law enforcement community (Willis & Mastrofski, 2017). Since the 1950's, many researchers (Anderson, Litzenberger & Plecas, 2002; Biggs, Brough & Barbour, 2014; Miller, 2005; Violanti, 1983) have identified the culture of law enforcement as being typically guarded, sensitive to any perceived challenge to their authority, and have high expectations of loyalty from fellow officers; however, police officers operate with a specific set of "norms, beliefs, and priorities" (Willis & Mastrofski, 2017, p. 85). This attitude of secrecy, suspicion of, and isolation from the general public comes as a result of the negative portrayal of law enforcement from the media, and constant criticism and even physical attacks from the public (Willis & Mastrofski, 2017).

According to Willis and Mastrofski (2017), the work that police officers perform has often been identified as a "craft," and that members of law enforcement have been viewed as seeing themselves being apart from the rest of society or placing themselves above others because of their skills (Willis & Matrofski, 2017). To gain a deeper understanding of what police officers value within their specific culture, Willis and Mastrofski (2017) conducted a longitudinal study between 2010 and 2012 with the Everdene and Newbury Police Departments. It is worth noting that the name of the actual measurement that was used was never disclosed, therefore it is difficult to determine the validity of the data that was gathered. Nevertheless, the results of the study seem to be

consistent with Lazarus and Folkman's (1984) Cognitive Appraisal Theory, in that officers will base their reactions to specific events on how they perceive it, and this perception of events is typically derived from the lessons learned through their particular culture (Willis & Mastrofski, 2017).

Pre-hire Assessment Instruments

Unlike members of the armed forces, police officers undergo a rigorous screening process before they are hired. There are several instruments that are used during the pre-employment phase, such as Hathaway and McKinley's (1942) Minnesota Multiphasic Personality Inventory (MMPI), Davis and Rostow's (2008) Matrix Predictive Uniform Law Enforcement Inventory (M-PULSE), or Robin Inwald's (1980) Inwald Personality Inventory (IPI). Ben-Porath (n.d.) reminded that the MMPI has undergone two very significant revisions since its first publication in 1943, providing us with the MMPI-2, and the MMPI-2-Restructured Form (Ben-Porath, n.d.). Foreman (2014) explained that the M-PULSE, and the MMPI-2 are two of the most commonly used instruments during the pre-employment phase for members of law enforcement, as it assists in predicting job performance and liability risk among potential recruits in order to ensure that those members of law enforcement are capable of conforming to the standard practices of the profession, and are in keeping with public safety (Foreman, 2014).

Conversely, Aamodt (2004) explained that a meta-analysis of the MMPI and MMPI-2 demonstrated that these two measurement scales were not "valid predictors" of performance by members of law enforcement, or their supervisors since the results were interpreted with cutoff scores as opposed to linear relationships (Aamodt, 2004, p. 41).

Aamodt (2004) explained that some psychologists tend to exclude potential applicants if they score above 65 on any of the clinical scales of the MMPI, where others tend to focus on more extreme scores or patterns (Aamodt, 2004). Through the course of his meta-analysis, researchers with MMPI and MMPI-2 datasets were asked to reexamine their data using the following techniques: Good Cop/Bad Cop Profile (Blau, Super & Brady, 1993), Goldberg Index (Costello, Schneider, Schoenfeld & Kobos, 1982), Husemann Index (Hargrave, Hiatt & Gaffney, 1988), Gonder Index (Godner, 1998), and the Aamodt Index (Aamodt, 2004), to further analyze which of the aforementioned indexes would show a greater statistical significance in predicting performance among police recruits (Aamodt, 2004). The results of Aamodt's (2004) research established that the Good Cop/Bad Cop Scale and Social Introversion (Factor 3) scores were meaningful, and the performance ratings were higher than the .09 correlation in the scales used in the Aamodt (2004) meta-analysis (Aamodt, 2004).

Historically, an instrument that was prominent in the evaluation of potential police recruits prior to the implementation of the MMPI is Morey's (1990) Personality Assessment Inventory (PAI), which consists of 344 test items, 4 validity scales, 11 clinical scales, 5 treatment scales, and 2 interpersonal scales, and was designed with the intention of measuring adult personality and psychopathology (i.e., aggression, violence, or misconduct). However, the PAI was replaced in 1995 with Johnson, Roberts and Associates PAI Police and Public Safety Selection Report. The Inwald Personality Inventory (IPI) was designed to evaluate a police recruit's fitness for duty during the hiring process, to weed out any candidate that may demonstrate personality

characteristics that could impair his or her ability to perform their duties effectively (Inwald, 2008). The IPI may not be immediately recognized by many psychology professionals, due to the fact that it was specifically designed for assessing individuals/candidates in the field of law enforcement, and/or public safety positions. The IPI consists of 25 content scales, and one validity scale that can be administered in one of two ways: 1) paper and pen, or 2) computer software (Institute for Personality and Ability Testing, 2006). Unlike the PSS, the IPI measures personality and behavioral responses to stressors, and can differentiate between those individuals who simply consider negative behaviors, and those who actually act on them.

Misperceptions About Law Enforcement

Cordner (2016) explained that while much of the research into police behaviors over the last 20 years focused primarily on such characteristics such as cynicism, authoritarianism, isolation, and solidarity; the influx of diversification into the construct of law enforcement has helped with changing those perceptions (Cordner, 2016). Cordner (2016) conducted a study of 89 police and sheriff departments across the United States from 2014-2015 and determined that the attitudes expressed by those officers regarding citizens, toughness, solidarity, misconduct, community policing, supervisors, and even the organization as a whole was mainly positive, and that not all officers think, or behave alike (Cordner, 2016).

Nonetheless, another common misconception regarding police officer's and the institution of law enforcement is that it is universally the same across the globe (i.e., brutal, prejudiced, cynical, and mistrusting); however, Terpstra & Schaap (2013)

explained to us that this assumption is based on an Anglo-Saxon perception, rather than fact (Terpstra & Schaap, 2013). While the profession of law enforcement may on the surface appear to be brutal, and uncaring, it must be understood that the culture of law enforcement centers around a series of "attitudes and values," that are instilled in each officer throughout their careers, which assists them in carrying out their duties, and coping with a hostile environment (Terrill et al., 2016, p. 65). While these cultural attitudes may help an officer to perform his or her duties in a proficient manner, there is a negative backlash to these practices, which may have a bleed-over effect that perpetuates a negative relationship between law enforcement and the general public.

Terpstra and Schaap (2013) conducted a qualitative study involving police officers from the Netherlands, questioning whether the Anglo-Saxon causal model of police stress was the same in that region (Terpstra & Schaap, 2013). Terpstra and Schaap (2013) reminded researchers that an ethnographic approach is generally more ideal when conducting a cultural study; however, in order to avoid any bias, or overgeneralizations regarding the officer's view of 'real' police work, a quantitative survey approach was deemed more appropriate (Terpstra & Schaap, 2013). The results of this study showed that Dutch officers were shown to be less conservative, and their distrust of the general population was not as prevalent as is usually observed in the United States; however, the similarities is that just as in the United States, the cop culture in the Netherlands is relatively closed off from the general public (Terpstra & Schaap, 2013).

The role that police officers play, among other first responders, is replete with any number of stressors, such as the uncertainty one feels when entering a suspect's home

during the issuance of a warrant, or arriving at the scene of an accident, or other critical incident. This uncertainty can have a negative effect on an officer's reactions at the scene, thereby altering the outcome of the situation, which can put lives at risk (Regehr et al., 2008). This concept of how stress affects performance, prompted Regehr et al. (2008) to conduct a study with 84 police recruits from Toronto, Ontario, Canada, to determine whether acute stress affects emergency workers differently than any other occupation. The research participants were involved in a series of scenarios utilizing the Firearms Training System (FATS), which is designed to simulate situations where recruits would be evaluated on their critical thinking as it relates to their use of force (i.e., baton, hand-to-hand, chemical spray, or firearm), decision-making, and marksmanship during a mock 911 call for domestic violence (Regehr et al., 2008).

Following the FATS scenario, recruits were administered the Strait-Trait Anxiety Inventory (STAI), which is an anxiety scale consisting of 20 items measured on a 4-point scale with a high internal consistency, and a Chronbach's alpha of 0.87 (Regehr et al., 2008). Additionally, salivary cortisol samples were taken, and their heart rates were measured 20 minutes post-scenario using a heart rate monitor, primarily because of the speed in which the ANS returns to baseline. The results showed no correlation between job performance and subjective distress; however, a Spearman's rho was calculated and demonstrated statistical significance ($r = 0.261$, $p \leq 0.05$, $r = 0.290$, $p \leq 0.01$) in rankings of relative performance. A one-way ANOVA was conducted to determine the differences in subjective anxiety and biological stress, and there were significant differences in baseline cortisol levels between 2 groups ($F = 10.25$, $p \leq 0.001$), and in peak cortisol

levels ($F = 10.19$, $p \leq 0.001$), as well as differences in the STAI scores ($F = 2.97$, $p \leq 0.05$); (Regehr et al., 2008). What can be inferred from this study is that while participating in the FATS scenario may have caused a physiological change due to physical exertion, the officer's involved did not perceive any real danger, therefore their subjective anxiety would naturally be lower than if they were involved in an actual crisis situation.

Another longitudinal study of 81 police recruits from a Northeastern police agency was conducted by Patterson (2016), in which the concept of perceived stress in life and at work was explored over a 7-month period utilizing the Ways of Coping Questionnaire (WCQ) in 3-month intervals in order to assess "emotion-focused, problem-focused, and seeking social supports" coping strategies, and to determine if positive or negative coping strategies varied during their training (Patterson, 2016, p. 561). The WCQ is a four-point Likert-type scale used to get participants to identify the frequency that a coping strategy is utilized. What this research demonstrated was the drop off in a police recruit's attitude, and motivation during their academy training; shifting from high levels of commitment to an almost non-existent level of commitment, which appears to be contributed by the socialization process, and the roles they are expected to play following their training (Patterson, 2016).

Following Lazarus and Folkman's (1984) cognitive phenomenological approach, which includes cognitive appraisal, coping, and identification of stressors (primary and secondary appraisal), Patterson (2016) was able to identify two types of problem-focused coping strategies: confrontive coping and planful problem-solving, as well as five

emotion-focused coping strategies (Patterson, 2016). The interesting thing with regards to the emotion-focused strategies is that each of them asserts itself to the notion of avoidance, which is consistent with the culture of law enforcement. Primary appraisal focuses on an individual's perceptions of a threat to their own wellbeing; whereas, secondary appraisal focuses on the individual's ability to change the outcome of the stressor (Patterson, 2016). For the purposes of this research, secondary appraisal was examined more closely than primary, in that participants were asked what they could do to change the situation causing the stress, or if they were prepared to simply accept the situation, which is consistent with Lazarus and Folkman's (1980) theory (Patterson, 2016).

