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DePaul University

College of Education

Resilience & Wellness Teams: A Comprehensive Mental Health Maintenance Plan for Law Enforcement Officers



A Capstone in Education with a Concentration in Educational Leadership

by

Landon J. Wade

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Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Education

June 2021

5/26/2021	
Date	

Certification of Authorship

I certify that I am the sole author of this capstone. Any assistance received in the preparation of this capstone has been acknowledged and disclosed within it. Any sources utilized, including the use of data, ideas, and words quoted directly or paraphrased, have been cited. I certify that I have prepared this capstone according to program guidelines, as directed.

Author Signature Date 5/15/21

EXECUTIVE SUMMARY

The United States enjoys a population of over 330,000,000 citizens who reside in communities which are assigned 650,000 sworn police officers representing just over 17,000 law enforcement agencies. The average length of time that a police recruit spends in formal training in police education and training academies is five to six months. Many of the courses introduced in this initial stage of an officer's career are not presented regularly once the recruit has left the academic environment of the academy.

Officers experience traumatic stress continuously throughout their career and are provided little or no resources to manage the conditions suffered as a result of the exposure. Beside clinically diagnosed mental illnesses, officers may develop behaviors that lead to outcomes such as domestic violence, substance abuse, excessive use of force complaints, lawsuits, biased based policing practices, compassion fatigue, and suicide. In 2019, it was reported that 228 police officers committed suicide in the United States. For perspective, in that same time frame 89 officers lost their lives in the line of duty at the hands of others.

The fear that manifests in officers assigned to populations of ethnic minorities can lead to disproportionate arrests and overall criminalization in these communities. Tragic use of force incidents that were perpetrated by police officers captured on video—beginning with the brutal and inhumane beating by four officers of an unarmed Rodney King in 1991, bridged by LaQuan McDonald 23 years later who was shot 16 times while lying on the ground with a three-inch knife in 2014, and culminating in the murder of George Floyd in 2020—have taken a toll on the consciousness of this country. Police behaviors within a culture of systemic bias-based inequities have likely resulted at least in part from the lack of proper intellectual and emotional preparedness by law enforcement.

The research reviewed for this project has analyzed the predictors that can lead to mental illness outcomes by those exposed to periods of prolonged stress. The predictors are examined through a quantitative data analysis and compared across three studies to determine a potential solution to interrupt the causes of traumatic stress. The studies included respectively, populations of 413,763 active-duty Reserve National Guard soldiers, 434 officers assigned to the Dallas Police Department, and 3,957 United States soldiers deployed to Afghanistan. Items such as time on the job, previous military assignment, and gender were focused on to determine potential outcomes.

Based on the findings and extensive literature reviewed on this topic, an officer wellness and resilience program was developed and proposed as a key function in police training academies throughout the United States. The Resilience & Wellness Team Plan was designed while applying the wellness principles to a preventative and response management system that will be employee-facing from the initial entry into law enforcement and for the entirety of the officer's career. These maintenance activities are analogous to an automotive PitStop.

An officer diagnostic health management portfolio will track engagement in the program and will detail the progress as well as challenges faced by each individual officer. Officers will be required to participate in the wellness clinic after every 75 deployments, as professional milestones years of service such as one, three, five, eight, and eleven-year work anniversaries, and following extraordinary events such as injury to the officer or close colleague, divorce, promotion, and anticipated retirement or resignation. The program will track officers' overall physical and emotional wellness across scientific dimensions to allow for a uniform diagnostic wellness portfolio that will inspire enhanced emotional intelligence and improved moral behaviors.

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INTRODUCTION

An extensive body of research has focused on identifying predictors of Posttraumatic Stress Disorder in police officers in order to effectively develop strategies. Police stress predictors are based on identified categories of police stressors which include family/personal stressors, environmental, job related performances/encounters, organizational stressors, community/media stressors, and justice system stressors. This research investigated two questions: (1) What are the primary causes of PTSD in police officers? (2) Which preventative measures may be applied to reduce or eliminate PTSD in police officers? The vast majority of investigations into this topic have proposed hypotheses regarding the former. *The Diagnostic and Statistical Manual of Mental Disorders*, 5th Edition (DSM-5) lists three primary predictors for traumatic stress: pretraumatic, peritraumatic, and posttraumatic. Each of the predictor categories are described extensively in the research of Marchand et al. (2015). Peritraumatic aspects are highlighted in the research of Galatzer-Levy et al. (2011).

This study will evaluate the effectiveness of preemptive measures aimed at disrupting stress in police officers exposed to continuous traumatic events. Incidents of police suicides, police incarcerations and domestic related events involving police officers are on the rise among police agencies throughout the United States. This has created severed ties with the communities that police officers have been sworn to protect. Suspected causes to the growth in this phenomenon are being examined more closely than ever, as is the notion that in the line of duty police involved citizen deaths may be a result of stress factors influencing officer response behavior.

Police officers serve for years in some of the most hostile environments imaginable and are seldom, if ever, evaluated for mental wellness or any other type of ongoing personal care. The best analogy to consider when formulating a plan forward would be the idea of professional car races spanning hundreds of miles. Over the course of three hours, the drivers and the cars that they operate undergo preventative and restorative maintenance between five and six times per race, yet police officers receive no mandatory preventative maintenance throughout their careers.

Policing is, in theory and the application of its principles, an incredibly difficult and complex profession. It is usually considered a vocation occupied by civil servants which requires little in the way of specialty or expertise.

Problem Statement

Law Enforcement officers are tasked with responsibilities ranging from responding directly to hazardous situations in progress to mediating minor disputes between responsible members of society who are otherwise unable or unwilling to reach an equitable resolution on their own. These professionals are employed to be ever vigilant to ensuring the enjoyment of calm and peace for the citizens in their care. Dr. Rudofossi (2007) references a mythology created by officers who convince themselves that justice is on their side as a self-coping mechanism. This self-diagnosis can easily manifest into an unhealthy superiority complex that may place citizens at risk of becoming victims of overly aggressive, biased policing that far too often results in the use of excessive or deadly force. Officers spend the entirety of their careers in a state of self-reconciliation in terms of navigating through the consequences of stress results. Dr. Dan Rudofossi is a licensed psychologist who spent more than a decade in the role of Uniform Psychologist/Police Sergeant for the New York City Police Department. Dr. Rudofossi was the first to serve in that role for the NYPD, and his contributions to the field of complex PTSD are vast and have inspired a large

volume of research in the industry. Rudofossi (2009) asserted that actual police stress is overwhelmingly associated to multiple cumulative experiences of trauma and loss rather than factors like administrative and bureaucratic challenges present in most professions. Violanti et al. (2018) provided evidence to support the theory that police are negatively affected by the frequent encountering of violent crime victims, incidents with fatalities, public scrutiny and media coverage.

A system of individualized and targeted mental health resiliency care would serve the industry of policing extremely well. A comprehensive design should employ innovative techniques targeting preservation of mental wellness, increased emotional intelligence, heightened justice intelligence quotient and physical fitness and agility training.

Purpose Statement

This research will utilize a quantitative approach through the examination of large data sets from several open source agencies to explore the predictors and pathways that may likely cause Post Traumatic Stress. Morash et al. (2006) reported that crime levels, department sizes, practices, and gender may predict stress. Comparisons will be performed between the combat deployment of military personnel and the continuous uninterrupted response to crimes throughout the span of a law enforcement career. Multivariate analysis will be used with large data sets to determine statistically significant findings.

The population to be examined will include police officers from large metropolitan police departments and United States Army soldier's pre-deployment and post-deployment. The data captured for interpretation in this research was derived from lived experiences of the respective populations.

Definitions of Key Terms

- Posttraumatic Stress Disorder A condition of persistent mental health and emotional stress occurring as a result of injury or severe psychological shock, typically involving disturbance of sleep and constant vivid recall of the experience, with dulled responses to others and to the outside world (American Psychiatric Association, 2013, p. 265).
- Moral Injury The distressing psychological, behavioral, social, and sometimes spiritual aftermath of exposure to such events (Shay, 2014, p. 182).
- *Traumatic stress* an anxiety problem in some people during extremely traumatic events, such as combat, crime, an accident or natural disaster (Chapin et al., 2008).
- Operational stress is a concept rather than a medical term. The term was devised by the Canadian Forces to describe the range of negative health effects caused by military service (Chapin et al., 2008).
- Social performance is the effective translation of an institution's mission into practice in line with accepted social values (Wartick & Cochran, 1985).

Research Questions

- 1. To what extent does continuing traumatic stress affect police officers' mental health?
- 2. What are the factors that help predict PTSD outcomes in police officers?

LITERATURE REVIEW

Henry (2004) examines both the social and the psychological environments of new police officers and how each of those are influenced by the involvement of the officer during the transformation of entering into law enforcement. Additionally, Henry (2004) focuses on the conflict that exists between the personal identity and the occupational identity of officers entering law enforcement for the first time. Based on the researcher of the current study, police officers have an obligation to adhere to the norms of the culture of policing while balancing psychologically and maintaining the moral compass that has guided them for their entire lives. The previous statement does not refer to acting outside of rules, laws or policy, but rather speaks to the burden of attempting to fit into an established culture by understanding its values and processes while serving a public that understandably requires appropriate and fair applications of justice.

Stress and Coping

Krohne (2002) shares how Hans Selye introduced the world to his theory that tracks stress from its introduction into a person's environment, to the processing of the stress by the individual, and finally, to the harm caused by its lingering attachment in the most severe cases. Selye's research was among the first to consider offering a response to victims of traumatic stress that continues for a prolonged period of time and is joined by new stress items. This research is integral in developing strategies for tracking and developing systems that monitor stress exposure and provide the affected individuals with resources along a continuum.

Krohne's (2002) research looks at the mechanics of Selye's General Adaptation Syndrome (GAS) and the three stages of (1) alarm reaction, (2) resistance, and (3) exhaustion. According to Krohne (2002), Selye's theory has inspired an entire generation of research in the area of stress. And although Selye's concepts were revealed to have deficiencies as addressed in Krohne (2002), the overall structure of his research has held up over time.

Frenkel et al. (2020) noted that most critical police incidents are limited in both time of harm and geospatial scope of influence. Frenkel et al. (2020) were quick to discuss the uniqueness of the COVID-19 pandemic not just on the world but in particular on police officers tasked with managing this epic and ongoing hazardous phenomenon.

Kyprianides et al. (2021) prepared a work for the *International Journal of Research and Policy* on the COVID-19 pandemic and police officer wellbeing. The researchers examined the compounded risks faced by police officers who were asked to perform traditional duties and roles while having to consider the potential of themselves being exposed to a potentially deadly virus. Additionally, officers were required to learn epidemiological principles of contagions, such as airborn risks, optimal exposure conditions, and ensuring compliance to safety protocols by a less than trusting public.

Kyprianides et al. (2021) found that police officers maintain confidence in their ability to perform their jobs effectively even during times of uncertainty and emergency. The researchers point to a strong organizational support network—and the officers' understanding of its goals—that increases confidence and can have a positive effect on competence in policing.

Galovski et al. (2018) performed a longitudinal study on the symptom trajectories in untreated victims of trauma and utilized many of the elements of the events which unfolded in Ferguson, Missouri in 2014 after the police shooting death of Michael Brown in that city. Galovski

et al. (2018) contend that their research revealed evidence that racial disparities in Ferguson at the time extended to diminishing mental and physical health. Police officers were under continuing scrutiny but were expected to report to work each day amidst looting, protests, negative news coverage and direct violence aimed at them. Galovski et al. (2018) emphasize that the condition in Ferguson was not exclusive to that community but rather it has spread across the United States and has taken on its own sociopolitical life form.

Maguire et al. (2016) point out research that credits the actions in Ferguson, Missouri 2014 as the catalyst for many reform programs within policing and also most notably the establishment of the President's Task Force on 21st Century Policing in December 2014 by then President Barack Obama. In Maguire et al. (2016), the "Ferguson Effect" is explained as the reluctance of police officers to engage in lawful preventative law enforcement activities for fear of encountering situations that may lead to use of force or scrutiny for the type of engagement performed. Due to the endless news cycle and the endless platforms of media story dissemination, police officers throughout the United States keep a watchful eye on the incidents involving officers and the subsequent legal outcomes that follow, which has the opportunity to present stress to officers hundreds of miles away.

Maguire et al. (2016) contend that violence against police officers may not be directly correlated to socioeconomic themes. However, evidence does support the theory that underserved communities feel that police resources are utilized to support those in economic levels that are thriving and that communities below the poverty line may harbor animosity that can manifest into violence against the very group that is employed to maintain justice. Maguire et al. (2016) describe the conflict between police forces and minority communities, noting that current movements fuel anxiety as threatening populations increase in numbers and influence.

Dave et al. (2021) prepared a document immediately following the January 6, 2021 riots at the United States Capitol building in Washington, D.C. The hours that followed the initial storming of the Capitol were viewed around the world in real time through streaming services and major news outlets. Dave et al. (2021) collected data from several sources close to the event by both geography and by professional responsibilities. They included in their research strong words from political insiders who denounced the activities and who also criticized then then sitting U.S. President for his part in inciting the actions of the day.