Emotion-focused strategies were conceptualized using 32 items as being those automatic thoughts experienced by police officers that assist them with controlling their emotional responses to a perceived stressful situation. Additionally, problem-focused strategies, which were a 12-item subscale, identified the behaviors police recruits would use to adapt to, or modify the perceived stress situation (Patterson, 2016). Finally, seeking social support strategies was measured using a 6-item subscale, and was used to identify where a recruit may go in order to gain support (i.e., family, friends, colleagues, and leadership within the organization).

The results of Patterson's (2016) study, which was summarized using a repeated-measures analysis (ANOVA), showed that 38.2% of the participants appraised a stressful situation as changeable during the first time-period (TP1). However, during the second administration (TP2) of the WCQ, the appraisals diminished to 32.9% and finally at the

third time period (TP3) it had fallen to 25.4% (Patterson, 2016). As it relates to whether recruits will accept a situation for what it is, once again the research showed a significant drop off from TP1 (90.5%) to TP2 (81.1%), and TP3 (71.9%). A Bonferroni calculation was then conducted for each strategy. The first coping strategy of emotion -focused showed a significant difference from TP1 ($M = 19.96$, $SD = 12.34$) to TP3 ($M = 11.84$, $SD = 14.17$) and ($p < .01$). The same levels of difference were also noted in the subsequent coping strategies: problem solving ($p < .05$) and seeking social support ($p < .05$). According to Patterson (2016), post hoc tests were employed due to the significant differences between the mean and each of the time points, and were based on the assumptions that there was no homogeneity within the variances, and that there was statistical significance with regards to recruits utilizing emotion-focused, problem-focused, and seeking support strategies, but also showed that the use of these strategies decreased over the three time periods (Patterson, 2016).

Agnew's Strain Theory

There has been very little exploration into the root cause in the decrease of organizational commitment by police officers; more specifically as to what role does Agnew's (1992, 2006) Strain Theory play in this departure from organizational norms (Moon & Jonson, 2012). This loss of interest in the mission of the institution of law enforcement doesn't just affect the individual officer; it has a trickle-down effect that is felt by everyone in the department, which then bleeds over into the community that the officer has sworn to protect (Moon & Jonson, 2012). Agnew's Strain Theory provides researchers with a theoretical framework in which to understand which strains are most

likely to lead to an officer's lack of organizational commitment, which can lead to job dissatisfaction, excessive absenteeism, and high turnover rates (Moon & Jonson, 2012).

It is worth noting that Agnew's (1992) General Strain Theory, which was developed as an extension of Merton's (1938, 1968) single strain theory, is generally associated with crime and delinquency, or rather what drives an individual to commit crimes, or engage in deviant behaviors (Moon & Jonson, 2012). Nevertheless, Agnew's (1992) theory may offer some explanation as to what causes an officer to engage in negative, or maladaptive coping mechanisms in response to the stress of their occupation through his assertion of there being three classifications of strain: a) failure to achieved positively valued goals, b) the removal of positively valued stimuli, and c) the introduction of toxic stimuli (Moon & Jonson, 2012). Due to the irregular work hours of most police officers, the availability to positive social supports may diminish over time, which becomes a stressor in and of itself, and reiterates the theories of other researchers (Aamodt & Stalnaker, 2001; Aaron, 2000; Biggs, Brough & Barbour, 2014; Ménard & Arter, 2013; Miller, 2007). Ménard and Arter (2013) suggested that in utilizing Agnew's (1992, 2006) General Strain Theory (GST) it may help to guide researchers in a direction of exploring the triggering effects of such maladaptive coping mechanism's such as alcohol abuse, and/or an apathetic attitude that affects one's organizational commitment, but little into the multitude of other negative outcomes associated with GST (Ménard & Arter, 2013).

Perhaps, police officers are attempting to achieve some level of equity as it relates to the strain theory, in that they are "pursuing some specific outcome," according to

Agnew (1992); however, Agnew (1992) informs us that the literature pertaining to equity suggests that individuals are not seeking any specific outcomes, rather they are predominantly interested in the notion that their efforts will "conform to the justice principle," and that their efforts will somehow have an effect on how they perceive, or interpret the outcomes (Agnew, 1992, p. 55). Additionally, the culture of the police officer, which may be identified as his or her immediate social environment will often play a significant role in the "importance attached to selected goals/values/identities," and therefore make it difficult for the officer to differentiate between positive or negative coping mechanisms (Agnew, 1992, p. 72).

Lazarus and Folkman's Cognitive Appraisal Theory

There is evidence to suggest that the cognitive processing of information (stressful events) varies from one individual to the next, and that there are phylogenetic implications that influence their reactions to these events, and that a negative affect will typically be met with a deeper, and possibly more elaborate method of processing (Alves, Koch, & Unkelbach, 2017). A basic tenet of the human condition is that stress will either be interpreted as good (*eustress*), or bad (*distress*), and this valence asymmetry will typically be viewed that distress is stronger than eustress and shall therefore require a greater amount of exertion in the coping strategies (affective and motivational reactions) employed to reduce or eliminate the perceived stressor (Alves, Koch, & Unkelbach, 2017). Affective and motivational reactions such as facial attractiveness, person perception and attitudes, and language (verbal and body) are generally determined by the cognitive functioning of individuals, or the speed at which one processes either positive

or negative information. However, there is ample evidence to suggest that positive information is processed at a different rate of speed due to its similarity with one's natural environment, but this becomes an extremely relative concept as what may be considered positive to one individual, may be interpreted as negative to another (Alves, Koch, & Unkelbach, 2017).

It must be understood that thought (cognition) and affective (emotional) reactions are not separate entities; rather, they are interdependent constructs that dictate specific behavioral responses that can operate independently of one another yet are often intertwined. This has the effect of making it difficult to discern where one begins, and the other ends (Lazarus, 1982). There are many researchers that reject the notion that emotions are determined by one's appraisal of a situation, or given set of stimuli, and that appraisal is just one cog in the machine of emotions (Ellsworth, 2013; Moors, 2013). Anshel (2016) explained that for there to be any emotional reactivity, the officer must identify the stressful situation as being meaningful, otherwise the perceived stress event is considered absent, and the act of coping with the stressor is unnecessary (Anshel, 2016).

In its most simplistic form, cognitive appraisal can be explained in the following manner. First, there is an external event, which can be identified as any situation that creates a sense of perceived stress for the member of law enforcement. This event then creates an automatic thought; this thought does not necessarily have to be rational in nature, nor does an individual need to have an awareness of their thoughts for it to generate an emotional response (Lazarus, 1982). There are many psychology

professionals who view emotional responses as a primal experience that originates in the midsection of the human brain (Ellis, 1962; Ellsworth, 2013) that typically overwhelms an individual's ability to reason rationally causing them to depend on primitive logic (Lazarus, 1982). This emotional response will dictate the responding behavior (B), which is typically determined by what the individual has learned throughout his or her lifetime, or the messages he or she has received from their respective cultures, which is consistent with Lazarus and Folkman's (1984) theory of appraisal.

There are three levels of analysis as it relates to appraisal: *functional, algorithmic,* and *implementational*, which produces a series of values based on the stimulus. The functional level describes the relationship between input (stressors) and output (response), while the algorithmic level describes how an individual translates the output (emotional/behavioral), whereas the implementational level describes the individual's specific brain activity (Moors, 2013). However, Moors (2013) rebukes the notion that appraisal is a singular cause for emotional responses to perceived stressors; rather, appraisal is looked upon as part of a larger concept known as circular causality, where the action of one impacts others and is therefore impacted by other actions (Moors, 2013). Moors (in press) informed researchers that there are many theories that attempt to explain the concept of emotions, which she identified as being componential, causal, and/or mechanistic; however, most appraisal theories fall under the componential rubric, which suggests that emotions are a by-product of several components: a) subjective, b) cognitive, c) somatic, and d) motor, which can be argued to correlate with Lazarus' theory of appraisal (Moors, 2018).

According to Ellsworth (2013) Many appraisal theorists have been compared to constructivist theorists in that they too see appraisal as being an action that is influenced by multiple constructs such as: an individual's personality, biology, culture, life experiences, and/or the values they place on their goals. The first step of appraisal that triggers a change in one's emotional state is known as the perception of novelty, where the individual will gauge the external stimulus as either significant or irrelevant (Ellsworth, 2013). Questions have been raised as to whether language, or one's specific geographical dialect has any bearing on appraisal, and its subsequent emotional response. Ellsworth (2013) questions whether the language of a specific culture has any effect on emotional experiences, and notes that many constructivist theorists have hypothesized those emotions are a direct result of the human experience (Ellsworth, 2013).

As previously stated, appraisal is oftentimes determined by causation, or rather the influences of extraorganizational stress associated with the occupation of law enforcement, such as a natural disaster, long work hours, or critical incident. Because of exposure to such causations, a significant effect on desired work-outcomes has been identified (Biggs, Brough, & Barbour, 2014). It is worth noting that research into the influences that stress has on these undesired negative work-outcomes (i.e., lack of organizational commitment, poor job performance, excessive absenteeism) has been sparse, which has called for researchers to explore this area further in order to develop more effective stress management techniques (Biggs, Brough & Barbour, 2014). In their study, Biggs, Brough and Barbour (2014) compared four types of exposures to natural disasters: communication and major projects deployment to frontline operations;

volunteering; and personal property damage or loss and hypothesized that these exposures would have a profound impact on negative work-related outcomes (Biggs, Brough & Barbour, 2014). The results of this research demonstrated a "small, but statistically significant correlation" ($\chi 2\ [1094] = 2484.03; p < .001$), between negative work-outcomes and natural disasters in a sample of 1,623 police officers from Queensland, Australia utilizing an electronic survey method over an 11-month period (Biggs, Brough & Barbour, 2014).

One factor that must be considered as it relates to appraisal of the causation is its level of meaningfulness, which will then determine the corresponding emotional state (Smith, Tong, & Ellsworth, 2016). As it relates to the degree of the corresponding emotional state, it is worth noting that an area of debate among researchers is whether these emotions will be classified as either positive or negative (Smith, Tong, & Ellsworth, 2016). The truth is that emotions are not positive or negative, good or bad, they just are. Using the topic of this paper as an example, if an officer is involved in a critical incident where his or her partner has been critically injured or killed, and that officer begins to experience an elevated level of anger, and/or sadness, it is because that is what is supposed to happen. Whether or not the emotion is comfortable or uncomfortable, it does serve a specific adaptive, or maladaptive function to cope with the given situation (Smith, Tong, & Ellsworth, 2016).

According to Weber Brooks and Leeper Piquero (1998), an area that has received a great deal of attention among researchers is perceptions of stress among police officers, and police administrators serving in large, metropolitan departments, which are often

described as being “para-militaristic, and bureaucratic” in nature, and have demonstrated a “social distance” between officers and the public they serve (Weber Brooks & Leeper Piquero, 1998, p. 1). However, the effect of perceived stress on department size has received a limited amount of attention. Additionally, many of the negative assumptions about police organizations seem to be primarily directed toward the larger agencies, and these assumptions seem to be generalized across both large and small departments, which Weber Brooks and Leeper Piquero (1998) identify as being problematic (Weber Brooks & Leeper Piquero, 1998). What is suggested by Weber Brooks and Leeper Piquero (1998) is that smaller departments may actually experience/appraise less stress than their larger counterparts because of the “informal relationships” between officers and the community, as well as between supervisors and subordinates in which these smaller departments are operated very similar to a family system (Weber Brooks & Leeper Piquero, 1995). While it may appear ideal to view the smaller departments in such a way, where the chief is identified as the father, and veteran officers are the older siblings, this can also be considered as a significant source of stress on younger officers, as the structure of the police culture centers around solidarity and peer group acceptance (Weber Brooks & Leeper Piquero, 1998).

Korre, Farioli, Varvarigou, Sato and Kales (2014) conducted a study that explored perceived stress experienced by members of law enforcement during the performance of 22 duties, and then examined the personal perspective of both police chief’s and frontline officers through the use of a research developed survey (Korre et al., 2014). Korre et al. (2014) explained that the experience of perceived stress among members of law

enforcement "may vary by department/jurisdiction size and geographic location," and that understanding the perceived stress experience may help to mitigate the stress and its effects (Korre et al., 2014, p. 110). However, Korre et al's (2014) study only explored perceived stress from a hierarchal perspective (i.e., police chiefs v. frontline officers), but did not quantify whether department size had any influence on perceived stress on members of law enforcement.

One component of the appraisal theory centers on the individual's evaluation of those available resources needed to cope with the stressors of the job, and their perceived control related to the situation. Vander Elst, De Cuyper, Niesen, Baillien, and De Witte (2013) conducted a study among 2413 Belgium workers regarding the mechanisms that account for negative outcomes in job insecurity. According to Vander Elst et al. (2013), lack of perceived control and psychological contract breach contributed significantly to one's inability to cope effectively, thereby increasing the level of stress experienced, which then results in the individual minimizing the event, and/or its level of importance (Vander Elst et al., 2013). A psychological contract breach refers to an individual's perception that the organization he or she works for has failed to meet their expectations, and that there will be no reciprocity for their efforts to the organization, which only serves to exacerbate an employee's sense of insecurity within the organization (Vander Elst et al. 2013). This, metaphorically speaking, becomes a snowball effect where the employee begins to demonstrate lower job performance, poor organizational commitment, increased absenteeism, and even a reduction in life satisfaction (Vander Elst et al., 2013).

As the purpose of this study is to examine perceived stress among members of law enforcement from small, medium, and large departments, it is important to identify how workloads on various agencies can have a direct effect on the levels of stress experienced by police officers. McCabe and O'Connell (2017) explained that many departments try to maintain higher staff levels in order to reduce response times; however, the size of a police department will be dependent upon several variables, such as changes in crime rates, economic conflicts, budget considerations, political atmosphere of the jurisdiction, and/or public demands (McCabe & O'Connell, 2017). Additionally, McCabe and O'Connell (2017) cite a report by the Bureau of Justice Statistics (2003) that stated that departments are typically "categorized by the size of the population served," but will ultimately be determined by authorized budgets (McCabe & O'Connell, 2017, p. 3). What can be inferred from this is that regardless of the size of a population (i.e., city, town, municipality), if a police department is only authorized an annual budget to employ 12 officers, then those twelve will have to do the same level of work as a precinct of 100 officers. From a Cognitive Appraisal Perspective, this could be perceived just as stressful as an officer working in a department of one thousand, which in turn can create high turnover rates within the department because of a severe reduction in organizational commitment.

Physiological Effects of Stress

Stress is typically defined as a reaction to a given set of stimuli, either internal or external that provides a neurophysiological activation of arousal that generates a learned behavioral response, or *stress response* that creates a sense of internalized wakefulness in

order to deal with the perceived stress event (Ursin & Eriksen, 2010). Ginty, Kraynak, Fisher, and Gianaros (2017) also explained that psychologically perceived stressors can evoke physiological changes that increase the potential risk for cardiovascular disease (Ginty et al., 2017). This wakefulness will typically occur whenever there is a divergence from an individual's expectation of a situation, and what is happening (Ursin & Eriksen, 2010). A normal part of the brain's function from the perspective of any learning theory is the concept of expectancy, with regards to how an event should play itself out ideally, and is measured in three dimensions: acquisition strength (how strong will the learning be), perceived probability (what is the subjective evaluation/control), and affective value (is the outcome attractive or unattractive) by the individual experiencing the stress (Ursin & Eriksen, 2010). It is during these moments of heightened arousal that the individual begins to activate a defense to the stress, which may involve a disconnection from reality as a means of coping with the actual event, and if allowed to be prolonged can have an adverse reaction on one's physical health (Ursin & Eriksen, 2010).

The human brain is a remarkable structure that is designed to operate in ways that still confound even the most astute scientific minds. For the average citizen, the brain doesn't expend any more energy than the next person. However, for a police officer, the structures of the brain can kick into overdrive, and go from 0 to 100 in mere moments, such as when responding to a call for back-up, or when hearing those most dreaded two words of *officer down*, which then activates the hypothalamus-pituitary-adrenal (HPA) gland, which is the organ of the brain that triggers one's fight-or-flight response (Sharps, 2017). Sharps (2017) gives us an interesting explanation of the marvelous, but imperfect

functions of the subcortical organs of the brain, and that as a result of these imperfections in the brain, police officers like the average citizen are prone to making poor decisions, or taking actions that are considered destructive (Sharps, 2017).

This physiological stress response mechanism is biologically designed to provide individuals with the needed energy to cope with the stress-producing event, but this can have an adverse effect if activated for long periods of time, such as lowering one's resistance to infection, or other diseases (Priyadarshini & Aich, 2016). From a medical perspective, stress is defined as any situation that disturbs an individual's ability to maintain a stable equilibrium, which then activates that individuals stress response system (SRS), which is a vital element of survival in all human beings (Priyadarshini & Aich, 2016). Through their research utilizing the integration of gene data from a molecular level, Priyadarshini and Aich (2016) identified a link between psychological stress and physiological homeostasis and were able to predict "involvement of serotonin receptors and uridine 5'-diphospho-glucurnosyltransferases in mediating effects of psychological stress" (Priyadarshini & Aich, 2016, p. 277).

When neurotransmitters such as serotonin are overstimulated, it has an adverse effect of causing the liver to dump high amounts of glucose into the bloodstream, which in turn causes the pancreas to generate high levels of insulin to counteract the glucose; all of which can have a detrimental effect on the human body (i.e., heart disease, insulin resistant obesity, fatigue), resulting in increased absenteeism, poor productivity, among other health concerns. Grossman (1995) explained that during combat, the SNS is activated and will shut down those internal systems that are considered nonessential, such

as digestion, bladder, and even sphincter control (Grossman, 1995). Other research has shown that even groups such as the Navy SEALS, who are trained to operate in extremely hostile environments, can experience significant impairment in "tasks of memory, vigilance, and hand-eye coordination" after an extended exposure to conditions where there is a perceived threat (Regehr et al., 2008, p. 296).

This concept is reiterated by Sharps (2017), who explained that during periods of extreme stress, a police officer will experience an increase in blood-flow to the body, but a diminished level of oxygen to the prefrontal cortex, thus causing difficulty with concentration, and an increased probability of making a poor decision at a very critical moment (). Sharps (2017) has explained that in response to high levels of repeated stress, a police officer can develop a series of habitual behaviors, or operate on "automatic pilot" that can result in outcomes that are unfavorable not just to the individual officer, but those around him or her, and ultimately place public safety at jeopardy (Sharps, 2017, p. 32).

The Buffalo Cardio-Metabolic Occupational Police Stress (BCOPS) study also demonstrated the negative physiological effects of stress, as 100 officers from Buffalo, New York were sampled, where more than half of the sample ranged between the ages of 40-49, 19% were African-American, and 42% were women, and 50% of those sampled were considered veteran officers. The study explored the negative contribution of stress to the psychological, physiological, and subclinical well-being of members of law enforcement, which shows that there is sufficient evidence that occupational stress among police officers has a significant effect on their physiology, and causes an increase in

cortisol secretions, dependent on the nature of the stress, and how it is perceived (Violanti, Fekedulegn, Andrew, Hartley, Charles, Miller, & Burchfiel, 2017). As with the study by Priyadarshini and Aich (2016), the BCOPS research explored the effects of psychological stress on the autonomic nervous system (ANS) and was shown to be a significant factor in the development of heart disease among police officers because of abnormal cortisol secretion (Violanti et al., 2017).

The measures used for this research included a high protein meal challenge (65 gram protein shake) over a 20-minute period that measured salivary cortisol patterns over a 2-day period. Additionally, the researchers administered the Center for Epidemiological Studies Depression scale (CES-D) to determine if any of the officers were experiencing any type of psychological distress, as well as the Impact of Event scale (IES), which is used to identify any symptoms of posttraumatic stress disorder (PTSD), and finally the Police Incident Survey, which asks participants the number of times they have been involved in perceived traumatic events such as shootings, working with abused children, or observing dead bodies (Violanti et al., 2017). Violanti et al. (2017) demonstrated that there was a significant difference (77%) in cortisol response to stress, with median levels increasing to a greater extent among women than men, but the mean systolic and diastolic blood pressure was higher in men than women (Violanti et al., 2017).

This demonstrates that there is a difference between the two genders with regards to the physiological responses to stress. From a psychosocial perspective, the mean scores of stress and depression, as measured by the CES-D, showed to having a significantly higher impact on women (N = 42) than men (N = 58), where the mean and standard

deviation was M = 9.79 v. M = 7.93 (Violanti et al., 2006, p. 153). Additionally, the results of the IES showed that there was a significant higher rate for women than men in the areas of experiencing intrusive thoughts and feelings of avoidance; male participants demonstrated slightly higher levels of cortisol than the female participants; however, there was an increased cortisol response with increasing median levels among the women (8.7 to 15.1 nmol/L), but these numbers slightly decreased over a 60-minute timeframe (Violanti et al., 2017). In the final analysis of this research, it has been shown that members of law enforcement experience a lower brachial artery flow-mediated dilation (FMD), as well as a lower carotid intima-media thickness (IMT) in comparison to the general population of the same mean age (M=44) in response to perceived stress (Violanti et al., 2017).