Five people ultimately died as a result of the insurrection, including a Capital Police Officer named Brian Sicknick. Dave et al. (2021) presented evidence of a larger condition underway as the riot was dissected later. Their research relied on trusted accounts of pipe bombs having been recovered from the grounds that were tools of planned domestic terrorism actions that were thwarted by law enforcement. As a result of the events of January 6, 2021, 20,000 National Guard troops were deployed to D.C., where they spent several weeks. National police agencies waited with bated breath as the details unfolded, all the time preparing for similar protests that were anticipated to be focused on several state capitol buildings in the United States. These activities did not materialize; however, the anxiety and stress caused by the potential are likely sources of continuing mental injury in many service personnel.

Mapping Police Stress

Henry (2004), who is a former New York City police officer, presented research describing the close relationship between death and police work. Henry (2004) examines the death experience

through the lens of active-duty police officers and illustrates the differences between death caused without intent—such as the traffic accidents or natural causes—versus death caused by murder.

Hickman et al. (2011) note that the most extreme type of stress faced by police officers is fatal encounters directly involving or perpetrated against police officers. The study references the 2009 shooting death of four Lakewood, Washington police officers who were seated and working on reports on their laptops in a coffee shop, as well as two other officers who were killed in the line of duty within two months of the Lakewood tragedy. Hickman et al. (2011) compared research from related studies which focused on the unpredictable potential for violence in policing and found that the effects of the killing of officers are felt even among officers who had no direct association to the event.

Hickman et al. (2011) examine the fight-or-flight reaction to high stress events in which police officers participate and the damage caused in this process by immunosuppression. Hickman et al. (2011) further research from other studies into the body's stress response mechanisms and the manner that they operate, whether the triggering stress is real or just perceived to be real. Hickman et al. (2011) participated in an innovative experiment in which officers were supplied wrist worn devices that monitored their heartrates during normal patrol assignments to establish data of stress responses in varying police response environments.

Fighting Police Trauma

Papazoglou and Tuttle (2018) note that the expectation for police officers by government, the public and their own agencies is that they are mentally/physically/emotionally fit and prepared to perform at an optimal level whenever deployed for service. Papazoglou and Tuttle (2018) and previous researchers on the topic of police stress acknowledge that police officers will be placed, by the very nature of their assignments, in situations that would elicit a range of emotions from individuals with the strongest resolve yet be expected to suppress natural feelings of fear, anger, and emotional grief. The very mechanisms that allow officers to endure the effects of trauma in real-time often linger into both their consciousness and subconsciousness creating the opportunity for the deterioration of mental wellbeing.

Papazoglou and Tuttle (2018) examine the ethos of police culture and confront the notion that suggests that somehow upon entering the industry of policing, officers are transformed into unbreakable independent warriors. Papazoglou and Tuttle (2018) reference extensive literature that suggests that psychological intervention is the most effective disruptor of traumatic stress in police officers and that this strategy also improves the overall future mental health and wellbeing of officers who participate in the process. Papazoglou and Tuttle (2018) intended to unearth opportunities to strengthen trust in police officers who would benefit from psychological services specifically designed to address the extreme traumatic stress present in policing. Barriers that have historically prevented this type of corroboration include an officer's fear of being deemed unfit for duty, losing the ability to work supplemental assignments off duty, and the stigma of appearing weak among her/his peers (Papazoglou & Tuttle, 2018).

Rudofossi (2009) is recognized as New York City's first uniformed police psychologist and has been a powerful voice in the field of stress for over two decades. Rudofossi (2009), based on his research and professional experiences, estimates that the average police officer who works on the job for 30 years will personally be involved in 900 traumatic event incidents.

Defunding Police

Weichselbaum and Lewis (2020) tackled the sensitive topic of police defunding in an article focusing on Minnesota's nearly yearlong move to defund its police department and redirect funds to social services that are said to directly assist the communities. Weichselbaum and Lewis (2020) discussed the layers of complexities involved in police defunding as well as an overhaul or dismantling of police departments in such a critical time. Nationally, calls for defunding police agencies and examples of drastic reform initiatives directed at policing have caused another source of organizational stress for police officers. Weichselbaum and Lewis (2020) highlight the long history of entanglement of policing and racism. The flash points for the calls to shift funding and resources from police are the increase of the availability of video in police encounters with citizens and the disproportionate number of minorities who suffer under current policing strategies.

Worrall et al. (2018) examines the social scientific studies focused on police shoot/don't shoot decisions and how research supports the idea that those decisions are more often based on racial bias than not. Worrall et al. (2018) explored the reported instances when officers were, by policy and legal statutes, authorized to engage perpetrators while appropriately applying use of force responses but chose not to do so. This behavior would require unique research methods to determine if bias was present or absent in these deployments. Worrall et al. (2018) reported that research has shown that the vast majority of officers who would be considered justified in their use of force chose alternative methods to confront arrestees. Worrall et al. (2018) had the benefit of a larger data population than studies that have preceded theirs and they were thus able to introduce comparisons across cases involving the use of force and those excluding that application of response. Worrall et al. (2018) were able to identify themes and patterns through extensive review of literature on the topic and found that in urban environments fatal shootings involved young African Americans at a disproportionate rate based on census data and the overall population makeup of the areas examined.

Pretraumatic Predictors

Violanti and Aron (1994) utilize Spielberger's Police Stress survey to apply a ranking order to work stress in policing. The items on the survey illustrate external and internal factors that negatively drive stress in policing. Violanti et al. (2018) set out to investigate associations between the stress related to the performance of police work duties and the ultimate result of posttraumatic stress disorder. The researchers make the comparisons between complex and routine stress in police officers. Police officers, by the nature of their vocation, are deliberately placed into scenarios on a daily basis that challenge their mental wellness. "Routine stress may be considered chronic, building up cumulatively over time and producing a slow pathologic effect on persons" (Violanti et al., 2018, p. 2).

Henry (2004) asserts that the conflicts that a rookie officer is confronted with are based on ambiguity fueled by the officer wondering if this is in fact a desirable career path or if the job is beyond the officer's ability to grasp. It is the author of this study's lived experience that this type of imposter syndrome follows officers for at least the first couple of years of service and is revealed infrequently and thus rarely addressed. Henry (2004) discusses the belief and the phenomenon practiced by police officers that in responding to each assignment, they must perform an action even if the exact hazard has not been clearly identified and the solution is not crystal clear to them.

Ranking police stressors allows for a categorical examination of the items that contribute to stress outcomes in officers engaged in active police duties (Violanti et al., 2018). The overall system of police response readiness requires officers to effectively navigate through a spectrum of internal and external stress-causing elements. The enterprise of policing is void of continuity of mental health aid as a measure in combating exposure to traumatic events that may lead to PTSD diagnoses. Data reviewed in this research is available to be utilized by managers in police agencies towards the development of intervention and disruption of the identified stressors (Violanti et al., 2018). The tool highlighted in Violanti et al. (2018) can gauge negative effects to the psychological health of workers and may present the opportunity for organizations to confront challenges to the culture.

Forecasting the first several years of a police officer's career can yield important data in determining the types of mental injuries that may present themselves based on measurable items such as past stress, level of education, age at time of hire. Although Shane (2019) found that as educational levels increase in some police officers, performance decreases, departments are moving towards hiring only those who possess college credits prior to being accepted as recruits.

The industry of policing is currently confronted with calls for reform, enhanced training and the development of policies towards improving the performance of officers, shifting the police culture to one of transparency and responsiveness.

Marmar et al. (2006) take on the task of attempting to untangle cause and effect while formulating a strategy to predict vulnerability to and resilience to PTSD symptoms in officers by beginning the evaluation process prior to critical incident exposure. Even before they experience a traumatic incident, stress can start to build. Police departments function on para-military designs. This structure requires that there is a separation of ranks and hierarchal culture that promotes divisiveness and dysfunction in communication protocols. Violanti and Aron (1994) concluded that operational stress in police officers is second to the stressors caused by organizational effects. These can include autocratic supervisors as well as high expectations of a public that demands clarity. Police occupational stress is a widespread problem because of its numerous negative effects on individuals and on police organizations (Morash et al., 2006).

Van der Velden et al.'s (2010) longitudinal study examined the independent predictive values of frequent confrontations between police officers during their patrols. Saunders et al. (2019) noted the growing pressure on police officers to complete more thorough reports in support of criminal cases as well as the burden of adhering to daily organizational responsibilities. In van der Velden et al.'s (2010) analysis of organizational stressors, problems with colleagues were among the most significant predictor.

Saunders et al. (2019) take a close look at data surrounding effects on police officer stress brought upon by the social medial and the advancement of a 24-hour news cycle. The continuous and unrelenting commentary targeting the police professionals is magnified by the fact that here are expanding platforms for the dissemination of news stories or individual opinions about police performance.

Gerber et al. (2010) extend prior literature while providing evidence to support the hypothesis that shift work, stress, sleep, and health are measurable factors that share a relationship in stress outcomes. Midsize to large departments often have issues with appropriate staffing numbers. This burden falls upon the shoulders of the available personnel who may be expected to frequently work extended hours or may be asked to work rotating shifts. Van der Velden et al. (2010) also found that police officers experience organizational stressors in the form of conflicts, workload and lack of support from supervisors and the agency. Collins and Gibbs (2003)

concluded that organizational culture and officer workload are major contributors to stress symptoms.

Maguen et al. (2009) support the notion that work environment has the strongest connection with PTSD symptoms in police officers. Police organizations, as observed by the researcher of this study for 26 years working as both an officer, supervisor and manager in the industry, are focused on designing measures that will deliver justice response and social services as needed through the utilization of police resources. Maguen et al. (2009) derived results in their study that extended the findings of Liberman et al. (2002), which exposed inferior equipment, daily operational issues, unclear work roles and stressful relationships with colleagues as direct influencers on PTSD symptoms. The inconsistencies and lack of order create a condition of confusion and often times hostility among officers and may affect their ability or willingness to perform duties expected by their role.

Dimensions of job dissatisfaction are strong and significant predictors of stress (Buker & Wiecko, 2006). Buker and Wiecko (2006) measured stress directly on a clinical scale while other characteristics of police work were also examined. Among the major focuses of my research is to further the development of an effective measurement of potential future PTSD and compassion fatigue. Rudofossi (2009) examines secondary mental wellness issues as potential primary issues based on their ability to surface due to ongoing exposure to recurring abusive relationships, social support voids, or participation in addictive behaviors.

Historically, there has been a stigmatization of psychological anguish and mental illness in the policing industry. Bakker and Heuven (2006) reached findings that explain the tendency for police officers and nurses to become emotionally detached and as a result, detach cognitively from their respective jobs. The suppression or non-expression of emotions among police officers may result in relatively high levels of depersonalization as opposed to the empathic and caring attitude from nurses resulting in high levels of exhaustion (Bakker & Heuven, 2006).

Berking et al. (2010) conducted exploratory analysis to identify emotion-regulation deficiencies in police officers with the goal of determining if an intensive training program in this topic would be effective. Results of the research by Berking et al. (2010) supports other literature that point out the unwillingness of police officers to admit having or addressing negative emotions. One of the strengths of the study by Berking et al. (2010) is the fact that a time-staggered design was applied that eliminated the potential for emotion regulation to be influenced by the passage of time. This is key to understanding that officers can have skills introduced into their core competencies.

The lack of open and honest dialogue among police officers and managers has fueled the perception that police officers are disconnected from the communities they serve, especially when those communities are populated by socio-economically disenfranchised populations. Officers often patrol areas within a city that are not the neighborhood of their residence or even an area that they may have frequented if not for their employment duties. This creates an us versus them mentality and can also create stress for officers who are sincerely working towards serving and protecting citizens. "In low trust environments, impersonal trust in human institutions is virtually unknown, and interpersonal trust is largely limited to one's family or immediate associates" (Goldsmith, 2005, p. 450).

Maguen et al. (2009) in their study, argued that prior trauma history was not a predicting factor related to PTSD or work environment stress. The researchers went on to warn that prior trauma history should be utilized as a part of a larger model rather than as a stand-alone variable. Zhao et al.'s (2002) work supports previous research which revealed police officers, on a regular

basis, encounter antisocial, mistrustful and violent members of society. Further investigation by Zhao et al. (2002) discovered that there is a distinct bureaucratic culture associated with most police organizations that typically exclude officers' contributions to departmental operation.

Arntén et al. (2016) furthered the discussion regarding work climate as a stress contributor and utilized three quantitative instruments: The Positive Affect and Negative Affect Schedule, The Learning Climate Questionnaire, and Situational Motivation Scale. The PANAS Scale takes into account positive affect and negative affect as systems of measurement for emotional profiles. The data collected by this method considers a range of feelings that contribute to stress outcomes. Arntén et al. (2016) acknowledge that personality traits of managers well as the clear understanding of the affective profiles of her/his personnel will contribute to the effectiveness of learning behaviors with the tools presented in this research.

Adams and Mastracci (2019) studied a sample of 271 police officers in the United States, some of whom regularly wear Body Worn Cameras (BWCs) during their patrols and others who do not. They used Cronbach's alpha and confirmatory factor analysis in order to confirm reliability of the experiments. They found, "Proliferation of BWCs may exacerbate burnout as police officers balance their accountability to the public, compliance with administrative oversight, and constant surveillance" (Adams & Mastracci, 2019, para. 11). Based on findings from the comparison of data across research projects, Adams and Mastracci (2019) suggest that police departments should require emotion-regulation training to assist officers with coping with cycles of long-term mental health issues.