Hickman et al. (2011) conducted a similar, pilot study to measure the physiological effects of stress, and explained that stressful situations activate the sympathetic nervous system (SNS), as well as the HPA, which releases epinephrine and norepinephrine into the bloodstream that causes an elevation in the individual's heart rate, and releases cortisol and thyroxin into the system as a means of preparing for the necessary reaction to the stress event (Hickman et al., 2011). In order to map "when, where, and why officer's experience stress," Hickman et al. (2011) recruited a single participant from the Seattle Police Department, and utilized a GPS device developed by Garmin that was designed to measure the officer's heart rate during an actual shift, in real-time (Hickman et al., 2011, p. 235). During the shift, the officer had responded to at least 5 potentially deadly situations, in addition to many other activities that were less

stressful (Hickman et al., 2011). The results of the study showed that there was a significant increase in heart rate from 96 bpm to 165 bpm whenever the officer was involved in a potentially dangerous situation, which can be linked to the officer's appraisal of each situation as he received calls from his dispatcher (Hickman et al., 2011).

In further exploration of how psychological stress affects an individual on a physiological level, Gianaros and Wager (2015) explained to us that the brains appraisal system has created a pathway that links psychodynamic functions with the development of cardiovascular reactions (Gianaros & Wager, 2015). Using neuroimaging systems, a change in brain activity was observed whenever a person appraises their life experiences as being more exhausting, therefore elevating their blood pressure, thus increasing the likelihood of developing heart disease; however, these brain-based changes can in some ways "provide metabolic support for adaptive behaviors" in order to attend to those perceived threats to self (Gianaros & Wager, 2015, p. 2).

Research conducted by Vine, Moore, and Wilson (2016) has demonstrated that acute stress can have a significant effect on another facet of human physiology; specifically, to an individual's fine motor skills that are visually guided, and how this is connected directly to one's personal interpretation of an event, or stressor (Vine, Moore & Wilson, 2016). According to Vine et al. (2016), individuals go through a series of "psychophysiological states (challenge and threat)" during an encounter with a perceived stressor, which can determine either a positive, or negative performance outcome in any "visuomotor task" (Vine et al., 2016, p. 2). Vine et al. (2016) concur with Lazarus' (1966) theory that stress is based on one's perception of it, and how one conceptualizes it

(primary appraisal) will typically determine how they evaluate it (secondary appraisal), and ultimately react to it (Vine et al., 2016). However, Vine et al. (2016) points out that not a great deal of research has looked specifically into this phenomenon in order to make any solid predictions of potential outcomes but was able to determine through their integrative framework that the psychophysiological evaluation and response to challenge and threat, will have different effects based on the individual's perception, or attentional control (Vine et al., 2016). As the literature has demonstrated, detriments to one's physiology as a result of stress can have an adverse effect on one's psychological state, thereby causing an individual to make poor decisions that result in negative outcomes. For a member of law enforcement, this can have dire consequences not just for themselves, but their department, and the communities they serve.

Coping Mechanisms

As with all things, every choice has a consequence that follows it. Some consequences are immediate, while others can happen over a longer period. Every choice that is made is based upon an individual's specific need at the time the choice is rendered. For members of law enforcement, that need may be defined as a reduction in the stress associated with the profession. The stress that a police officer experiences, doesn't begin and end while on the job. In fact, longitudinal studies have demonstrated that the acute stress experienced, and perceived by police officers begins during their academy training, and that the most common reaction to these perceived stressors among recruits is alcohol consumption (Regehr et al., 2008; Pastwa-Wojciechowska, & Piotrowski, 2016). Additionally, this method of coping comes as an alternative to reaching out to one's

support system (i.e., spouse, family, friends, and/or colleagues), as the culture of law enforcement is one that typically fosters the notion of avoidance (Pastwa-Wojciechowska, & Piotrowski, 2016).

There are multiple factors that play into a police officer's reaction to stress, and these stressors do not operate within a vacuum. Incidents of violence tend to trail behind police officer's like a foul vapor, entering his or her home, thus creating a high level of psychological, emotional, and even physiological toxicity that can affect relationships with their spouse, or other family members. Additionally, the demands of the organization despite the perceived trauma experienced by the officer can also take its toll, resulting in any number of negative outcomes (Pastwa-Wojciechowska, & Piotrowski, 2016). As previously mentioned, the consumption of alcohol has become one of the primary mechanisms used by members of law enforcement to cope with the stress associated with their occupation, which may lead to feelings of hopelessness. According to Violanti, Andrew, Mnatsakanova, Hartley, Fekedulegn, and Burchfiel (2016) these feelings of hopelessness becomes a predicting factor in the development of suicidal ideation, and the act of suicide (Violanti et al., 2016). An interesting caveat is that while one might believe that violence, and/or other traumatic events would be the precipitating cause for alcohol abuse among police officers, it is organizational stressors such as lack of support, low morale, long hours, reprimand for an infraction of policy, and a perceived sense of futility of their work that has been identified as the leading cause for such abuse (Pastwa-Wojciechowska, & Piotrowski, 2016; Violanti et al., 2016).

Pastwa-Wojciechowska, and Piotrowski (2016) conducted a longitudinal study of

the specific causes of stress among a group of Polish police officers from 16 different police headquarters, 5 police academies, and the National Police Headquarters located in Warsaw, Poland over a 3-year period. The study examined the number of extraordinary incidents that occurred in conjunction with incidents that occurred while under the influence of alcohol, both on and off duty. While the number of extraordinary incidents seemed to fluctuate over this 3-year time frame, the actual number of alcohol-related incidents dropped significantly; thereby demonstrating that stress precipitated by perceived traumatic events may not have a direct correlation to the negative coping mechanism of alcohol abuse (Pastwa-Wojciechowska, & Piotrowski, 2016). Nevertheless, there is still sufficient evidence to suggest that this negative coping mechanism can have an adverse effect on an officer's job performance, as well as having a detrimental effect on that officer's quality of life.

Shjarback, Pyrooz, Wolfe, and Decker (2017) conducted a study to determine if police officers and their respective departments were taking a relatively hands-off approach to policing, or de-policing as it has come to be known, following negative, high-profile events like the one that took place in Ferguson, Missouri in the wake of the shooting death of Michael Brown (Shjarback et al., 2017). Ever since the death of Michael Brown, there has been a growing challenge from the community to the legitimacy of law enforcement, which has come to be known as the "Ferguson Effect," and has caused many police officers to alter the methods in how they perform their duties, or "pullback from proactive policing" (Shjarback et al., 2017, p. 44). According to Shjarback et al. (2017), this de-policing has had a backlash effect in that there has been

an increase in violent crimes across the United States, because more police officers are withdrawing from their usual practices to avoid further scrutiny, and negative publicity from the media, not to mention potential civil lawsuits, consent decrees, civil unrest that results in riots, or other violent public activities, and/or any action that would prevent them from returning home safely at the end of a shift (Shjarback et al., 2017). It is also worth noting that aside from avoiding the aforementioned negativity by the press, the public, and departmental supervisors, there is an even more significant aspect that has not been considered: the human condition. Thomas (2010) reminded us that police officers are human beings, which makes them equally susceptible to the same external and internal variables as any other human, which may influence their behaviors both in and out of uniform (Thomas, 2010).

Shjarback et al.'s (2017) study collected data from 118 police departments across Missouri from 2014 to 2015, focusing on rates of traffic stops, searches, and successful arrests (quantity and quality) and the results demonstrated that between 2014 and 2015 many departments had scaled back their usual efforts, especially within many of the African-American communities that they serve (β = -0.44: traffic stops, β = -0.37: searches, β = -0.27: arrests), which suggests that there is sufficient evidence to support the notion that this level of de-policing is occurring only with the African-American population of Missouri following the death of Michael Brown, and subsequent riots/civil unrest in the city of Ferguson (Shjarback et al., 2017).

Chronic stress among members of law enforcement has been a precursor for a series of maladaptive coping mechanisms such as reacting to stressors with aggressive

behaviors, or turning to drugs and alcohol in order to cope, which can then develop into long-term health problems (Anshel, 2016). Anshel (2016) identified three assumptions with regards to stress: a) acute stress, which can cause officer's to think and behave differently in high stress situations, as opposed to less stressful situations; b) chronic stress, which is an ongoing syndrome that can affect an officer both psychologically and physically by compromising the body's immune system; and c) burnout, which can cause an officer to experience a significant lack of motivation, poor job performance, and lower an officer's commitment to the organization (Anshel, 2016). Anshel (2016) also explained that a police officer's self-esteem is a determinant factor in which particular method of coping will be utilized during an event of high stress, which means that if an officer is one that exudes self-confidence, and has some measure of control over the event, then he or she will most likely be able to cope effectively with the perceived stressor (Anshel, 2016).

Another negative coping mechanism that has been demonstrated by members of law enforcement in response to overwhelming stress has been the act of suicide. Based on research conducted by Aamodt and Stalnaker (2001), the rates of suicide among police officers are 18.1 per every 100,000 officers per year, which is 11.4 higher than that of the average citizen (Aamodt & Stalnaker, 2001). Additionally, the greater number of suicides (89%) completed by members of law enforcement were by white males between the ages of 21 and 55 (Aamodt & Stalnaker, 2001). While the precise cause of this negative coping mechanism has not been fully determined, stress from events such as legal issues was the precipitating factor, with the highest percentage of suicides (26.6%) being related

to relationship issues (Aamodt & Stalnaker, 2001). According to statistical information provided by Badge of Life (BL, 2018), the number of police suicides has had a significant drop between 2008 (141 suicides) and 2016 (108 suicides), which is markedly lower than Aamodt and Stalnaker's (2001) study; but the average age of an officer who committed suicide was 42 years old, and their length of service was averaged at 17 years, with 87% being males, which is consistent with Aamodt and Stalnaker's (2001) figures (Badge of Life, 2018). While these statistics may seem on the surface as low in comparison to the overall population, the events of perceived stress which led to this particular negative coping mechanism are still significant enough to warrant further exploration and understanding, if there is to be a viable solution to the problem.

Mental Health Disorders and PTSD

The term posttraumatic stress disorder (PTSD), which evolved from a condition once known as shell-shock, and was named by English physician, Charles Myers (1915), following the return of soldiers during World War I, was once believed to be a malady exclusive to that specific population (Meyers, 2012). However, this is no longer the case, as psychologists have determined that anyone can develop this disorder, because each person identifies stress-invoking events differently, which is consistent with Lazarus and Folkman's (1984) theory of cognitive appraisal. What is still a mystery to many researchers is how long does it take before the symptoms of PTSD manifest following exposure to a traumatic event? Eekhout, Reijnen, Vermetten, and Geuze, (2016) conducted a cohort study involving 1007 Dutch soldier that had been deployed to Afghanistan between 2005 and 2008 and assessed them utilizing the Self-Rating

Inventory for Post-Traumatic Stress Disorder (SRIP), which showed that short-term symptomology began within 6-months following deployment, whereas long-term symptomology surfaced, and increased up to 5-years later (Eekhout et al., 2016). An interesting caveat of Eekhout's et al. (2016) study is that combat stressors and extra-organizational duties seem to have a positive impact on reducing the intensity of PTSD symptomology (Eekhout et al., 2016).

This reduction in symptomology can also be inferred from Leppma, Mnatsakanova, Sarkisian, Scott, Adjeroh, Andrew, Violanti, and McCanlies, (2017) study that examined the idea of posttraumatic growth (PTG) with 113 police officers from New Orleans following exposure to a natural disaster: Hurricane Katrina (Leppma et al., 2017). The results of the study demonstrated that specific factors such as gratitude ($B = 0.002$, $p \leq .05$), life satisfaction ($B = 0.002$, $p \leq 0.05$), and social supports ($B = 0.001$, $p \leq 0.05$), help to regulate the methods used by officers in order to cope with perceived stressors, thus reducing potentially negative outcomes associated with prolonged, or repeated exposure to traumatic events (Leppma et al., 2017).

Stress and Police Families

Some of the issues related to police officers, particularly high divorce rates have become a controversial subject even among police experts. As it relates to the family dynamics, one might believe that the families of police officers are more susceptible to divorce than the average citizen. Miller (2007) explained to us that this is a myth, and that research has shown that if a police family can make it beyond a 3-year period, they have an equal, or greater chance of survival than the average American family (Miller, 2007).

However, there are certain stressors that are experienced by the families of law enforcement that are specific only to the police culture, such as schedule and shift changes, responding to critical incidents and/or hostage situations, and the solidarity with fellow officers, which can sometimes be stronger than the bonds established between the officer and his or her family members (Miller, 2007). The spouses of police officers recognize, and accept the demands of the job, and that even when their partner is off duty; they are always *on duty*. Miller (2007) refers to this as an "over-identification with the police role," which can oftentimes result in a dereliction of duties in the household, such as avoiding daily chores, dinner with the family, playing with the kids, and dance recitals (Miller, 2007, p. 26).

However, McCoy and Aamodt (2010) argue that there is no empirical data to support the belief that police officers experience a higher divorce rate, and according to their analysis of the 2000 United States Census, is in fact lower than that of the average citizen (McCoy & Aamodt, 2010). Nevertheless, there is evidence that officers who have developed such maladaptive coping strategies in the form of dissociation, or psychological avoidance can also experience an alteration of their cognitive abilities, which can increase the likelihood for multiple negative outcomes (Kurtz, Zavala, & Melander, 2015; Ménard & Arter, 2014; Smoktunowicz, Baka, Cieslak, Nichols, Benight, & Luszczynska, 2015).

Resiliency

Andersen, Papazoglou, Nyman, Koskelainen and Gustafsberg (2015) cite Gilmartin's (2002) assertion that the occupation of law enforcement is essentially a

"biological rollercoaster," in the sense that officer's experience high physiological arousal before, during, and after a call to a critical incident (Andersen et al., 2015). While one might think that the pressures from working long hours, responding to various calls, the unpredictability of routine traffic stops may be the source of the greatest amounts of stress for a police officer, the research tends to demonstrate that there is a proportionate amount of stress that originates from the organization as well (Andersen et al., 2015). Just as with soldiers in the military, police officers go through rigorous tactical training to prepare them for whatever they may encounter while on duty; however, there is little to no mental preparedness training for police officers to learn how to effectively cope with repeated exposures to traumatic situations (Andersen et al., 2015).

During a recent telephone conversation with retired Lt. Col. Dave Grossman (2017), he stated, "Police are a lot like soldiers, in that they are taught to turn it on, but are never taught how to turn it off "(D. Grossman, personal communication, October 13, 2017). In his book *On Killing*, Grossman (1995) described to us that soldiers go through a form of operant conditioning, that teaches them how to activate their *kill switch* during periods of combat but are never trained how to turn it off when the fighting is done (Grossman, 1995). There is no training for mental preparedness with soldiers. They are taught to engage and eliminate the enemy. Period. It should not be surprising that when a police officer is involved in frequent, erratic, and extremely stressful situations, there is an increased likelihood that the officer will experience a level of impairment to his or her cognitive, and fine-motor skills; thus, reducing his or her efficiency in the performance of duties (Hope, 2016). Additionally, fatigue begins to set in when the frequency, duration,

and intensity of these situations take place over a prolonged period. As a result, police officers may experience sleep disturbance issues, which can ultimately alter their normal behavioral patterns, and response times during critical incidents, which may cause officers to engage in maladaptive methods of coping, thereby increasing the potential for negative outcomes (Hope, 2016).

Hartley, Violanti, Sarkisian, Fekedulegn, Mnatsakanova, Andrew, and Burchfiel (2014) researched the correlation between a variety of sleep disturbance issues experienced by 356 police officers (256 males, 100 females) with three police-specific stressors (Hartley et al., 2014). The study involved police officers who had previously taken part in the Buffalo Cardio-metabolic Occupational Police Stress (BCOPS) study, and the results demonstrated that stress indices were higher for administrative and organizational pressures, but less than 2% of those who participated reported requiring any assistance with proper sleep hygiene, as indicated by the Pittsburgh Sleep Quality Index (PSQI), which is a 19-item instrument with seven subscales: subjective sleep quality, sleep latency (how long it takes to fall asleep), sleep duration, habitual sleep efficiency (how much time is spent in bed), sleep disturbance, use of sleeping medications/sleep aids, and daytime dysfunctions (difficulty staying awake), and measures sleep quality over a one-month period (Hartley et al., 2014). The results of the study showed that officers identified poor sleep quality was related to stress associated with lack of support (organizational, personal), with 54% of the participants achieving a PSQI score of 5 or higher (Hartley et al., 2014).

This lack of mental preparedness is not limited only to members of the armed

forces, but to members of law enforcement as well, and refers to psycho-education about the physical and psychological aspects of stress, and the practical application of the necessary skills to reduce stress and elevate resilience, which then assists police officers with 1) improved decision making during critical incidents, 2) situational awareness, and 3) efficiency in utilization of resources (Andersen et al., 2015). However, repeated and prolonged exposure to stressful events can develop into maladaptive behavioral responses with police officers, thus calling for more mindfulness-based techniques, and/or interventions (Snippe, Dziak, Lanza, Nyklíček, & Wichers, 2017). According to Snippe et al. (2017) such mindfulness-based techniques can assist with reducing emotional reactivity to the perceived stressor; however, Snippe et al's (2017) study did demonstrate that while the concepts of "worry and rumination" were quite linear in nature (Snippe et al., 2017). Nevertheless, the repeated use of mindfulness-based stress reduction (MBSR) over a period of time showed a significant decrease in "daily stress and negative affective states" (Snippe et al., 2017).

Conclusion

This review of the literature established the foundation for the current study. The most prevalent item suggested is that while there is still no concrete definition as to what police culture is (Aamodt, 2018; Cordner, 2016), the evidence of the research shows it to be an organizational, para-militaristic culture that operates under a specific set of values and norms unlike any other. What the evidence does seem to show is that officers tend to identify organizational pressure (i.e., lack of support, organizational demands) as being the most stressful aspect of their profession (Anderson et al., 2015; Violanti et al., 2016;

Hartley et al., 2014; Leppma et al., 2017). Lazarus and Folkman's (1984) Cognitive Appraisal Theory suggests that an individual's reaction to stress will always be determined by how he or she perceives the situation causing the stress, and that this perception is based on the respective culture/s of the individual, which has been demonstrated through the empirical research expressed in this chapter as it relates to law enforcement.

Chapter 3 will discuss the methodology of the study, the rationale behind the study's design and includes a section on the population, sample size, recruitment strategies, data sources, instrumentation, and how the data was analyzed. The chapter also addresses and threats to validity and ethical concerns.

Chapter 3: Methodology

The purpose of this quantitative study was (a) to analyze the effect of stress among police officers, and (b) to determine if the size of the agency (small, medium, or large) has any influence on what police officers identify as stressful. CAT (Lazarus & Folkman, 1984) was used for this study in order to address the gap in the literature, as the concept of appraisal theory has not been researched as it relates to how the culture of law enforcement contributes to an officer's perceptions of, and response to, stress. This study also built on a study conducted by Violanti and Aron (1995), which also examined those factors in law enforcement that police officers find to be the most stressful. There have been many changes in the field of law enforcement over the last 22 years since the Violanti and Aron (1995) study, and this study sought to compare those differences, in order to identify the areas that require attention.

This chapter discusses the methodology of the study, starting with the rationale behind the study's design and the approach to the topic. It includes a section on the population, sample size and recruitment strategies, data sources and instrumentation, and how the data were analyzed. The chapter closes with a section that addresses threats to validity, and ethical concerns.

Research Design and Justification

This research explored the perceptions of stress experienced by police officers during the course of performing their various duties and drew on inferences about how the culture of law enforcement contributes to, and influences, those perceptions. To accomplish this goal, a survey design was used because it was most appropriate for this

study; it assists researchers with identifying "trends, attitudes, or opinions of a population" (Creswell, 2014, p. 249). As noted above, the profession of law enforcement does not always afford officers a time for activities outside of their normal, daily routines. Therefore, in order to conduct this research in a timely and efficient manner, it was prudent to use a research design that fit into a officers' busy schedules.

Sample Information

Participants were selected utilizing a convenience sampling technique. Tongco (2007) suggested that a purposive sampling technique is the most efficient and effective method when studying a specific culture, because it assists researchers with ensuring that the data they gather is accurate, and that the participants of the study are reliable and competent, so as to avoid damaging the integrity of the study (Tongco, 2007). However, Rudestam and Newton (2015) explained that when a researcher is looking for participants who will "contribute to an evolving theory" because they have experiences that are most relevant to the research questions, then a convenience sampling technique is the most appropriate (Rudestam & Newton, 2015, p. 124). The only required characteristic of this particular sample population was that each participant was an active duty member of law enforcement.

Role of Researcher

Creswell (2014) educated us that the purpose of any quantitative research is to explore the relationship between variables, which can be measured by any number of methods, and then later analyzed utilizing statistical techniques (Creswell, 2014). Unlike qualitative research, the quantitative researcher has little to no interaction with study

participants, so as to avoid any bias that might adversely affect the validity of the study (Simon, 2011). As this study is a survey design, it provided a numeric description of attitudes, and/or opinions regarding the perceptions of stress experienced by police officers to develop more effective methods of reducing or eliminating those stressors.

Methodology

This study looked to clarify how stress is perceived and rated by police officers within the context of their occupation/culture, quantitative research was determined to be the most appropriate method for this research. Two hundred and forty-five members of law enforcement were asked to volunteer for this study. A letter of research intent was sent to the National Police Suicide Foundation (NPSF), asking for their assistance with the data collection process. Upon being granted permission by the NPSF, a sample packet of the PSS was sent, along with a disclaimer that explains that no actual demographic data about the participant would be gathered; however, each participant was asked to provide information about their age, years of service, and size of agency, in addition to completing the actual survey. As the researcher was not directly involved in the collecting of the data, the data is henceforth referred to as archival data.