Dormann and Zapf (2004) developed an instrument to measure Customer-Related Social Stress to further research in this area. This instrument was scientifically proven to be statistically significant in predicting burnout. This tool was not created specifically with police officers as end users; however, the mechanism that inspires its outcomes can easily be applied to the interactions between police officers and citizens during patrol response. Zhao et al. (2002) reviewed items that could be applied to the previously mentioned instrument by further studying the effects of strict adherence chain of command, a narrow span of situational control and how burnout may result from the suppression of individual originality within a police culture.

Peritraumatic Predictors

Asmundson and Stapleton (2008) utilized a sample size of 138 active-duty police officers to examine correlations between anxiety sensitivity and PTSD in police officers. They applied the 17-item Lifetime Traumatic Events Checklist (LTEC) to their research, which measures potentially traumatic events including physical assault, combat exposure, motor vehicle accidents, and others. Asmundson and Stapleton's (2008) analysis revealed that depression symptoms and volume of reported trauma events are good predictors of PTSD symptom severity.

According to Weiss et al. (2010), officers who experience traumatic events infrequently will perceive them as more severe than perhaps they are. Frequency of encounters with trauma events were evaluated through the use of variables, including mistakes by officers that cause injuries, life-threatening man-made disasters, and badly beaten adult victims. By studying frequency alongside severity, Weiss et al. (2010) exposed commonalities across the field and also highlighted the need for further research in this specific category.

Stress manifests itself in various ways and has not shown standard distribution across groups of individuals, even if they maneuver operationally in the same environment across a shared span of time. Invariably this creates a multitude of possible responses based on factors such as

time of day, the officer's past job-related experiences, the history associated with unique environments, etc.

Violanti et al. (2017) investigated the chronobiological aspects of nighttime shift work and the stress caused by attempting to sleep while society participates in the conventions associated with daytime. Police officers experience stress caused by internal and environmental conditions. Folkard and Lombardi (2006) stated that the likelihood for on-the-job accidents during overnight shifts were three times more likely than daytime shift incidents.

Violanti et al. (2017) acknowledged that the police culture experiences similar risk factors as other "hard drinking" occupations and that officers tend to drink together while creating an altered common value system. Hodgins et al. (2001) explored the symptoms associated with PTSD in emergency response personnel and also joined in on the growing body of research into the phenomenon of psychiatric morbidity in workers whose jobs regularly expose them to high levels of stress.

Blumberg et al. (2019) reported that graduates of the police academy enter into patrol duties that often requires working evening hours and weekend assignments causing a strain in relationships between spouses and children. Carlier et al. (2000) describe how traumatic outcomes can develop from the frequency at which police officers are exposed to incidents such as fatal car accidents, child abuse, homicide, and other crimes affecting victims.

Carlier et al. (2000) present evidence within their study supporting the new methods being utilized in the field of psychotherapy to work with the body in addressing the long-term effects of trauma on the human body. Bowler et al. (2016) explore the topic of comorbidity of PTSD, Depression, and anxiety among police officers who responded to 9/11. The DSM-5 states that much more research is needed to gain a better understanding of comorbidity but did however compile data from United States Veterans who served in Afghanistan and/or Iraq that illustrated co-occurrences of PTSD and degrees of Traumatic Brain Injury.

The original study that produced the above data was approved by the Center for the Protection of Human Subjects at The University of Texas Health Science Center at Houston (Jetelina, et al., 2020). Jetelina et al. (2020) involved survey data from 434 police officers, which represented 97% of those asked to participate. 18 individual officers participated in five focus groups (Jetelina, et al., 2020). This level of participation on a topic as sensitive as police mental health is not consistent with the past culture of policing. The researcher of this study has served over two and a half decades in the industry of law enforcement and witnessed first-hand reluctance of officers to share emotion or details of stress associated with experiencing extraordinary traumatic events as a matter of routine deployments.

Hur (2013) deduced that employees are likely to voluntarily leave public sector jobs when satisfaction is low, thus decreasing organizational commitment. According to Hur (2013) managers should determine the reasons for low job satisfaction among employees and create solutions to prevent good performers from leaving the organization.

Collins and Gibbs (2003) observed through their research and the analyzing of data that organizational reform has provided little improvement on levels of stress-related mental illness in police officers. Gerber et al. (2010) suggests that police organizations should implement policy changes geared towards fostering more healthy work environments in an effort to uniformly decrease stressors. Officers are often left to feel that they are left out of the decision process when it comes to input on organizational matters. The lack of informative daily briefings also leaves officers with a sense of exclusion.

Arble et al. (2017) embarked upon the goal to modify a preliminary test method to improve coping and reduce the occurrences of stress in newer urban police officers. They recommended exams that more closely scrutinize an officer's capacity to not only respond to complex assignments while assessing and executing appropriate response protocols, but also to be equipped with the fortitude to frequently respond to a high volume of critical incidents.

Arble et al. (2017) asserted that their development and execution of a preventative program revealed valuable information regarding resilience to trauma. This contribution will certainly assist the industry of law enforcement in formulating strategies to forecast and combat stress in advance of its adverse effect on officers. Arble et al. (2017) further explain the need for comprehensive systems that are likely to ensure the development of healthy responses to the exposure of traumatic incidents during the span of an officer's career. Officers are at risk of experiencing same social stressors as the rest of society in addition to job related stress.

Marchand et al. (2015) concur on the idea that research has not yet supported a consensus about the significance and predictive power of factors that influence PTSD symptoms. PTSD requires the self-reporting of a potentially affected individual or actual professional diagnosis. There are more barriers which include unearthing the root causes and the time exposed to stressors that may have influenced the negative health result. Marchand et al. (2015) attempted to create an environment that would consider and appropriately respond to the limitations identified in previous studies regarding creating predictive alerts for PTSD in police.

Carlier et al. (2000) turned their focus to the cognitive structuring of traumatic events in relationship with police officers with and without PTSD. The study does recognize that cognitive dimensions vary from subject to subject in regard to stress assessment. This method of scaling variables creates a perspective that may help develop tools geared towards identifying and defeating stress obstacles.

Asmundson & Stapleton (2008) revealed through their study that police officers who fear anxiety related symptoms are creating a risk factor for future PTSD. Conversely, Marmar et al. (2006) conducted research that points to posttraumatic reactions being averted when police officers have experienced successful field operations and have participated in training focused on crisis encounters.

In Marmar et al. (2006), the researchers developed a modeling plan for individuals in determining risk and resilience in regard to critical incident exposure. Based on a review of available literature, Marmar et al. (2006) established the perspective that takes into account such pre-trauma variables as stress susceptibility based on genetics, gender, history of trauma in individuals, and intellect.

Posttraumatic Predictors

As detailed in Friedman and Higson-Smith (2003), police officers experience lower posttraumatic symptomology when they perceive high social support from the community and individuals in their lives. During the course of a career spanning one or two decades, police officers who are assigned to field duties experience near-constant traumatic stress.

Van Der Kolk (1988) recalled that it was Kardiner (1941) who first described the full syndrome for what is now known as PTSD. Kardiner (1941) referred to the phenomenon of posttraumatic stress as a mental disorder that affects the body and the psyche. A study performed by Blumberg et al. (2019) of officers in Finland shows that moral injury significantly predicted PTSD and the associated clusters of avoidance, hyperarousal, and re-experiencing.

Smid et al. (2009) reviewed criteria for three distinct types of symptoms associated with PTSD: re-experiencing of events, avoidance of reminders, and hyperarousal. In doing so, they were able to determine that police officers develop coping mechanisms that cover the issues rather than appropriately responding to the signs of mental illness. When treatment is avoided and the officers continue field work where they continue to be exposed to trauma events, they convince themselves that they are healthy and that there is no need for intervention.

Blumberg and Papazoglou (2019) included in their research an examination of the loss experienced by police officers in dealing with deceased victims in the line of duty and the everpresent idea that the officers may experience loss among their collogues. Much of the stress discussed in this current research has to do with perceived or anticipatory harm that may occur based on the inherent danger of police work. Officers are faced with the realization that each traffic stop, or domestic disturbance call may develop into a life ending ordeal.

It is important to note that Smid et al. (2009) encountered and excluded data from an experiment on a particular cohort in which the diagnostic instrument did not utilize PTSD assessments according to DSM criteria. The research of Smid et al. (2009) does continue the research into delayed PTSD and does match several of the eight exposure criteria outlined in the DSM-5. Andrews et al. (2007) offer that studies that provide evidence consistent with DSM-5 criteria are necessary in illustrating the importance of definitional issues in determining the existence of delayed-onset PTSD. In Andrews et al. (2007) the researchers examined studies that concluded delayed onset PTSD was experienced by individuals who reported prior stress symptoms. Ehlers et al. (2004) concluded that memories of traumatic events are often segmented and may feature the worst part of the moment and not enough supportive information to allow for accurate predictions of future re-experiencing. Further investigation is needed in the area of predicting this type of PTSD with a degree of certainty.

The mental harm resulting from the cumulative exposure of multiple stress events creates a heightened opportunity for diminished cognitive behavioral performance in officers responding to critical incidents. This is also evident in the phenomenon of Secondary Traumatic Stress. Jenkins and Baird (2002) probe the outcomes of secondary traumatic stress experienced by those in policing, fire service and nursing. This category of stress involves the transference of another's grief onto the responder who shares the event through association or supportive listening and awareness.

Carlier et al. (2000) noted that a requirement for thoroughly understanding the clinical diagnosis of PTSD is the deliberate identification of experiences involving trauma and the symptom outcomes that these exposures are likely to cause. Carlier et al. (2000) recalled that past studies have utilized objectives, stressors, and even focused primarily on war zone stress. Police officers respond repeatedly to calls for service for the duration of their career in many instances unaware of the type of hazards awaiting them while military personnel have a comparatively abbreviated time and are often warned on the impending dangers associated with military deployment.

Carlier et al. (2000) found that police officers create a multidimensional framework through which they process trauma by creating a lens that considers hazards, safety, and moral responsibility. Carlier et al. (2000) assert that when it is difficult to control or predict a stressor, the individual is more likely to experience PTSD. Rees and Smith (2007) assert that traumatic stress carries with it the burden of physiological symptoms brought on by societal non-participation in the response to those in need of assistance against exposure to stressful encounters or factors.

Bryant and Harvey (2002) outlined the Network Theory in which they proposed a strategy that would allow clinicians to first identify symptoms and monitor the network interactions that assist them to measure stress. Ehlers et al. (2004) offer evidence in the phenomenon of intrusive re-experiencing of PTSD when individuals are confronted with triggers or reminders of the traumatic event.

Bowler et al. (2016) did assert that role changes such as retirement or being unable to work due to injury elevated the level of PTSD in officers surveyed. Police officers are accustomed to being utilized for their skills and are left to feel inadequate if they are viewed as incapable or unavailable to stand shoulder to shoulder with colleagues who continue to contribute to justice activities.

Blumberg and Papazoglou (2019) further reviewed the elements of stressors and identified the fact that less severe psychic wounds may be underexamined by police executives. The researchers in Buker and Wiecko (2006) point to the mixed implications of their study but also explain how their findings advance the literature on this topic by citing that the most notable stressors in policing are associated with structure and management practices. Police organization in the United Sates are not equipped with career advancement path systems. There are also poor management training courses offered once an officer is promoted. These two facts are often voiced within police departments as points of stress and frustration.

Recommendations from Buker and Wiecko (2006) call upon administrators to direct more energy on modernizing management methods to create relaxed and supportive environment for officers. There is a huge disconnect between what is considered upper management and even front-line supervisors within police environments. The void created by the former often translates to distrust among front line officers and those tasked with supervising them daily.

Marmar et al. (2006) point to the fact that there are over 600,000 law enforcement officers in the United States and that there is a growing need for insulating officers from the vulnerability to the harms resulting from traumatic stress. Bergman et al. (2016) asserted that if law enforcement officers are armed with the ability to be self-aware, they might be inspired to become more objective when employing their cognitive and physiological faculties in time of trauma. Bergman et al. (2016) noticed that there was a significant reduction in organizational stress through mindfulness after officers had reported a higher level of acting in a state of awareness.

Emotional Intelligence

Al Ali et al. (2011) reached findings that support previous data regarding the effectiveness of emotional intelligence (EI) on job performance in stress environments. Like many researchers, they agree with Salovey and Mayer's (1990) definition of emotional intelligence: "the ability to monitor one's own and others' feelings and emotions, to discriminate among them and to use this information to guide one's thinking and actions" (p. 189). Al Ali et al. (2011) found that employees possessed skills such as conflict resolution, adaptive performance, and achievement motivation, which all played positive roles in the acquiring of organizational satisfaction. Constructive communication with members outside in the community was also found to be enhanced through high levels of emotional intelligence. Through hierarchal regression, Al Ali et al. (2011) determined that officers who are taught how to develop the ability to increase their EI will display behaviors that can be joined with personality and cognitive ability in order to further predict job performance outcomes. This is particularly beneficial in policing because these tools will allow

analysts and managers to design corrective plans if needed for officers who display diminished capacities in any of the former areas.