The National Police Suicide Foundation provides ongoing training for law enforcement personnel across the country. Research packets were distributed to study participants during those trainings. Participation in the study will be completely voluntary. Initially the packets were mailed to the director of the foundation. Once completed, the packets were then returned to the researcher. Each packet contained an informed consent stating that participation was voluntary, and that by filling out the

surveys, he/she was agreeing to participate in the study. It included information on the name and contact information of the director of the NPSF, should any questions or concerns regarding the survey arose. It will also include information on how the participant can obtain a summary of the findings. The NPSF has a comprehensive list of therapists across the country that provides services directly to law enforcement. If a participant finds that participating in this study is stressful, he/she would have been provided with a list of referrals from their local area.

Instrumentation

The data collection instrument utilized for this study was a hardcopy version of Spielberger's et al. (1981) Police Stress Survey (PSS), which is an instrument that consists of 60 items, and three subscales that assesses specific sources of stress: (a) administrative and organizational pressure (23 items) which includes satisfaction with departmental policies and procedures, fairness of rewards, performance, and the judicial system; (b) physical and psychological threat (24 items) which includes dangerous situations and experiences; and (c) lack of support (13 items) that includes political pressures and relationships with supervisor and coworkers. For the purposes of this study, stress was the dependent variable, which was determined through a rating system of 0 – 100, where the higher the number equals the greater the stress perceived for each item; whereas size of agency was the independent variable. No permission was required for the PSS, as Spielberger's et al. (1981) instrument is an open access government sponsored document, and as such is freely available for use in whatever manner is required, so long as it is cited properly. According to Martelli, Waters and Martelli (1989) the PSS has an

internal consistency reliability of .90 for both the administrative/organizational and physical/psychological stressors subscales. The administrative/organizational subscale showed statistical significance as it relates to measures of job satisfaction and organizational commitment (Martelli, Waters & Martelli, 1989).

Research Questions

The research questions to be answered in this study are as follows:

RQ1: Are there significant differences between department sizes on their level of officer's perceived stress as it relates to administrative/organizational pressure?

H_0: There is no difference between department size and perceived stress by members of law enforcement in relation to administrative/organizational pressure.

H_1: There is a difference between department size and perceived stress by members of law enforcement in relation to administrative/organizational pressure.

RQ2**:** Are there significant differences between department sizes on their level of officer's perceived stress as it relates to physical/psychological threats?

H_0: There is no difference between department size and perceived stress by members of law enforcement in relation to physical and/or psychological threats.

H_2: There is a difference between department size and perceived stress by members of law enforcement in relation to physical and/or psychological threats.

RQ3**:** Are there significant differences between department sizes on their level of officer's perceived stress as it relates to lack of support?

H_0: There is no difference between department size and perceived stress by members of law enforcement in relation to lack of support.

H_2: There is a difference between department size and perceived stress by members of law enforcement in relation to lack of support.

Threats to Validity

As with any research study, no measurement is completely infallible. Therefore, threats to internal and external validity will exist, and must be accounted for. Creswell (2014) explained that researchers must explain the steps they will take to validate the "accuracy and credibility of their findings" within their respective proposals (Creswell, 2014, p. 201). The most significant consideration will be whether or not the changes in the independent variable are responsible for causality in the dependent variable. According to Creswell (2014), internal threats to validity result when a researcher's "experimental procedures, treatments, or participant experiences" (p. 234) threaten to cause the researcher to make inaccurate inferences from the data collected on a specific population; whereas, external threats arise when the researcher generalizes beyond the groups/population not in the study (Creswell, 2014).

It was suggested in a study conducted by Violanti and Aron (1995) that one internal threat to validity would be whether an officer will be completely honest in his or her answers regarding interdepartmental practices, such as how they feel about lack of administrative support, or disciplinary actions (Violanti & Aron, 1995). The reason why an officer may not offer a truthful answer to the questions posited on the survey is that they may fear their answers will have a negative backlash on their careers. To ensure complete anonymity, a disclaimer was posted in the introduction to the survey that will inform each participant that his or her individual responses will be kept confidential, and

that no personal information will be gathered, or disseminated to any agency. However, the overall findings of the study will be provided to the NPSF to be used in future conferences.

Data Analysis Plan

Stress by its own definition is not just a single, one-sided factor; it is multifaceted, and complex, and therefore the reactions to it will be markedly different from one person to the next. To effectively examine the research questions of whether department size influences the perceptions of stress experienced by a police officers, three separate ANOVA's were conducted for each research question, where the stress index was the dependent variable, and size of department was the independent variable (3 levels: small, medium, large). SPSS software (IBM SPSS Statistics version 21; IBM Corp., 2012) was used to perform the statistical analysis for this study. For each item, the officer rated the perceived stressfulness of experiencing the event from 0 to 100 (0 = no stress, 100 = maximum stress), which created a stress rating for each event. The officer also provided the frequency of occurrence of each event over the past month (total frequency in past month) and past year (total frequency in past year). Multiply the rating by the frequency for past month, and for past year to get both values, which is known as the "stress index". The total stress index for each of the three subscales for the past month and the past year was used as the dependent variable.

Ethical Procedures

Creswell (2014) explained that researchers must anticipate any potential ethical concerns that may exist prior to the collection of data (Creswell, 2014). Creswell (2014)

also informed us that proper ethical practices do not just protect the participants, but also protects the integrity of the study itself, which includes the "authenticity and credibility" of the data collected (Creswell, 2014, p. 92). Additionally, ethical standards assist with protecting the reputation of the organization where the study originates. The primary ethical consideration for this study was protecting the anonymity of those members of law enforcement that chose to participate in the study. Walden University's Institutional Review Board (IRB) approved this study and deemed that it met all ethical standards and the IRB approval number for this study is 06-14-18-0518617.

The data collected is being maintained per Section 8 of the American Psychological Association's (2017) Code of Ethics, which states that participants will be provided adequate informed consent that notifies them prior to taking the survey that the data collected will kept confidential, and no personal information will be shared with their respective agencies, or other participants. The participants' names do not appear on any documents. The documents are being kept in a locked box, and only the researcher and the research chair has access to this data.

Summary

This chapter provided the research questions, research design method, process of participant selection, method of collecting data, and addressed the primary ethical considerations related to the study. This quantitative study sought to examine the perceptions of stress experienced by police officers from the perspective of Lazarus and Folkman's (1984) Cognitive Appraisal Theory utilizing Spielberger et al's (1981) Police

Stress Survey and determined if there were any significant difference in perceived stress among police officers between small, medium, and large departments.

Chapter 4 explains the results of participant responses from the paper survey, the demographics, data collection process and analysis.

Chapter 4: Results

Introduction

This chapter presents an analysis and explanation of results of the study that utilized Spielberger et al.'s (1981) Police Stress Survey. The purpose of this quantitative study was to examine the perceptions of stress related to the profession of law enforcement according to police officers from departments of three different sizes. The goal was to determine if there were any significant differences in what they identified as the most stressful aspect of their occupation. This was achieved through the use of archival data provided by the National Police Suicide Foundation. The research questions to be answered in this study were as follows:

RQ1: Are there significant differences between department sizes on their level of officer's perceived stress as it relates to administrative/organizational pressure?

RQ2: Are there significant differences between department sizes on their level of officer's perceived stress as it relates to physical/psychological threats?

RQ3: Are there significant differences between department sizes on their level of officer's perceived stress as it relates to lack of support?

Setting

Each of the participants who volunteered for the study were police officers from various regions across the United States. At the time, they were taking part in voluntary training conducted by the National Police Suicide Foundation.

Demographics

There were 93 male police officers, and 51 female officers surveyed in this study. Fifth-eight officers were from a large police department, 68 were from a medium-sized police department, and 18 were from a small police department. The ages of the participants ranged from 25 to 67, with a mean age of 44. The years of service ranged from 1 to 38 years, with a mean of 15.5 years.

Data Collection

Before conducting the survey, a thorough literature review was conducted. It showed that there were substantial research findings into what had previously been identified by police officers as the most stressful aspect of their profession. According to a 2016 report by the Bureau of Justice Statistics (BJS), there are 18,000 federal, state, county, and local law enforcement agencies in the United States, which employ over 1 million active-duty officers (BJS, 2016). Recognizing that it would be impossible to survey each of these agencies, I sought to sample a number that would provide a satisfactory representation of the population. A power analysis for an analysis of variance (ANOVA) with five levels and two dependent variables was conducted in G*Power to determine a sufficient sample size using an alpha of 0.05, a power of 0.80, and a medium effect size ($f = 0.25$); (Faul et al., 2013). Spielberger et al.'s (1981) Police Stress Survey (PSS) identified three subscales as areas of most significance: administrative / organizational pressure, physical / psychological threats, and lack of support.

A total of 245 participants from Utah and New York were invited to take part in the research; however, only 144 completed the PSS during their attendance at a voluntary

training seminar conducted by the National Police Suicide Foundation between May and June 2018. I utilized archival data collected from the Police Stress Survey (Spielberger et al., 1981) that was completed by participants attending voluntary training conducted by the NPSF. The response rate for the survey was at 60% due to the fact 101 participants were not active members of law enforcement. Upon completion of the surveys, the packets were mailed to me, where the Stress Index scores were calculated manually for each survey completed, and then entered into the SPSS dataset in order to run the analyses.

Each participant was provided an informed consent, which was attached to the survey booklet. Each participant understood that their participation in the survey was completely voluntary, and that they could choose not to take part in the research with no worry of reprimand from their command and would have no effect on their involvement in the training being conducted by the NPSF. Participants understood that no personal information would be collected or disseminated to any organization or person prior to the completion of the survey. Each packet was assigned a numerical value, which also served as a participant identification number to be used during the data analysis stage.

Data Analysis

There are several assumptions that must be met to ensure valid results, including (a) stress index scores were normally distributed for police officers within Small, Medium, and Large departments, (b) participants represented a random sample of their respective populations, (c) small, medium, and large stress index scores were independent of each other, and d) the variances of the stress index scores in the Small, Medium, and

Large departments were equal. There was no evidence to suggest that these assumptions were violated, therefore a one-way ANOVA was appropriate because it was used to compare the differences between three or more means for independent groups.

Administrative/Organizational Pressure

A one-way ANOVA was conducted to test the hypothesis of whether department size has a significant difference in a police officer's level of perceived stress as it relates to administrative/organizational pressure within three different sized departments. One assumption of the one-way ANOVA is that all groups have equal variances. The result of the test produced an F statistic of 2.82 (past month) and has a p of .062. Since the p value for the past month is greater than a standard alpha level of ($p > .05$), we can infer that the variances did not differ and that the assumption of equal variances was met. We can also fail to reject the null hypothesis, and can say the result is statistically non-significant $F(2, 141) = 1.54$, $p = .219$, $\eta^2 = .021$. This non-significance may be a result of the relatively small sample size ($N = 144$).

However, the result of the test also produced an F statistic of 3.11 (past year) and has a p of .05. Since the p value for the past year is less than or equal to the standard alpha ($p \leq .05$), thus we reject the null hypothesis, and say the result is statistically significant $F(2, 141) = 1.42$, $p = .245$, $\eta^2 = .020$. For this reason, the results of the Tukey HSD post hoc test were examined. Table 1 shows the means, standard deviations, and 95% confidence intervals generated by the Tukey HSD test. The Tukey test indicated that Medium sized departments perceived stress much more significantly than Large departments ($MD = 2.79$, $p = .996$). The 95% confidence interval estimate the differences

between these means ranged from -184.86 to 184.86. As this interval does not contain zero it suggests a real difference between the population stress index scores. Although there is some evidence to suggest that police officers from Medium sized departments perceive stress in the area of administrative/organizational pressure much more significantly than officers working in large departments, the small sample size prevents a conclusive interpretation. It is recommended that this study be repeated with a larger sample size.

Physical/Psychological Threats

A One-Way ANOVA was conducted to test the hypothesis of whether department size has a significant difference a police officer's level of perceived stress as it relates to physical/psychological threats within three different sized departments. The assumption of the One-Way ANOVA is that all groups have equal variances. The result of the test produced an F statistic of .746 (past month) and has a p of .476. Additionally, the result of the test also produced an F statistic of 1.43 (past year) and has a p of .243. Since the p values for both past month and past year is greater than a standard alpha level ($p > .05$), we can infer that the variances did not differ and that the assumption of equal variances was met. We can also fail to reject the null hypothesis, and say the result is statistically non-significant $F(2, 141) = .332$, $p = .718$, $\eta^2 = .005$. This non-significance may be a result of the relatively small sample size ($N = 144$).

Lack of Support

A one-way ANOVA was conducted to test the hypothesis of whether department size has a significant difference a police officer's level of perceived stress as it relates to

lack of support within three different sized departments. The assumption of the one-way ANOVA is that all groups have equal variances. The result of the test produced an *F* statistic of 3.13 (past month) and has a *p* of .05. Since the *p* value for the past month is less than or equal to the standard alpha ($p \leq .05$), the null hypothesis is rejected and the result is statistically significant $F(2, 141) = .674$, $p = .511$, $\eta^2 = .009$. For this reason, the results of the Tukey HSD post hoc test were examined. Table 1 shows the means, standard deviations, and 95% confidence intervals generated by the Tukey HSD test. The Tukey test indicated that large-sized departments perceived stress much more significantly than Medium departments ($MD = 53.62$, $p = .506$). The 95% confidence interval estimate the differences between these means ranged from -167.39 to 167.39. As this interval does not contain zero it suggests a real difference between the population stress index scores. Although there is some evidence to suggest that police officers from large-sized departments perceive stress much more significantly in the area of Lack of Support than officers working in medium-departments, the small sample size prevents a conclusive interpretation. It is recommended that this study be repeated with a larger sample size. The result of the test also produced an *F* statistic of 2.54 (past year) and has a *p* of .08. Since the *p* value for the past year is greater than a standard alpha level of .05, we can infer that the variances did not differ and that the assumption of equal variances was met. I can fail to reject the null hypothesis, and say the result is statistically non-significant $F(2, 141) = .589$, $p = .556$, $\eta^2 = .008$. Again, this non-significance may be a result of the relatively small sample size ($N = 144$).

Table 1

Descriptive Statistics

	Size of Agency	Mean	Std. Deviation	Sig.	*N*
Administrative/Organizational Pressure - Past Month	Small	155.8642	83.24	0.062	19
	Medium	232.7928	185.83114	0.107	68
	Large	229.9991	184.64083	0.107	57
	Total	221.5367	176.25182	0.087	144
Physical and/or Psychological Threats - Past Month	Small	150.0479	172.7888	0.476	19
	Medium	195.46	266.81006	0.678	68
	Large	181.0114	155.25769	0.679	57
	Total	183.7489	216.26497	0.62	144
Lack of Support - Past Month	Small	189.9626	101.97043	0.047	19
	Medium	239.8724	195.24222	0.095	68
	Large	243.5879	183.91796	0.095	57
	Total	234.7578	180.90228	0.066	144
Administrative/Organizational Pressure - Past Year	Small	498.1416	282.94537	0.048	19
	Medium	655.5456	491.15944	0.154	68
	Large	710.8865	507.74588	0.155	57
	Total	656.6828	478.09515	0.069	144
Physical and/or Psychological Threats - Past Year	Small	491.4347	442.55143	0.243	19
	Medium	452.3837	350.51546	0.204	68
	Large	548.6246	407.73031	0.204	57
	Total	495.6316	386.43322	0.215	144
Lack of Support - Past Year	Small	573.6553	330.43915	0.082	19
	Medium	648.5744	538.1954	0.226	68
	Large	710.3239	495.53509	0.226	57
	Total	663.1317	497.66454	0.118	144

Areas of Interest

As it has been indicated several times through the course of the research, the PSS is divided into three subscales: administrative/organizational pressure, physical/psychological threats, and lack of support. Within each of these subscales, there

emerged several points of interest that were consistent regardless of the agency size (small, medium, or large). Of the 144 participants of the study, 130 members of law enforcement identified that Insufficient Manpower to Adequately Handle a Job had a mean stress index score of 371, with the second highest being Excessive Paperwork with a mean stress index of 360 as rated by 118 participants. Additionally, under the subscale of physical/psychological threats, two areas that garnered the highest scores were a) Dealing with Family Disputes and Crisis Situations, which received a mean score of 664.2, as rated by 114 participants; and b) Situations Requiring Use of Force, which had a mean score of 73.3.

An interesting caveat to this subscale, was that of the 144 participants, only a total of 6 officers identified killing someone in the line of duty as being stressful, with a mean score of 75. The lack of this particular stressor becomes significant, as it opens the door for exploration into the widely perceived public opinion that all police officers engage in the use of deadly force, and it worth noting that the difference in the number of officers involved in such an event between agencies was not significant. Finally, under this subscale of lack of support, the three most prominent areas of perceived stress were a) inadequate support by supervisor, with a mean score of 275.6 as identified by 105 officers; b) inadequate support by department, with a mean score of 272.7 as identified by 109 officers; and c) poor or inadequate supervision, with a mean score of 312.7 as identified by 78 officers.

Summary

Chapter 4 provided a description of the setting, demographics, data collection, and data analysis of this research study. The archival data provided by the National Police Suicide Foundation was manually scored and imported into the SPSS software dataset. The SPSS software assisted in organizing and analyzing the aforementioned stress index scores of 144 participants. The survey scores provided insight into what individual officers perceive as being the most stressful aspect of their profession and solidifies the concept of Lazarus and Folkman's (1984) Cognitive Appraisal Theory that each person will interpret stress differently, therefore their reactions to those stressors will also be different. However, as this researcher had no actual contact with the participants during the administration of this survey, there was no way to ascertain what those responses were in order to determine whether they would be classified as either positive or negative.

Chapter 5 will include the interpretation of the findings, limitations of the study, recommendations for future research regarding police stress, implications, and a conclusion.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative study was to ascertain what today's police officer perceives as the most stressful aspect of his or her profession, and to determine if there are any significant differences between what police officers identify as stressful within small, medium, and large sized police departments, and if the size of the department has any influence on those perceptions. The study also sought to identify those areas that are the most significant, and later to (a) develop effective strategies to reduce those stressors and (b) to educate the general public and leaders in the law enforcement community in order to bridge the gap between the community and the police.

From the completed Police Stress Survey (Spielberger et al., 1981), several areas were identified unilaterally between police officers working in small, medium, and large departments in Utah and New York. Most researchers agree that the profession of law enforcement comes with its own series of inherent risks and job-specific stress (Russell, 2014; Ma et al., 2015; Biggs, Brough & Barbour, 2014). This study found that the sources of stress experienced by police officers tends to be more associated with lack of manpower, and inadequate supervision and/or support from their leaders, and agencies as a whole.

Interpretations of Findings

As mentioned in Chapter 2, this study sought to build on a previous study conducted by Violanti and Aron (1995), which identified several areas that police officers identified as the most stressful aspect of their profession. The research questions of this

study asked if there were any significant differences in how police officers from different sized departments perceived stress in relation to their profession. As it relates to administrative/organizational pressure, the results indicate that police officers from medium sized departments perceive greater amounts of stress than their counterparts in large or small police departments. The results also indicated that officers from large police departments perceived greater amounts of stress than their counterparts in small- and medium-sized agencies in the areas of physical/psychological threats and lack of support. One reason may be that larger departments may have an entirely different outlook on their roles within the community; in addition, the culture of a larger department may also be significantly different from the culture of smaller departments.

In the Violanti and Aron (1995) study, the two highest-ranked stressors were killing someone in the line of duty and experiencing a fellow officer being killed (Aron, 1995). In their study (Violanti and Aron, 1995) the mean score for killing someone in the line of duty was 79.38, while the mean score in the present study was only 75. This demonstrates that, even after more than 20 years since the first study was conducted, this particular stressor still ranks very high among police officers despite the relatively small sample size.

This study identified several areas related to stress perceived by police officers, such as (a) insufficient manpower to adequately handle a job, (b) excessive paperwork, (c) dealing with family disputes and crisis situations, (d) situations requiring use of force, (e) inadequate support by supervisors, (f) inadequate support by department, and (g) poor or inadequate supervision. When compared to the Violanti and Aron (1995) study, the

mean scores were significantly higher in the aforementioned areas by an average of 560%, which demonstrates the changes that have occurred in the world of law enforcement since the original study, and what police officers identify as meaningful in terms of stress.

The most significant change noted is how officers appear to feel less confident in their supervisors, and departments as a whole. What can be inferred from this study, is that a paradigm shift in the culture of law enforcement is beginning to take place, where the attitudes and values are shifting from the collective to a more individualistic perspective. In other words, while officers may still hold true to their "secrecy and silence" (M. Aamodt, personal communication, January 2018), there appear to be many officers who are wanting to express their feelings openly to the leaders of law enforcement in order to achieve a measure of reform with regards to supervision and departmental support. The roles and responsibilities of police officers have changed dramatically over the last 50 years, especially with regard to how police officers contend with a hostile public attitude. However, as we now live in an extremely litigious, media-controlled culture of political correctness, it is understandable why law enforcement administrators may wish to err on the side of caution in order to avoid creating an even greater atmosphere of negativity, and public scrutiny following certain high-profile cases (e.g., Ferguson/Michael Brown, Baltimore/Freddie Gray, Baton Rouge/Alton Sterling) by following protocols mandated by departmental policy.