Kelley et al. (2019) investigated the uses of the Bio-psycholosocial Model in an effort to gain insight into performances of police officers under stressful conditions. Kelley et al. (2019) relied on empirical work to review the different types of influence stress has on active-duty officers. The Biopsycholosocial Model has shown significant evidence to support the idea that favorable outcomes are inspired by the physiological toughness displayed by officers who are able to lower anxiety, increase performance, while enjoying emotional stability during performance motivated by stress. Kelley et al. (2019) found that officers who have had positive prolonged associations or interactions with black people were less likely to use lethal force during stress encounters with minority individuals. Kelley et al. (2019) went on to suggest that officers who deliberately participate in community-oriented activities will enjoy the same type of reduced anxiety when confronted with members from minority groups.

In Berking and Wupperman (2010) the researchers determined that there was a significant improvement in the skill of emotion-regulation as performed by police officers who had undergone training aimed at this result. The findings in Berking and Wupperman (2010) suggest that programs should be developed with the intention of enhancing officer's capabilities in emotion-regulation as a prevention in mental-health issues.

In research by Ioannis and Ioannis (2002), the principals offer that emotional intelligence, as a framework, can be utilized to direct individuals towards coping with strong emotions. The findings in the aforementioned research revealed a strong link between emotional intelligence, occupational stress, and organizational missions. Ioannis and Ioannis (2002) utilized a hierarchical regression analytical scale to determine if there were traits that might accurately predict the effect of emotional intelligence on job related stress and the relationship between those findings and commitment to an organization. The findings of the study yielded significant results, however there was not enough evidence to ensure an identifiable set of predictors.

Rosete and Ciarrochi (2005) gave preliminary evidence in support of the idea that executives who possess high emotional intelligence are likely to be more effective leaders and will be have a positive influence on the culture of their respective company. In Garbarino et al. (2011) the authors raise the idea that internal factors such as overtime, shift changes, and the lack of uniform communication throughout the ranks cause enormous stress on police officers. Many of the factors that prove harmful to officers' well-being over the span of a career are internal department factors that may be more easily addressed than the external factors that are difficult to manage.

The Cognitive Model (Sokol & Fox, 2019) dissects trauma incidents by categorizing them into situation/event, automatic thought, emotional reaction, physiological reaction, and finally behavioral reaction. This model is an accurate depiction of the nature of response to real time police critical incidents. Officers repeat the actions several times throughout each tour of duty and will store the stress which invariably builds over time. This type of elastic response requires an abundance of energy and fortitude; it also asks the participant to display a high level of emotional intelligence. When appropriately applied, the construct of high emotional intelligence can be contagious to the culture. Departments have begun to employ the assistance of consultants, usually from academia, to train police departments on the importance of this emerging tool.

The term Post Traumatic Stress Disorder (PTSD) has been associated with the mental outcomes experienced by individuals or groups working in critical response capacities. Becker et al. (2009) echo others in noting that police officers tend not to seek mental health services, perhaps

internalizing the idea that they cannot demonstrate strength and authority if they allow themselves to feel stress. Nonetheless, police stress continues with the officer throughout a career and often times presents as hostility during encounters with loved ones within the home environment.

Erwin et al. (2005) surveyed 1,100 officers to collect data around intimate partner violence (IPV) by police officers. Erwin et al. (2005) found through reviewing data from similar studies that 25% of police families recorded having experienced IPV while the officer was still active in law enforcement. One of the immediate challenges in this study was the fact that of departments serving populations over 100,000, only 55% of them have polices in place that are focused on IPV. Erwin et al. (2005) utilized univariable and logistic regression analysis and found that 61% of those accused of IPV were over 34 years of age and 69% were reported to be minorities, 84% were males, 89% were patrol level officers without rank, and 47% were assigned to high crime districts within their municipalities. psychological screening data collected at the time of hire as a condition of employment were evaluated to establish a foundational baseline for the study.

Burnout

Blumberg and Papazoglou (2019) argue that because police officers fail to emotionally engage with victims, they develop compassion fatigue. Blumberg and Papazoglou (2019) explain that burnout among police officers occurs when they face organizational stressors, frustrations with the criminal justice system and resentment from community. "Police officers face a broad spectrum of moral dilemmas and morally ambiguous choices, which can lead them to question their moral beliefs" (Blumberg & Papazoglou, 2019, p. 29).

Andersen et al. (2018) conducted research into compassion fatigue and compassion satisfaction among police officers in North America. Their research found that officers who enjoy social support from friends, family and peers are much more likely to experience reduced psychological distress. Andersen et al. (2018) further showed that the effect of increased compassion satisfaction is an overall reduction in burnout and compassion fatigue; they recommended that police organizations conduct routine assessments.

The wellness and safety of law enforcement officers is critical not only for the officers, their colleagues, and their agencies but also to public safety (President's Task Force on 21st Century Policing, 2015). The culture of policing is consistent in its expectation that officers will work through difficulties without sounding mental health alarms. The industry, at present, does very little to ensure that the mental wellbeing of all officers is maintained on a regular basis.

In Bowler et al. (2016) the reluctance by police officers to seek mental health evaluation and care due to the possibility of having their confidentiality breached and being negatively judged by peers. There has been a lack of concrete information regarding the process of securing records and interactions with mental health care professionals by officers. This adds to the long-practiced taboo of suffering in silence rather than being ostracized in the field.

This research is concerned with three stages of police exposure to traumatic stress: prior to entering the field and experiencing job related stress, as officers progress through their career and are exposed on a regular basis, and post career once the stress has been interrupted by lack of direct continuing exposure. The literature shows distinct differences at each level of stress involvement for officers and also predicts characteristics that may put an officer at risk of suffering mental illness.

Euwema et al. (2004) reviewed research spanning 25 years that highlighted the fact that burnout has negative consequences for police officers and the departments to which they belong.

Surprisingly, Euwema et al. (2004) found that burnout deriving from emotional exhaustion and fueled by cynicism was related to less dominant behavior by police officers in their interactions with members of the public. This study does illustrate the result that burnout in professional settings often have an outcome of conflicts with customers outside of a particular organization (Euwema et al., 2004).

Euwema et al. (2004) confronts the inevitable transaction between burnout-professionals and civilians in response situations that are required by duty expectations. Citizens expect a level of professionalism and respect from police officers while police officers expect that their presence should require cooperation and respect. Both groups would benefit in hostile encounters from remembering the participants are human, and all may be carrying the burden of a challenging experience into the situation.

Carlier et al. (1997) confirmed that severity of trauma is a good predictor of PTSD symptoms at both 3 months and 12 months. First responder careers have taken on a new complex dynamic than even two decades ago. In the past these workers were committed to the vocation and dedicated at least 20 years to the respective organizations. Turnover rates were low but according to Carlier et al. (1997) that has changed over time. Officers and fire fighter understand now that there are many options once they have enjoyed the status of first responder. "Police and fire fighters who cannot cope may tend to pull out of these professions at an early stage" (Carlier et al., 1997, para. 21).

Van Der Kolk (1988) exposed the gap in research into PTSD outcomes by asserting that as people mature, they are more likely to process and overcome stress or that the symptoms are walled off only affecting isolated aspects of mental functioning. Van Der Kolk and Sapora (1993) examined the therapeutic benefit for victims of trauma to sort through the emotions of traumatic experiences with a professional in an effort to assist in having symptoms subside.

Hart and Cotton (2002) drew on prior research to find that no compelling evidence exists that has confirmed that policing is the occupation with the most stress related harm. Additionally, Hart and Cotton (2002) suggest in their study that new officers are aware to some degree, the types of hazards they will face in the line of duty and they are free to leave law enforcement if they feel incapable of handling the challenges associated with working as police officers.

Clark et al. (2015) implored upon the bureaucracy of policing to expand its strategies of intervention from a customary approach to a more focused singular one. Law enforcement agencies often operate in small silos rather than working in unison to address industry issues such as wellness, stress exposure, and uniformed innovative training standards. The trauma that first responders encounter is uninterrupted and can accumulate over time. Without safeguards or therapeutic response methods, these traumata can develop into behaviors that can negatively affect the entire culture.

Clark et al. (2015) defined the stages of critical-incident trauma as: the actual trauma, the ensuing shock, and the recurring traumatization. Clark et al. (2015) recommend that policies developed in response to critical-incident trauma should manage intervention strategies with individuals and organizations in mind. Clark et al. (2015) compares its finding to other research and offers that a therapeutic intervention for crime scene investigators should include components focused on changing the manner in which police organizations operate in terms of stress response for its members.

Clark et al. (2015) reviewed best-practice research and discovered that current police intervention strategies originated from military intervention designs. The participants in the study conducted by Clark et al. (2015) consisted of investigators from 14 law enforcement agencies from

a Midwestern state. The findings in Clark et al. (2015) were surprising in that the CSI investigators admitted that the nature of their work is stressful; however, they also agreed that they enjoyed the work, which decreased the level of stress.

Lindemann's (1944) Symptomology and Management of Acute Grief theory holds that the type and severity of grief reaction can be predicted with a degree of certainty. The measures utilized to ensure accuracy in this process can be teamed with components of other predictive measures within this body of research in order to develop responses to threat items prior to them manifesting into PTSD.

Lindemann (1944) holds that acute grief joins the field of psychological syndromes and that it may present after a critical incident or may be delayed. One of the traits of acute grief according to Lindemann (1944) is that the symptoms may be exaggerated or otherwise indistinguishable by a traditional category.

Violanti and Aron (1994) enjoyed a sample size of 103 of varying ranks, time on the job, age, and ethnic backgrounds while utilizing the 60-item Police Stress Survey created by Spielberger et al. (1981). The findings of the study helped to advance the field in understanding the types of triggers that influence stress outcomes in police officers at all ranks. The data helps to create a pool of knowledge that may be utilized in further determining predictors, creating preventative training, and ultimately contributing to a culture of support and mental health preparedness.

Violanti and Aron (1994) acknowledge that police organizational structures have not historically supported meaningful interpersonal relations between subordinates and their supervisors. Nikolaou and Tsaousis (2002) in a study unrelated to policing contend that a high level of emotional intelligence of the individual associated with an organization will serve that employee well even when working with an institution that doesn't aim to intentionally help with the development or growth of the individual. The active and deliberate participation of supervisors and management personnel in the process of responding to the stress caused by the organization would serve as a valuable tool in convincing their reports to be active in these health pursuits.

Snider (2015) reached findings consistent with previous research focused on the negative association between occupational stress brought upon by factors such as organizational behaviors and expectations and the overall mental wellness of the officer. The recommendation by Snider (2015) is that early screening of officers be conducted to detect and develop programs for burnout, sleep disorders, and mental wellness.

For decades police departments have grappled with the commitment of rebuilding trust among the citizens that make up the communities they serve and protect. Many court cases have played out in the headlines of news outlets and have help to energize a dialogue of concern for in reference to tragic occurrences at the hands of law enforcement officers. In a ten-year study conducted by Collins and Gibbs (2003) it was revealed that evidence exists to pinpoint specific factors that contribute to high risk of mental ill-health by officers. Certainly, there are response calls in policing that are considered less stressful than others, however each police interaction with the public brings about inherent stress based on the inability to accurately predicts the intentions of others or ultimate outcomes.

The professions likely to have abundant research in this area are vocations such as military personnel, medical staff, and first responders. Officers are available to witness the most unimaginable events within a society. The first emergency calls are usually directed towards police resources and the responders do so with little knowledge of what types of situations they will encounter.

Engaging in regular and organized meetings with the community has proven to bridge the divide between police and citizens. Most often members of the community just want to be assured that their voices are relevant and that those entrusted to protect them due so responsibly and with integrity. "The community policing philosophy and programs require new policing skills not previously tested for in the selection process or taught in basic training academies" (Bradford & Pynes, 1999, p. 284).

The extensive review of this available literature sheds light on complex PTSD issues present in the field of policing. Research that has preceded the current investigation of police occupational stress were limited in the number of stressors considered (Morash et al., 2006; Spielberger et al., 1981). Police officers are exposed to extraordinary amounts of continuing traumatic stress throughout their careers. In the time that I have spent in service, I have witnessed the recovery of deceased citizens passing away of natural causes, traffic accidents involving fatalities, and individual suffering from injuries caused by gunshots. Research has established that "vicarious trauma" resulting from exhaustion, hypervigilance, and avoidance also has adverse effects on officers working in policing (Baird & Kracen, 2006).

Palm et al. (2004) conducted research into the phenomenon of vicarious traumatization in which individuals experience secondhand exposure to traumatic events through contact with colleagues or other stimuli. The affected person is vulnerable to present symptoms similar to those which attach to the primary harmed individual by being in close proximity and sharing in exchange of the reimagined event. Post mission briefings are held in police environments but are designed to employ best practices and avoid hazards that were endured previously. Hammond and Brooks (2001) are concerned with the advantages of having a Critical Incident Stress Debriefing mechanism built into emergency response protocols.

Emotions like guilt and shame can help us navigate life, if they are meaningfully interpreted as motivators to reconcile with those affected by our behavior and to facilitate social belonging. Berry et al. (2010) coined the phrase "workplace wellness" which highlights behaviors needed to promote and enhance the effectiveness of employees through a deliberate employer program. Carlier et al. (1997) collected evidence supporting the factors that predict PTSD in police officers, factors such as inadequate amount of time post event, officers lack of trust in their organization's support, and the polarization felt from members of the community.

Marchand et al. (2015) agreed during their study that traumatic events can generate negative effects on the psychosocial health and overall vocational functioning of officers. Griffin et al. (2019) discussed how wars in both Afghanistan and Iraq produced numerous veterans who have committed and witnessed events that are in conflict with their deeply rooted personal beliefs.

Roberson (2019) indicated that manager encouragement has immense power on officers' loyalty and allegiance to the organization. Snider (2015) asserted that if the activity of engaging in transgressions leads an individual to moral injury, and shame exists at a high level, the likelihood is that the perpetrator is void from the luxury of self-forgiveness.

Recruit and refresher training offered through the Education and Training Division is often inconsistent and certainly does not currently have the expertise shared by non-law enforcement organizations. Additionally, there is not a consistent mechanism of response for mental illness response within policing. "Police academy training for recruits in America is not uniform in either content or in the number of hours required for certifying a police officer" (Palmiotto et al., 2000, p. 16).

Police department training is typically geared towards providing officers with the technical expertise to perform tasks rather than instilling in officers' concepts that could effectively guide them when faced with a wide range of challenges. Koper and Lum (2012) assert that perhaps the police should have an open, direct and constant line of communication with research professionals in order to have an analytical perspective applied to the concepts of law enforcement training.

In an article written by Van Brunt et al. (2015), the authors discuss "cold-blooded police killing" (p. 1). This article portrays officers who have used deadly force against citizens who have suffered death as a result of the encounter with police. Officers serving in urban police departments are aware of this negative sentiment and may harbor aggressive feelings against a large group as a defense to the feelings of anxiety.

In Violanti et al. (2018) officers were asked to self asses the types of calls for service that they themselves deemed as extraordinarily stressful. This approach is valuable and should be part of a mandated after-action debriefing protocol. Officers would benefit from being made aware of the types of calls general result in certain levels of stress. The process for accounting for these causes and outcomes could then be implemented into a training environment for officers entering the field of law enforcement for the first time.

Hammond and Brooks (2001) are concerned with the advantages of having a Critical Incident Stress Debriefing mechanism built into emergency response protocols. Post event briefings are conducted for most major law enforcement missions; however, these documents are often intended for viewing and dissemination among middle or upper-level managers. Rank and file officers would surely benefit from being allowed to engage in a tactical conversation regarding the outcomes of a recent deployment. I would potentially provide relief in terms of anxiety as to whether or not the officer's performance was adequate or conversely added to operational deficiencies.

In order to engage citizens effectively, there must be an agreement to the ideology of order by both the community and the officials tasked with enforcing laws. "Police require voluntary cooperation from the public to be effective in controlling crime. They need citizens to comply with their directives and a tacit willingness to obey the law in general" (Mazerolle et al., 2013, p. 35).

The glamorous way that cops are portrayed in countless television shows as well as in the cinema is evidence that the public holds high regard for the ideological concept of a group dedicated to fearless remain available to protect strangers against harm too dangerous for the average person to defeat. Loader and Walker (2001) express in a descriptive manner the importance of police in society by linking them with the population's sense of order over chaos while confronting situations that may preserve life or result in death.

Currently, several national law enforcement agencies are operating under Consent Decrees. This regulatory sanction requires that departments adhere to standards outlined in the notice of a determinant period of time. Control over police by local politicians, conflict between urban reformers and local ward leaders over the enforcement of laws regulating the morality of urban migrants, and abuses (corruption, for example) that resulted from the intimacy between police and political leaders and citizens produced a continued struggle for control over police during the late 19th and 20th centuries. Kelling and Moore (1989) performed research into the origins of the tumultuous relationship between citizens and the police by chronicling the era when police agencies were overtly controlled by politicians at all levels of government. Those instances that created distrust due to corruption and abuse directed towards members of migrant populations have caused moral injury from the 19th and 20th century continue to persist today.

Ramsey and Robinson (2015) illustrated a path towards developing consistent training that will inspire positive results in regard to better police-citizen encounters based on the philosophy of de-escalation. Training is the best prevention for the development of bad habits and behaviors. Requiring regular in-class training and on-line refresher courses may provide the type of guidance necessary to ensure compliance with rules and regulations as well as establishing character behaviors more in line with the emerging culture of law enforcement.

Through this system officers would undergo redundant training directed toward a set of measurable outcomes. In an effort to defeat the potential for inefficacy, training must consider the pitfalls of the effects of an established culture in policing. This culture has created a condition within the ranks that is often times based on tradition rather than innovation or technical training. Many of the posts that I have been assigned to are void of standard operating procedure manuals or products. Police culture often relies on the experiences and the handing down of performance steps from veteran officers to newly assigned members.

It has been a long-standing belief that police departments operate under and agreed upon institutional but unwritten "code of silence." The suggestion here is that law enforcement officers work in concert to conceal evidence, perpetuate bias', and /or maintain a barrier of us versus them mentality. There is no such code; however, the culture of policing has received a much-needed make-over that allows for transparency and accountability at all levels. This shift in the culture has an effect on officers who may have served for more than a decade and undoubtedly adds to the level of stress in the performance of their duties.

Weisburd et al. (2000) suggest that police officers have the ethical dilemma of doing what is right and protecting a culture that has historically expected unity and silence when involving what have been irresponsibly been considered police internal matters. McCraty and Atkinson (2012) talk about the fact that police officers are not only exposed to operational stressors, but also experience higher levels of stress through organizational structure and climate. In my experience, even though law enforcement has begun a robust conversation and developed a template for stress response, the organizational stress factors have not amply been addressed thus far. Officers who aspire to climb through the ranks or be assigned to desirable units within an organization often work long hours, volunteer for dynamic assignments, and generally take on more of a workload than their counterparts. The unintentional byproduct of this behavior may ultimately disguise itself as presumed traumatic stress through exposure to external harms.

Amaranto et al. (2003) described the state of the police environment as negative in nature and exposing officers to encounters in each community that reveal the worst parts of humanity.

This study sets out to create a viewpoint that considers the implications and hazards for not applying adequate training or response protocols to police officers who are affected by traumatic stress. The current research extends former studies by considering utilizing data in order to design wellness and training platforms intended to serve as check-ups for officers who are exposed continuously to critical incidents. The research will work towards the goal of removing stigma away from self-reporting or acknowledgement by officers that they may need mental health assistance.

The researcher endeavors to also create curriculum that is introduced on this topic immediately upon new cadets entering into the police academy. At the forefront of goals is the engagement by frontline supervisor who will play a pivotal part in enduring adherence and compliance to new protocols for mental wellness while officers are actively engaged in the line of duty. Training and community engagement will be considered as part of the overall construct of this plan based on the fact that the end result of untreated recurring stress often manifests into

episodes that directly affect others who may come into contact with an officer suffering from a stress condition.

The research design will be quantitative but will utilize some key components from a phenomenological approach in order to add observations from the perspective of a participant in the cycle of stress harm for over two and a half decades. This method will allow the researcher to analyze data from across the field while applying nuanced findings specific to variables that have been under-measured in past research.

Police and other first responders are repeatedly exposed to potentially traumatic situations (critical incidents), such as armed confrontations, motor vehicle crashes, and witnessing violent deaths. The purpose of this study is to evaluate the effectiveness of preemptive measures aimed at disrupting stress in police officers exposed to continuous traumatic events. Such frequent exposure places first responders at risk for developing posttraumatic stress disorder (PTSD). (Marmar et al., 2006). The overwhelming research on the topic of PTSD in police officers investigates the solutions to the following; What are the most effective strategies for increasing resiliency while decreasing trauma induced mental illness diagnosis in police officers?

In this investigation, the first hypothesis is that the development of a mechanism for early detection, frequent observation and both supervisory and organizational support will assist police departments in maintaining mental health and resiliency among its officers. The second hypothesis is that the implementation of a wellness model that examines an officer while considering Mindset, Behavior, Organizational Structure, and Overall culture will inspire desirable outcomes in the industry.

Policing is, in theory and the application of its principles, an incredibly difficult and complex profession. It is usually considered a vocation occupied by civil servants which requires little in the way of specialty or expertise.

The best analogy to consider when formulating a plan forward would be the idea that in professional car races spanning hundreds of miles over the course of three hours, the drivers and the cars that they operate undergo preventative and restorative maintenance between five and six times per race, yet police officers receive no mandatory preventative maintenance throughout their careers. My project is the introduction of a Resilience and Wellness Team Pilot Program that will ensure critical response to police officers in advance of issues arising from exposure to continuing traumatic stress.

For decades police departments have grappled with the commitment of rebuilding trust among the citizens that make up the communities they serve and protect. Many court cases have played out in the headlines of news outlets and have help to energize a dialogue of concern for in reference to tragic occurrences at the hands of law enforcement officers. In a ten-year study conducted by Collins and Gibbs (2003) it was revealed that evidence exists to pinpoint specific factors that contribute to high risk of mental ill-health by officers. Certainly, there are response calls in policing that are considered less stressful than others; however, each police interaction with the public brings about inherent stress based on the inability to accurately predict the intentions of others or ultimate outcomes.

The term Post Traumatic Stress Disorder (PTSD) has been associated with the mental outcomes experienced by individuals or groups working in critical response capacities.

Police stress continues with the officer throughout a career and often times is present as hostility during encounters with love ones within the home environment. The professions likely to have abundant research in this area are vocations such as military personnel, medical staff, and first responders. Officers are available to witness the most unimaginable events within a society. The

first emergency calls are usually directed towards police resources and the responders due so with little knowledge of what types of situations they will encounter.

Garbarino et al. (2011) raise the idea that internal factors such as overtime, shift changes, and the lack of uniformed communication throughout the ranks cause enormous stress on police officers. Many of the factors that prove harmful to officers' well-being over the span of a career are internal department factors that may be more easily addressed than the external factors that are difficult to manage.

Incidents of police suicides, police incarcerations and domestic related events involving police officers are on the rise among police agencies throughout the United States. This has created severed ties with the communities that police officers have been sworn to protect. Suspected causes to the growth in this phenomenon are being examined more closely than ever as well as the notion that in the line of duty police involved citizen deaths may be a result of stress factors influencing officer response behavior.

Police Suicide

Wexler (2019) points to the lack of a comprehensive data collection and analysis process when it pertains to developing effective police suicide prevention strategies. The suicide rate among police officers is alarming and have trended up in the past several years based on FBI statistics. Major police and sheriff's departments are working towards understanding the issues surrounding suicide outcomes among their employees and developing remedies to address them. Wexler (2019) outlines the process of psychological autopsies that the New York City Police Department currently employs which is a post suicide diagnostic examination into the possible factors leading to the suicide decision by the officer. An extensive yet respectful interview process is utilized and includes all individuals who may be available to lend insight into state of mind, underlying issues, and warning signs or silent calls for help. Wexler (2019) reviewed practices by the Los Angeles Police Department's program of actually assigning police psychologist to patrol groups working in the field as an attempt to increase the availability of resources and to remove the stigma associated with seeking out professional mental health services.

Cognitive Skills

Spencer et al. (2016) focus on the finite nature of cognitive resources in the human brain. The study examines the overloading capacity phenomenon as it pertains to cognitive responses in critical incidents by police officers. The authors offer prior research that noted subjects interviewed for data analysis supported the theory that humans will take shortcuts when their cognitive abilities have been depleted and that the shortcuts often include the reliance on stereotypes when reacting to encounters where stress is present. During these events a police officer may rely on their subconscious biases to make what they believe are survival solutions which are likely based on prejudgments and biases. Spencer et al. (2016) benefited from the application of the analytic tool known as the Process Dissociation Procedure (PDP), which applies automatic controlled processes to stressful encounters as an automatic response when the objectivity is pushed to the limit.

Racial Bias

Worrall et al. (2018) examines the social scientific studies focused on police shoot/don't shoot decisions and how research supports the idea that those decisions are more often based on racial bias than not. Worrall et al. (2018) explored the reported instances when officers were, by policy and legal statutes, authorized to engage perpetrators while appropriately applying use of force responses but chose not to do so. This behavior would require unique research methods to determine if bias was present or absent in these deployments. Worrall et al. (2018) reported that research has shown that the vast majority of officers who would be considered justified in their use of force chose alternative methods to confront arrestees. Worrall et al. (2018) had the benefit of a larger data population than studies that have preceded theirs and they were thus able to introduce comparisons across cases involving the use of force and those excluding that application of response. Worrall et al. (2018) were able to identify themes and patterns through extensive review of literature on the topic and found that in urban environments fatal shootings involved young African Americans at a disproportionate rate based on census data and the overall population makeup of the areas examined.

METHODOLOGY

The research data contained within this research was discovered through the utilization of sources such as Google Scholar, DePaul online library (EBSCO), documents available to me through Police Department databases, and professional knowledge gained from having served 26. In this research, I intend to review and compare findings from approximately 5 datasets. I will focus on midlevel police departments throughout the United States. I will analyze performance evaluations and both the disciplinary and complimentary performance history, absenteeism, medical role occurrences of the observed officers.