Limitations of the Study

This study was conducted with members of law enforcement from two different regions: Utah and New York. The responses from participants did not differ dramatically because of the regions they are employed in, but those geographical differences may have some role to play in what officers from the East Coast, and officers from the Western States perceive as stressful. The original study conducted by Violanti and Aron (1995) had a total of 110 participants, while this study consisted of 144 participants, from three department sizes: Small, Medium, and Large. Creswell (2014) suggested that because of these characteristics, the study might involve stratification, where the specific characteristics of the population are represented in the sample, and "reflects the true proportion in the population" (Creswell, 2014, p. 158). However, no stratification was included in the sample selection.

In Chapter 1, one limitation that was identified was whether participants would actually be active law enforcement officers. As the data was being provided by the National Police Suicide Foundation derived from a voluntary training hosted by the aforementioned agency for police officers employed in Utah and New York, it was assumed that this limitation would be nullified. However, of the 245 surveys submitted, only 144 participants were active duty police officers. Nevertheless, the number of qualified participants was sufficient, and would be considered representative of the entire population. Another limitation that comes into question with this particular type of research, is whether or not the participants were completely candid with their responses to the survey questions.

Recommendations

The relationship between the community and members of law enforcement has become tenuous, giving way to mistrust and misunderstandings of each other, which have blossomed into an almost adversarial partnership. However, this study has revealed that the most significant stress experienced by officers comes from within their own ranks. In the Violanti and Aron (1995) study, inadequate support by supervisors was ranked third in terms of significance; but in this study, it was ranked the highest regardless of the size of the agency. Based on this information, forensic psychologists and law enforcement administrators should work together in developing/implementing evidence-based practices that will allow all officers to express their thoughts, feelings, and ideas in an atmosphere where there is no fear of reprisal, such as one might find during a critical-incident debriefing. The forensic psychologist mediates the meeting, and all parties involved are allowed to express themselves openly, and very candidly.

The structure of law enforcement has often been compared to that of the military, in that there are clear roles that each member plays and there is a decisive chain-of-command to be followed (Andersen et al., 2015; Workman-Stark, 2017). Therefore, relationships between enlisted members and officers is strictly professional, and it is a rare occurrence when those professional boundaries are crossed. The same may hold true for members of law enforcement, in the sense that fraternization between high ranking officials and new recruits may be seen as a negative, both within and outside of the organization. One recommendation would be to foster stronger relationships between leaders and their subordinates to develop stronger levels of trust and camaraderie. If an

officer feels that the relationship with the organization, and his or her superiors is strong, then there is a greater probability that the officer will perform better in his or her duties.

Another recommendation for forensic psychologists and law enforcement leaders as it relates to establishing and maintaining positive relationships with younger officers and recruits is training in the proper use of technology and social media (i.e., Twitter, Facebook, Instagram), which should begin from the first day at the academy and continues throughout an officer's career. In addition to training newer recruits, veteran officers and law enforcement administrators must also be trained in the proper use of such technology to stay abreast of the advancements and maintain tighter control over what information is released to the public. There are several instances where younger officers are being either reprimanded, or even fired because of their misuse of certain social media outlets and apps. Forensic psychologists should take a very proactive role in conducting a series of seminars on the use of social media to the family members of police officers on a regular basis to educate them on what types of posts to Twitter or Facebook would be considered appropriate, and what would be considered damaging to the officer, and the department as a whole.

Future Research

This research study explored the perceptions of stress among 144 members of law enforcement from two regions. Future research studies should be conducted in multiple regions, with a larger sample size in order to compare the findings of this study to determine if there are any significant differences in what officers from other areas find as being the most stressful aspect of their profession. Additionally, Spielberger et al's

(1981) Police Stress Survey may need to be updated to better reflect changes in the perceptions of law enforcement, to include more questions, such as addressing the concept of police suicide, how officers experience those types of incidents, and whether drugs/alcohol has ever been used as a coping mechanism for stress. Questions about the stress associated with negative social media attention should also be included.

This becomes an extremely relevant issue considering that at the time of the creation of the PSS, there was no such thing as the world wide web, or social media, and the proliferation of mass media had not even begun. What we have seen with regards to this issue is that almost everyone has a cell phone, and incidents involving the arrests of certain populations are being caught on camera, which are then posted on websites like Facebook and YouTube, that often only capture a fraction of the situation, but doesn't show the event in its entirety. This in turn generates a negative perception of law enforcement in the eyes of the general public and has on several occasions caused members of the community to lash out violently against police officers (i.e., Dallas, Baton Rouge, New York). By exploring how officers perceive this particular type of stress, forensic psychologists may be able to offer a greater insight into what solutions can be developed in order to assist police officers in coping with this stressor.

Implications

From a social change perspective, understanding the stressors that police officer's face each day becomes an assistant in understanding the methods necessary in repairing the tenuous relationship that exists between the community at large and members of law enforcement. However, the strained relationships don't seem to begin and end between

law enforcement and the public, they also appear as a result of this research to exist within the very halls of justice, between the officers themselves. This division within the ranks was not always the case, but it does appear that the Code of Blue has somewhat deteriorated or is not as guarded as it once was. Officers have become more suspicious of not just the public at large, but of each other, which makes their jobs a lot more difficult and stressful. By now having a snapshot of what officers find stressful within their own departments, it opens the pathway for researchers to begin the process of developing more a productive dialogue between police officers and departmental leaders, which should begin during the early phases of training for newly indoctrinated cadets.

In any type of workforce, productivity is considered a key ingredient to the overall success of the organization. The same holds true for law enforcement, because this productivity is increased when officers feel more positive about not just the work they do, but when there is a well-established feeling of trust between themselves and their supervisors. This trust can only be facilitated and nurtured when communication between officers and their leaders is encouraged and established, and both sides feel as if they are being heard and validated.

It has been suggested from the literature review that lack of support from the department, as well as supervisors, has had a marked increase in feelings of cynicism and apprehension among members of law enforcement, and demonstrated a decrease in their motivation, especially in a post-Ferguson era (Shjarback, Pyrooz, Wolfe & Decker, 2017). Smith, Tong, and Ellsworth (2016) have explained that this level of appraisal by members of law enforcement should be considered as meaningful, and it must be

addressed if any positive social change both within and outside of the department is to be established. However, this open line of communication and trust must work in two directions if it is to be successful. New recruits and younger officers must not only feel comfortable with openly discussing their thoughts, feelings, and ideas with their frontline supervisors; but the supervisors and departmental leaders must also be comfortable with listening to their subordinates and take in their suggestions in order to foster a mutually beneficial work environment.

Conclusion

The results of this research have contributed to the existing literature, in the sense that it has increased an awareness into what today's police officer perceives as the most stressful aspect of their profession. As it has been shown through the literature review of this dissertation, there have been numerous studies into the concept of police stress, and how it affects officers psychologically, physically, and emotionally. However, little to no research into how officer's from differing sized departments perceive stress has been conducted in order to determine if there are any significant differences in how stress is perceived.

The research questions provided insight into the concept of police stress and offered a deeper understanding of what appears to be most meaningful in terms of appraisal. Police officers, as with any other profession, want to feel safe and secure in their environments, and they want to feel that they are going to be provided with the necessary equipment and manpower to perform their duties. They also want to feel secure in the notion that they are supported by their supervisors, are given proper training and

supervision, and mostly that in these dangerous times they are cared for and not abandoned. By identifying these sources of stress, forensic psychologists can work on developing healthier mechanisms of coping for police officers, thereby reducing the physiological side effects (e.g., cardiovascular disease, impaired motor skills, gastrointestinal issues, excessive absenteeism due to physiological issues). Most importantly, police officers want to feel secure in their positions within the communities they serve. Positive relationships with the community can improve some of the distorted perceptions of law enforcement expressed by citizens via social media and can begin to heal the rift that has widened over the past several years. It must be noted that law enforcement administrators are not solely responsible for repairing these relationships, rather it must be a collaborative effort between the departments, the officers, administration, forensic psychologists, and the public as well.

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Appendix A: Police Stress Survey

I. This section contains a list of job related items that have been identified by police officers as stressful. Please rate each item as follows:

1. Assign a score from 0-100 for each event. The higher the score, the more stressful the item. Mark a value in the stress rating column, even if you have not experienced the event in the past month, or the past year.

1. Assignment of disagreeable duties

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

2. Changing from day to night shift

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

3. Assignment to new or unfamiliar duties

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

4. Fellow officers not doing their job

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**

Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

5. Court leniency with criminals

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

6. Political pressure from within the department

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

7. Political pressure from outside the department

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

8. Incapacitating injury on the job

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

9. Working a second job

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

10. Strained relations with non-police friends

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

11. Exposure to death of civilians

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

12. Inadequate support by supervisor

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

13. Inadequate support by department

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**

Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

14. Court appearances on day off or day following night shift

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

15. Assignment of incompatible partner

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

16. Delivering a death notification

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

17. Periods of inactivity or boredom

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

18. Dealing with family disputes and crisis situation

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

19. High-speed chases

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

20. Difficulty getting along with supervisors

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

21. Responding to a felony in progress

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

22. Experiencing negative attitudes toward police officers

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**

Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

23. Public criticism of police

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

24. Disagreeable departmental regulations

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

25. Confrontations with aggressive crowds

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

26. Fellow officer killed in the line of duty

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

27. Distorted or negative press accounts of police

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

28. Making critical on-the-spot decisions

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

29. Ineffectiveness of the judicial system

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

30. Ineffectiveness of the correctional system

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

31. Personal insult from citizen

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**

Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

32. Insufficient manpower to adequately handle a job

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

33. Lack of recognition for good work

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

34. Excessive or inappropriate discipline

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

35. Performing non-police tasks

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

36. Demands made by family for more time

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

37. Promotion or commendation

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

38. Inadequate or poor quality equipment

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

39. Assignment of increased responsibility

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

40. Racial pressures or conflicts

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**

Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

41. Lack of participation on policy-making decisions

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

42. Inadequate salary

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

43. Accident in a patrol car

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

44. Physical attack on one's person

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

45. Demands for high moral standards

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

46. Situations requiring use of force

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

47. Job conflict (by-the-book vs. by-the-situation)

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

48. Court decisions unduly restricting police

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

49. Killing someone in the line of duty

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**

Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

50. Making arrests while alone

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

51. Public apathy toward police

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

52. Competition for advancement

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

53. Poor or inadequate supervision

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

54. Exposure to battered or dead children

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

55. Plea bargaining and technical rulings leading to case dismissal

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

56. Frequent changes from boring to demanding activities

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

57. Exposure to adults in pain

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**
Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

58. Possibility of minor physical injury on the job

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**

Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**	

59. Put-downs and mistreatment of police officers in court

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**

Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**

60. Excessive paperwork

Times in the past month	**0**	**1**	**2**	**3-5**	**6-9**	**10+**	**Stress Rating (0-100)**

Times in the past year	**0**	**1**	**2-5**	**6-10**	**11-24**	**25+**