Secondhand data were reviewed and analyzed from three primary open source data sets. JAMA Network Open Source, The Invisible Institute, Centers for Disease Control, and Police Executive Research Forum in order to identify variables that serve as predictors that are likely to manifest into PTSD outcomes in police officers. This process was utilized to answer the first research question. Open source data from governmental agencies were examined to confront the second research question. In this experiment, longitudinal data measured the degree to which uninterrupted traumatic exposure influences mental harm in police officers.

Data from the Open Source Database "The Invisible Institute" were examined and included in this section. The investigation of Invisible Institute data revealed the recurring incidents of lawsuits against a small group of repeat police officers. The data when closely analyzed shows that officers involved in lawsuits totaling payouts in the thousands are likely to have been involved in prior lawsuits for excessive use of force and are more likely than not to have been involved in additional lawsuits with the same team of officers or a common police partner.

Table 1. Settlements in Lawsuits Against Police Officers

Amt awarded	Number of off(s)	Year of incident	Gender of officers	Race of officers	Years of service	Total Award for each officer found liable
50k	2	2016	Male	1w,1b	6, 24	50k, 106k
37k	1	2015	Male	1w	8	37k
99k	4	2015	Male	2w,2h	8,8,8,30	149k,149k,149k,99k
50k	2	2015	Male	2w	15,15	50k,57k
70k	2	2015	Male	2w	26,15	10m,140k
65k	6	2015	Male	3w,2b,1	10,8,8,19,8,17	65k,65k,65k,65k,65
				h		k
22k		2015	Unk	Unk	Unk	Unk
202k	1	2014	Male	1w	18	202k
100k	3	2014	Male	1w,2h	17,17,8	100k,100k,185k
450k	3	2014	Male	2h,1b	20,26,14	450k,450k,450k
180k	2	2014	Male	1w,1b	16,22	865k,180k
100k	6	2014	Male	2w,2b,2	17,18,13,14,1	100k,1mil,100k,100k,12
				h	3,11	5k,177k
25k	2	2014	1M/1F	1h,1w	9,9	25k,25k
100k	1	2014	Male	1b	26	100k

11k	8	2014	6M,2F	3w,3h,1	21,26,30,25,2	12k,11k,12k,102k,12k,1
				b,1a	7,13,25,23	2k,41k,12k
10k	7	2013	NR	NR	NR	NR
60k	2	2013	2M	2h	18,20	67k,278k
4k	2	2013	2M	2w	22,14	64k,64k
32k	1	2013	1M	1w	14	209k
100k	1	2013	NR	NR	NR	NR
100k	11	2013	10M/1	10w,1h	25,23,25,16,9,	130k,100k,184k,248k,1
			F		16,28,16,25,1	75k,284k,250k,175k,33
					9,16	7k,175k,252k
5k	2	2013	2M	2w	14,13	265k,205k
999k	1	2013	1M	1w	23	1mil
3.7mil	1	2013	1M	1b	13	3.7mil
5k	2	2013	2M	1w,1h	15,10	45k,31k
6k	5	2013	5M	3h,2w	15,26,18,23,2	41k,6k,6k,51k,26k
3mil	2	2013	2M	2w	17,20	3mil,3.5mil
12k	4	2012	3M/1F	2b,1w,1	10,19,16,36	12k,12k,,12k,35k
				h		
925k	1	2012	1M	1w	13	1.1mil
100k	1	2012	1M	1h	20	803k
10k	2	2012	2M	1w,1a	11,16	25k,25k
30k	10	2012	10M	5w,4h,1	21,21,25,22,2	30k,30k,30k,30k,30k,21
				a	7,34,39,29,32,	1k,30k,30k,45k,45k
					29	
75k	1	2011	1M	1b	13	275k
100k	1	2011	1M	1a	22	100k
3mil	2	2011	2M	1a,1h	14,12	3mil,7mil
25k	6	2010	5M,1F	6w	16,24,34,21,1	25k,25k,25k,25k,25
					6,19	k
1k	1	2010	1M	Ib	24	41k
15k	2	2009	2M	1w,1b	17,29	98k,25k
335k	2	2009	2M	2w	20,15	335k,335k
5k	2	2009	2M	1w,1h	32,30	5k,5k
558k	4	2009	4M	4w	22,20,18,27	1.2mil,603k,570k,738k
25k	12	2008	11M,1	5w,5h,	16,18,22,15,1	245k,55k,175k,25,25k,1
			F		7,18,26,15	58k,30k,30k,25,145k,30
						k,25k

With more extensive training and emotional support, incidences of officer misconduct may be reduced. In addition to research on the cost to police departments (and, by extension, citizens) of officer misconduct, this study looked at reports of traumatic experiences by active police officers working in mid to large size departments. The unit of analysis is the individual police

officers actively responding to radio calls regularly who are known to have suffered from mental injury.

When examining PTSD outcomes, data were collected from open source secondary data of US military service members as well as police officers from several police departments throughout the United States. An extensive review was conducted of the data which included the analyzing of items provided by a survey series presented by the National Center for PTSD. The instrument utilized in the capturing of important data in this instance was the Deployment Risk & Resilience Inventory-2 (DRRI-2). This particular tool focuses on the lived experiences of military personnel at three stages; prior to military deployment, during military deployment and post military deployment. A Likert scale was used that elicited responses from questions such as the ones noted here:

Table 2. Trauma Questionnaire

Before deployment	During deployment	Post deployment
- Someone close to me	- I was in a vehicle or	- I was robbed/home
died	part of a convoy that	broken into
- I witnessed someone	was attacked	- I have experienced
being seriously	 I think I wounded or 	inadequate healthcare
assaulted	killed someone during	- Someone close to me
- I was seriously	combat operations	has experienced a
physically injured by	- I wasn't able to	serious illness, injury,
another person	contact home when I	or mental health
- I experienced stressful	needed to	problem
legal problems	- I wasn't able to rest	- Someone close to me
	when I needed to	has died

When considering the second question: "What are the factors that help predict PTSD outcomes in police officers?" data were collected from JAMA Network Open Source (Ursano et al., 2020).

The original study that produced the above data was approved by the Center for the Protection of Human Subjects at The University of Texas Health Science Center at Houston (Jetelina et al., 2020). Jetelina et. al. (2020) collected survey data from 434 police officers, which represented 97% of those asked to participate. 18 individual officers participated in five focus groups. This level of participation on a topic as sensitive as police mental health is not consistent with the past culture of policing. The researcher of the primary study has served over two and a half decades in the industry of law enforcement and witnessed first-hand reluctance of officers to share emotion or details of stress associated with experiencing extraordinary traumatic events as a matter of routine deployments.

The primary study involved survey data from 434 police officers, which represented 97% of those asked to participate. 18 individual officers participated in five focus groups (Jetelina et al., 2020). This level of participation on a topic as sensitive as police mental health is not consistent with the past culture of policing. The researcher of the primary study has served over two and a half decades in the industry of law enforcement and witnessed first-hand reluctance of officers to share emotion or details of stress associated with experiencing extraordinary traumatic events as a matter of routine deployments.

Jetelina et al. (2020) posed the question of the relevance of mental illness and metal health care use among officers at a large urban department. Four key findings that purportedly created barriers to mental health services were discovered in this research: (1) The inability for officers to self-diagnose when they are experiencing mental illness, (2) Officers' concern about maintaining confidentiality when reporting mental illnesses, (3) Officers do not trust that psychologists can relate to policing, and (4) The stigma associated with self-reporting mental illness and seeking mental health services.

Table 3. Mental Illness Diagnoses and Symptoms Among 434 Police Officers

Among 434 Police Officers Lifetime diagnosis (n = 54) ^a						
Variable	Not current (n = 28)	Current (n = 26)	Positive screening result in past 2 wk (n = 114) ^b			
Anxiety	10 (36)	26 (100)	39 (34)			
Depression	11 (39)	11 (42)	50 (44)			
PTSD	19 (68)	0	69 (61)			
Suicide ideation or self-harm	0	0	21 (18)			
Sought mental health services in past 12 mo	9 (32)	9 (35)	19 (17)			

Abbreviation: PTSD: posttraumatic stress disorder

(Jetelina, et al., 2020)

Analysis of the data provided in Table 3 revealed five categories that are highlighted to provide evidence of symptomatic outcomes of mental illness suffered by police officers in a large department. Of the original 434 participants of the study 12% reported to have suffered from a mental illness diagnosis in their lifetime. Additionally, 48% have identified themselves as being under current diagnosis of mental illness. Perhaps the most revealing data in this posting is the number (35%) of officers who sought mental illness services within the past year of the time of reporting.

The researchers measured characteristics such as age, education, marital status, military experience and length of service in police roles. The outcomes of that experiment were consistent with previous research. The length of time in service dramatically increased the odds for an officer to experience mental illness diagnosis. The service years of 5-10 years produced a percentage range of 1.42%-6.52% based on the participants and those with 10-15 years of service recorded a range of 1.2%-8%.

The odds for mental illness diagnosis increased for military veterans and for supervisory police personnel. Supervisors were found to have three time the chances of suffering from mental illness than their non-supervisory colleagues.

^a Depression, anxiety, or PTSD

^b Positive screening result for depression, anxiety, PTSD, and/or suicidal ideation or self-harm symptoms in past two weeks

Table 4. Characteristics of the Study Sample

Characteristic	Survey group (n = 434)	Focus groups (n = 18)	DPD patrol officer (n = 1413)
Age, mean (SD), y	37 (10)	38 (11)	35 (9)
Gender			
Male	354 (82)	17 (94)	1155 (82)
Female	68 (16)	1 (6)	258 (18)
Other	2 (0.5)	0	0
Missing	10 (2)	0	0
Race/ethnicity			
Non-Hispanic			
White	217 (50)	10 (56)	604 (43)
Black	62 (14)	4 (22)	374 (26)
Hispanic	112 (26)	4 (22)	379 (27)
Other or >1	22 (5)	0	56 (4)
Missing	21 (5)	0	0
Marital status	. ,		
Married	237 (55)	9 (50)	NR
Divorced, widowed, or separated	61 (14)	4 (22)	NR
Never married	86 (20)	3 (17)	NR
A member of an unmarried couple	31 (7)	2 (11)	NR
Missing	19 (4)	0	NR
Education	.,		
High school diploma	17 (4)	1 (6)	NR
Some college or technical school	155 (36)	6 (33)	NR
College graduate	222 (51)	10 (56)	NR
Masters graduate or higher	21 (5)	1 (6)	NR
Missing	19 (4)	0	NR
Military experience	99 (24)	2 (11)	335 (24)
Military medal C, R, or V ^b	59 (14)	NR	NR
Time in military, y	33 (2.1)		
<3	7 (2)	NR	NR
3-7	46 (10)	NR	NR
8-11	28 (6)	NR	NR
12-15	5 (1)	NR	NR
>15	13 (3)	NR	NR
Length of service, mean (SD), y	11 (9)	13 (10)	8 (8)
Shift	11 (3)	15 (15)	3 (3)
12-7 AM	114 (26)	9 (50)	NR
7 AM to 3 PM	140 (32)	7 (39)	NR
3-11 PM	136 (31)	2 (11)	NR
Other	24 (6)	0	NR
Missing	20 (5)	0	NR
Rank	20 (3)	3	· VIX
Patrol officer	366 (84)	NR	1413 (100)
Sergeant, lieutenant, or higher	44 (10)	NR	0
	24 (6)		0
Missing		NR	
Lifetime mental illness diagnoses ^c	54 (12)	NR	NR
Positive screen for mental illness symptoms in the past 2 wk ^d	114 (26)	NR	NR

Abbreviations: DPD, Dallas Police Department; NR, not reported

^a Data are presented as number (percentage) of study participants unless otherwise indicated. ^b A C device indicates combat merit; R device, remote merit; and V device, valor.

^c Depression, anxiety, or posttraumatic stress disorder.

^d Positive screening result for depression, anxiety, posttraumatic stress disorder, and/or suicidal ideation/self-harm. (Jetelina et al., 2020)

Jetelina et al. (2020) utilized univariant statistical analysis to describe the population, focused on for their study while measuring mental illness diagnosis, and the rate at which positive screening for mental illness symptoms occurred. To investigate the relationships between officer characteristics and either a diagnosis of mental illness or positive results of mental illness post examination. To further the experiment, Jetelina et al. (2020) employed the utilization of bivariate and multivariate logistic regression.

This particular study is significant because it is likely the first of its kind to perform this type of unique comprehensive analysis. The authors analyzed mental illness, identifying symptoms of mental illness, and mental health care use among officers at a large police department (Jetelina et al., 2020).

Table 5. Suicide Ideation Among Active-Duty Soldiers in Afghanistan

Association of Sociodemographic Characteristics With Past 30-Day Suicide Ideation Among	;
Active-Duty US Army Soldiers During Deployment in Afghanistan	

		Unweighted No. (Weighted %)			
Characteristic	Univariable OR (95% CI)	Suicide Ideation (n = 85)	No Suicide Ideation (n = 3872)	Total Population (N = 3957)	
Sex					
Male	1 [Reference]	72 (81.3)	3401 (87.6)	3473 (87.5)	
Female	1.5 (0.9-2.5)	13 (18.7)	471 (12.4)	484 (12.5)	
χ ₁ ²	2.1				
Current age, y					
≤29	1.2 (0.8-1.9)	48 (57.0)	2087 (52.5)	2135 (52.6)	
≥30	1 [Reference]	37 (43.0)	1785 (47.5)	1822 (47.4)	
χ ₁ ²	0.6				
Race/ethnicity					
White	1 [Reference]	65 (82.2)	2542 (67.1)	2607 (67.4)	
Other	0.4 (0.3-0.6) ^a	20 (17.8)	1330 (32.9)	1350 (32.6)	
Χ ₁ ²	16.7ª				
Education					
<high school<sup="">b</high>	1.4 (0.6-3.2)	9 (11.3)	321 (8.2)	330 (8.2)	
≥High school	1 [Reference]	76 (88.7)	3551 (91.8)	3627 (91.8)	
χ ₁ ²	0.7				
Marital status					
Not married	1.1 (0.6-1.8)	33 (43.0)	1557 (41.1)	1590 (41.1)	
Currently married	1 [Reference]	52 (57.0)	2315 (58.9)	2367 (58.9)	
χ ₁ ²	0.1				

Abbreviation: OR, odds ratio

(Jetelina et al., 2020)

^a Statistically significant at P < .05

^b Less than high school includes general educational development credential, home study diploma, occupational program certificate, correspondence school diploma, high school certificate of attendance, adult education diploma, and other nontraditional high school credentials.

The data inform the first research question, "What are the likely emotional outcomes of continuous traumatic stress in police officers?" The open source statistical data focused on PTSD, citizen deaths caused by police officers, and suicide. The second research question is, "What are the literal and figurative costs to the enterprise of policing as a result of huge lawsuits and a cultural disparity in disciplinary actions against repeat police officers?" Question three, "what is the rate of mental illness and mental health response in policing" was approached through researching data in JAMA Network. The data supports the hypothesis that demographics such as gender, race and time in service increase the likelihood of mental health trauma in police officers. Table 6 is split into two parts with the first part shown in Table 6a and then 6b continuing on the following page.

Table 6a. Stressful Events and Suicide Ideation Among Soldiers

		Unweighted No. (Weighted %)			
Event	Univariable OR (95% CI)	Suicide Ideation (n = 85)	No Suicide Ideation (n = 3872)	Total Population (N = 3957)	
Lifetime stressful events ^a					
Combat trauma					
Yes	0.9 (0.5-1.6)	68 (77.9)	3139 (79.8)	3207 (79.8)	
No	1 [Reference]	17 (22.1)	733 (20.2)	750 (20.2)	
X ₁ ²	0.1				
Noncombat trauma					
Yes	2.1 (1.1-3.9) ^b	71 (80.1)	2638 (65.7)	2709 (66.0)	
No	1 [Reference]	14 (19.9)	1234 (34.3)	1248 (34.1)	
X ₁ ²	5.5 ^b				
Bullying and sexual assault					
Yes	3.4 (1.9-6.3) ^b	28 (31.5)	482 (11.9)	510 (12.3)	
No	1 [Reference]	57 (68.5)	3390 (88.1)	3447 (87.7)	
X ₁ ²	15.7 ^b				
Past 12-mo stressful events ^a					
Combat trauma					
Yes	0.9 (0.5-1.6)	55 (62.4)	2535 (64.7)	2590 (64.7)	
No	1 [Reference]	30 (37.6)	1337 (35.3)	1367 (35.3)	
X 2	0.1				
Assault or injury to self or other					
Yes	2.2 (1.4-3.7) ^b	40 (46.0)	1132 (27.5)	1172 (27.9)	
No	1 [Reference]	45 (54.0)	2740 (72.5)	2785 (72.1)	
X 2	10.2 ^b				
Death or illness of friend or family					
Yes	2.6 (1.5-4.4) ^b	55 (62.5)	1638 (39.4)	1693 (39.9)	
No	1 [Reference]	30 (37.5)	2234 (60.6)	2264 (60.1)	
X ₁ ²	11.6 ^b				

Abbreviation: OR, odds ratio

(Jetelina et al., 2020)

^a Lifetime and past 12-month stressful event variables were derived from exploratory factor analyses. Variables indicate dichotomous endorsement or any event within a factor (yes or no) and cumulative scores of stressor factors. ^b Statistically significant at P < .05

Table 6b. Stressful Events and Suicide Ideation Among Soldiers (continued)

	Associations of Stressful Events With Page 1	ast 30-Day Si	uicide Ideation An	nong Active-Duty US Army
Solo	liers During Deployment in Afghanistan			

		Unweighted No. (Unweighted No. (Weighted %)			
Event	Univariable OR (95% CI)	Suicide Ideation (n = 85)	No Suicide Ideation (n = 3872)	Total Population (N = 3957)		
Past 12-mo stressful events ^a						
Relationship problems						
Yes	3.5 (2.1-5.8) ^b	40 (41.0)	707 (16.4)	747 (16.9)		
No	1 [Reference]	45 (59.0)	3165 (83.6)	3210 (83.1)		
χ ₁ ²	24.8 ^b					
Legal problems						
Yes	4.1 (2.8-4.4) ^b	11 (12.6)	146 (3.4)	157 (3.6)		
No	1 [Reference]	74 (87.4)	3726 (96.6)	3800 (96.4)		
X ₁ ²	14.9 ^b					
Accident						
Yes	2.0 (0.7-5.5)	5 (6.5)	129 (3.4)	134 (3.4)		
No	1 [Reference]	80 (93.5)	3743 (96.6)	3823 (96.6)		
χ ₁ ²	1.8					
Bullied by unit members						
Yes	2.5 (1.2-5.4) ^b	11 (14.6)	251 (6.4)	262 (6.5)		
No	1 [Reference]	74 (85.4)	3621 (93.6)	3695 (93.5)		
χ1	5.6 ^b					

Abbreviation: OR, odds ratio

(Jetelina et al., 2020)

The evidence presented after reviewing and analyzing secondary data supports he hypothesis that law enforcement has enherant stress outcomes that manifest into mental health illness. In the data presented by Jetelina, et. al. (2020) it was found that 12% of officers indicated that they have experienced prior mental health diagnosis and 26% received positive screenings for PTSD and related syndromes.

Data were collected from JAMA Network Open Source measuring Factors Associated with Suicide Ideation in United states Army Soldiers in Afghanistan. The number of soldiers in this study is 3957. Sociodemographic characteristics were measured through the utilization of the World Mental Health (WMH) Survey Initiative's updated model of the World Health Organization (WHO) Composite International Diagnostic Interview (CIDI). The CIDI was the instrument by which the researchers measured major depressive disorder in the selected group of United States Army Soldiers. The assessment was administered applying the structure contained within the Diagnostic and Statistical manual of Mental Disorders (Fourth Edition).

In 2019 the Police Executive Research Forum presented data from Blue H.E.L.P. of 228 known police suicides in that year. The statistics in this research were derived by employing a 25-

^a Lifetime and past 12-month stressful event variables were derived from exploratory factor analyses. Variables indicate dichotomous endorsement or any event within a factor (yes or no) and cumulative scores of stressor factors.

^b Statistically significant at P < .05

point data collection method. Duty status of the officers who committed suicide was represented as follows; Active duty 82%, Retired 11%, Medical Leave 4%, Terminated 2%, Administrative Leave 1%, Resigned 1%, and Suspension 1%. Of the officers who committed suicide in retirement, 38% did so within less than one full calendar year of leaving police work.

In the survey utilized to collect these data, an increase of 13% was seen in terms of officers with 0 to 5 years of service ranking at 12% of officers reporting depression and those who are serving between 6 and 10 years who accounted for 24.6% of depression cases.

This study included data from 413,763 active duty, reserve, and National Guard soldiers who were deployed to Afghanistan or Iraq between February 12, 2010 thru August 2014. The next set comprised 3957 United States soldiers deployed to Afghanistan. Next was 434 officers from the Dallas Police Department. Finally, 460 national police suicides between January 2016 and August 2019 were studied.

In examining and comparing data from the aforementioned surveys, it was discovered that common themes appeared, such as average years of service for suicide attempts and actual suicides, with the range of highest percentages occurring between 10 and 25 years. Of the population of 460 police officers serving in the United States who committed suicide over that nearly four-year period, 82% were on active-duty status, 4% were on a medical leave, and 11% had previously retired.

According to JAMA Network (2020), United States Soldiers who had reported suicide ideation over a 30-day period stood a significantly higher chance of documenting a suicide attempt. Conversely, police officers are much more likely to attempt or carry out suicide during duty hours. Across the populations researched in this study, another consistent finding was that of the percentage of males committing suicide being significantly higher: 81% of soldiers and 93% of police officers who died by suicide were male (Police Executive Forum, 2019).

The first research question is: To what extent does continuing traumatic stress affect the mental health of police officers? Secondary data were collected, reviewed and analyzed through investigating the methods and processes employed by the original researchers. Variables were introduced in an effort to ensure accuracy of the findings.

Training

Blumberg et al. (2019) outlines the core targeted training pillars found in police academy curriculum. The nationally accepted list, which is referenced Blumberg et al. (2019) in includes items such as physical fitness, interpersonal skill development, cognitive skill enhancement, and emotional aptitude. The skills that aid in the development of police officers at the beginning of their careers are intended to prepare them for the encounters they will face where force options are considered will be applied through split second decision making that will have irreversible and lasting effects on all who are involved. Many of the items that are presented in academy courses are known as perishable skills that require supplemental training over a period of time. Blumberg et al. (2019) notes that training programs inside police academies are following suit with other academic environments that employed blended training methods in order to ensure that the optimal potential for learning and retention are reached. To this end, Blumberg et al. (2019) point to the fact that training is now offered in connected forms of classroom instruction, digital content offered online, simulator training and practical person-to-person scenario-based training in order to create the most realistic environment possible. Blumberg et al. (2019) highlight the need for police agencies to move away from the para-military design that creates the mindset of us versus them

and rather incorporate training paradigms that are more in line with the 21st Century Policing Model that encourages and requires positive community engagement strategies and cooperation. Blumberg et al. (2019) offer findings that if applied will inspire departments to encourage individual growth and development while creating officers who are self-motivated problem solvers who contribute to the culture through active engagement in the principles of justice at every professional opportunity.

DISCUSSION

This study helps to describe the components of traumatic stress as defined in the DSM-5 while further informing previous research on the influence that uninterrupted traumatic stress has on police officers and the culture of policing. Past life experiences as well demographic traits play an important role in predicting degrees of mental illness and the onset of symptoms. The hypotheses for this study were:

H1- Officers who ultimately develop PTSD while working in mid to large sized police departments are not supported by peer systems, community networks or organizational interventions.

H2- If officers working in mid to large size departments are required to participate in wellness activities throughout their careers, they will be less likely to develop PTSD outcomes.

The research supports the idea that officers who receive positive interactions with mental health professionals and counseling services are able to identify and respond to stressors prior to them becoming damaging to the officer's overall mental health. The current study found previous experiments to be accurate and foundational in the identification of causes for mental injury in police officers and how those injuries manifest. The need exists for additional studies on the topic of how to identify and isolate causes of PTSD in police officers.

The current study relied on an extensive review of literature, data and methods from research performed on the topic of police PTSD. This study reviewed Violanti et al. (2018) and its research including data from the Buffalo Cardio Metabolic Occupational Police Stress (BCOPS) study. The BCOPS findings supported previous traumatic stress research and also introduced the correlation between cardiovascular diseases and negative metabolic outcomes.

Military personnel are used as the model for harm post trauma events, however, "Despite the negative effects resulting from exposure to a traumatic incident, the outcome is not always deleterious" (McDowell, 1997, p. 2). Many soldiers and officers are able to cope with the effects of trauma without ever developing symptoms of mental injury. McDowell (1997) documented instances where police have participated in horrific duties, such as body recovery and identification, yet have emerged without any significant pathology. Police officers' vulnerability to the effects of continuous traumatic stress through direct exposure causes diminished mental wellness and ultimately creates performance outcomes that fuel community mistrust.

This study focused on examining the predictors leading to PTSD in police officers in large police departments based on large open source data and a tool utilized by the National Center for PTSD, the Deployment Risk & Resilience Inventory-2 (DRRI-2). This instrument captures important data through the response by military personnel to questions grouped in three categories: stress events occurring prior to deployment, during deployment and post deployment.

Officers are expected, by the nature of their employment to confront nefarious actors and also respond to quality-of-life issues while appropriately managing a delicate balance. Consider the following: Indianapolis 500 races cover 500 miles in nearly three hours stretch of time with 32 participants. Vehicles are high precision automobiles expected to perform near flawlessly while being driven by the best drivers in the world. On average the cars pull into the pit stop five to seven times during the race for refueling and preventative maintenance based on available engineering data. Due to the severity and pervasiveness of PTSD symptoms in many police officers, I recommend a preventative stress maintenance plan for police personnel analogous to race car drivers' pit stops.

PREVENTATIVE STRESS MAINTENANCE PITSTOP PLAN

The average police officer who works five years in the field is exposed to varying degrees of trauma for approximately 1,080 days. This is in addition to the life issues that all adults experience in the form of financial obligations, raising children, spousal attentiveness, health concerns, and other challenges.

Police departments have historically not designed mechanisms to appropriately respond to the unique needs of their employees even given all of the research evidence that supports the idea that mental health diminishes over time when stress is introduced continuously.

In the $26 \frac{1}{2}$ years the researcher spent in law enforcement from Patrol Officer to Lieutenant, this is his Timeline of Trauma:

- 1991 Rodney King video released
- 1993 Rookie year
- 1994 Rodney King verdict
- 1995 Recovered 20 deceased bodies in a 30-day period Chicago's Heat Emergency
- 1996 Third car on the scene for officer shot in the line of duty
- 1995 Suffered broken leg on duty and developed blood clots hospitalized for 5 days
- 1999–2012 Lost three colleagues to suicide
- 2001 Assigned to Chicago Downtown Area after 911 Terror Attacks
- 2001 Suffered second broken leg
- 2002 Victim of facial stabbing during a hate crime incident
- 2004 Traffic accident
- 2005 Promoted to Sergeant of Police
- 2005 40-day travel detail away from family
- 1999–2005 Worked as an undercover officer in Organized Crime Division
- 2007 Was called and responded to off duty suicide threat by police officer
- 2012 Deployed team of undercovers to NATO Summit Molotov cocktails recovered
- 2014 Diagnosed with high blood pressure (reading at time of exam: 200/140)
- 2017 Promoted to rank of Lieutenant of Police
- 2017 Called to respond to suicide attempt by knife as Critical incident Manager
- 2018 Two officers committed suicide in District Parking lot (Black female, White male)
- 2018 Former officer from assigned police district committed suicide
- 2018 Two officers were struck by train and killed
- 2019 Retired from law enforcement
- 2020 Notified that former Commander and newly promoted Deputy committed suicide

This PitStop Resilience & Wellness Teams Program is informed by the researcher's personal experience as well as his extensive review of the literature on the lasting effects of police officers' experiences of trauma.

What It Looks Like

The Resilience and Wellness Team would focus on the continued evaluation of each individual police officer through the entirety of her/his career. The focus would be to build a tailor-made program that considers all dimensions of good health. The team would be responsible for working with the client on building and maintaining goals and ambitions. The benefits would also

extend to include members of the household and extended family members as it becomes necessary. The Resilience and Wellness Team would chart successes, discuss obstacles, reevaluate goals, and monitor physical changes due to occupational wear-and-tear.

This program would have uniform standards but would also ensure that the unique needs of individuals are met. Officers who request an elevated amount of physical fitness my request a plan that includes martial arts, yoga for increased flexibility for officers who may not have necessarily followed a dedicated fitness path prior to joining the police department. Each officer receives an in-depth mental wellness and physical fitness evaluation at time of hire. A comprehensive physical and mental health diagnostic overview will be performed on each recruit accepted to begin training at police academies.

Each Police Officer would have a personal diagnostics file that will closely mimic a medical chart in order to establish a proper officer profile. In order to appropriately measure health thresholds and forecast potential challenges, the following group of items will be observed and memorialized: Height, Weight, Blood Pressure (History), Blood Type, Years of service, Events resulting in injury, and Trauma Timeline (how many active deployments, how many homicides, shootings, traffic accidents with fatalities, trauma involving children, etc.). Optimization and predictive analytics tools will be utilized in order to process and investigate data compiled through the participation of the individual officers.

The researcher endeavors to also create curriculum that is introduced on this topic immediately upon new cadets entering into the police academy. At the forefront of goals is the engagement by frontline supervisor who will play a pivotal part in enduring adherence and compliance to new protocols for mental wellness while officers are actively engaged in the line of duty. Training and community engagement will be considered as part of the overall construct of this plan based on the fact that the end result of untreated recurring stress often manifests into episodes that directly affect others who may come into contact with an officer suffering from a stress condition.

The results of the examination will be reviewed by a team of mental health, nutrition and fitness industry experts. These teams will work inside the training facility to ensure continuity of systems and proper application of onsite resources. A Career Path strategy will be provided to each officer based on their professional goals. A results calendar will be created and implemented to monitor growth and measure the officer's progress. Performance coaches will be available to work closely with officers and provide instruction while presenting techniques proven to inspire optimal learning outcomes. In addition to instructors, Virtual Scenario Simulators will create a practical and realistic learning environment for officers to engage in mock response exercises designed to test skills, log critical engagement hours, and dramatically increase job performance competencies.

Partnering with Industry Experts

A cornerstone of this program will be the participation of established experts in the fields of mental wellness and employee assistance. Their contribution to this program will be instrumental in shifting norms within the police culture while relying on practices and services that have been under resourced and underutilized in the past. Among the agencies that will be invited to assist in this endeavor is the National Alliance on Mental Illness (NAMI). Since 1979 NAMI has been a leader in the field of mental health response, and its leaders are committed to further education and practical application of its principles in population at the highest risk for stress-induced trauma. NAMI provides advocacy, education, support and public awareness for

individuals and the families of those vulnerable to high levels of stress. NAMI will help to train officers in mental health awareness so they can assist their peers through Chicago Police Department Peer Support Teams.

With a wide range of instructors and peer leaders, the PitStop Program will offer classes and activities that will evolve based on ongoing assessment of their impact on improving officers' mental health and overall job performance. Here is a list of educational activities recommended for inclusion in the PitStop curriculum:

Table 7. PitStop Curriculum

Academic Counseling	Financial Consulting	Couples Counseling	Life Coaching	Marriage Counseling	Child Development	Handcuffing Techniques
Home School	Computer Systems	Yoga	Aquatic Therapy	Sports Therapy	Martial Arts	Comprehensive Specialized
Counseling	Competency Training				Agility	Police Roles Training
Community Engagement Mentoring	Cultural Diversity	Healthy Life Style	Sleep Science	Meditation	Vision & Hearing Exams	Stretching Body Mechanics
Anger Management	Weapon Retention	Retirement Planning	Estate Planning	Political Science	Massage Therapy	Acupuncture
Critical Thinking Complex System Dynamics	Management & Social Services Training	Emotional Intelligence Training	Project Management	Public Speaking	Moot Court	Stress Management
Conflict Resolution	Spiritual Direction (Clergy referrals)	Confidential Substance Abuse Education	Social Media Reputation Training	Victim Advocacy Training	First Amendment	Time Management

Officers will work with their performance coaches to determine which activities they should enroll in. Upon successful completion of each course, they will receive a commendation in their file. The commendations will be a nice complement to the other reports in their files that may not be as positive.

Officers will be required to attend the program in person based on several time metrics: after 75 active-duty deployments, following a hazardous event, a critical life event, return to work after an extended leave of absence, a promotion, or a scheduled upcoming retirement or resignation.

Alman et al. (2017) concluded that future research into the variety of exposures that officers experience could lead to early identification of those at risk. Police officers are required to submit to random drug and alcohol testing. Though these are unscheduled occurrences, they do offer the opportunity for forms of health and wellness maintenance. Policies for improved police wellness should consider utilizing this type of an opportunity for assessing officers in need of mental assistance (Alman et al., 2017).

A calendar will also track the officer's time on the job and require participation in the wellness plan at one year, three years, five years, eight years, eleven years, fourteen years,

seventeen years, twenty years, twenty-three years, twenty-five years, and each year annually subsequent to reaching twenty-five years of service.

The program will not only train officers in the proper method and procedures to fulfill the obligations of the role of patrol officer, it will build on that training and also focus on building officers law enforcement IQ to understand strategic planning, incident command, supervising personnel, staffing shifts, and performance evaluation strategies.

Officers will be required to journal academic and portions of physical fitness trainings as well as debriefing sessions for practical person-to person scenarios. Stephens and Long (2000) announced that talking or writing about traumatic events created a better immune function than the results compared to those who only wrote of general topics. Stephens and Long (2000) found there were increased benefits in talking directly to another person about trauma than even writing about the same trauma.

Officers will enjoy the opportunity to attend mock CompStat meetings which utilize statistical data to develop appropriate police response mechanisms and to also forecast activities based on emerging trends and national events.

Officers will participate in career path workshops and curriculum development planning. One of the key components of the strategy is to ensure that officers are connected to the process of justice and that they are active participants while inspiring within the culture an environment of inclusion.

Conclusion

The psychological effects of Post-Traumatic Stress Disorder have been widely researched. Individuals in roles that require them to be in stressful conditions for prolonged amounts of time often report that they develop symptoms that did not exist prior to the hazardous exposure. Evidence has revealed that all results have not been adverse and has even shown that proper preparation may eliminate the opportunity for some of the effects to attach to individuals in harmful ways. Agencies are working towards anticipating the way police officers will be affected by trauma incidents and what tools may prevent the manifestation of clinical symptoms over time.

This study intends to contribute to existing research while also influencing the field by proposing a remedy for the preservation of mental health and resiliency among officers in the field of policing. The pilot program that will be developed as a result of this investigation will serve as a model based on current deficiencies in the industry as well as the uniform and appropriate application of known successful methods. Throughout the literature, I found that there were many suggested limitations and also need for further investigation into the topic. A common shortfall was based on the fact that measuring and monitoring of police stress is not a simple endeavor. Researchers have pointed out lack of consistency in findings and the lack of cooperation from police departments while collecting this data. "The overall burden on departmental resources could also be quite significant" (Hickman et al., 2011).

Since my plan builds on existing resources, it will not be as expensive to implement as Hickman et al. (2011) cautioned. Regardless of the associated expense, there is an urgent need to address the problem of PTSD and other mental health concerns in police officers. My proposed PitStop plan meets that need. As more officers receive mental wellness support, job satisfaction and job performance are likely to increase along with self-awareness and empathy.

REFERENCES

- Adams, I., & Mastracci, S. (2019). Police body-worn cameras: Effects on officers' burnout and perceived organizational support. *Police Quarterly*, 22(1), 5–30.
- Al Ali, O. E., Garner, I., & Magadley, W. (2011, April). An exploration of the relationship between emotional intelligence and job performance in police organizations. *Journal of Police and Criminal Psychology*, 27(1), 1–8.
- Amaranto, E., Steinberg, J., Castellano, C., & Mitchell, R. (2003). Police stress interventions. *Brief Treatment & Crisis Intervention*, 3(1). 0.1093/brieftreatment/mhg001
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed., DSM-5®). American Psychiatric Association.
- Andersen, J. P., Papazoglou, K., & Collins, P. (2018). Association of Authoritarianism, Compassion Fatigue, and Compassion Satisfaction among Police Officers in North America: An Exploration. *International Journal of Criminal Justice Sciences*, 13(2).
- Andrews, B., Brewin, C. R., Philpott, R., & Stewart, L. (2007). Delayed-onset posttraumatic stress disorder: A systematic review of the evidence. *American Journal of Psychiatry*, 164(9), 1319–1326.
- Arble, E., Lumley, M. A., Pole, N., Blessman, J., & Arnetz, B. B. (2017). Refinement and preliminary testing of an imagery-based program to improve coping and performance and prevent trauma among urban police officers. *Journal of Police and Criminal Psychology*, 32(1), 1–10.
- Arntén, A. C. A., Algafoor, N. A., Al Nima, A., Schütz, E., Archer, T., & Garcia, D. (2016). Police personnel affective profiles: Differences in perceptions of the work climate and motivation. *Journal of Police and Criminal Psychology*, 31(1), 2–14. https://doi.org/10.1007/s11896-015-9166-5
- Asmundson, G. J., & Stapleton, J. A. (2008). Associations between dimensions of anxiety sensitivity and PTSD symptom clusters in active-duty police officers. *Cognitive Behaviour Therapy*, *37*(2), 66–75.
- Baird, K., & Kracen, A. C. (2006). Vicarious traumatization and secondary traumatic stress: A research synthesis. *Counselling Psychology Quarterly*, 19(2), 181–188.
- Bakker, A. B., & Heuven, E. (2006). Emotional dissonance, burnout, and in-role performance among nurses and police officers. *International Journal of Stress Management*, 13(4), 423.

- Becker, C. B., Meyer, G., Price, J. S., Graham, M. M., Arsena, A., Armstrong, D. A., & Ramon, E. (2009). Law enforcement preferences for PTSD treatment and crisis management alternatives. *Behaviour Research and Therapy*, 47(3), 245–253.
- Bergman, A. L., Christopher, M. S., & Bowen, S. (2016). Changes in facets of mindfulness predict stress and anger outcomes for police officers. *Mindfulness*, 7(4), 851–858.
- Berking, M., Meier, C., & Wupperman, P. (2010). Enhancing emotion-regulation skills in police officers: Results of a pilot controlled study. *Behavior therapy*, 41(3), 329–339.
- Blumberg, D., & Papazoglou, K. (2019). A brief introduction to multiple psychic wounds in police work. *Crisis, Stress, & Human Resilience: An International Journal*, 1, 28–31.
- Blumberg, D. M., Schlosser, M. D., Papazoglou, K., Creighton, S., & Kaye, C. C. (2019). New directions in police academy training: A call to action. *International Journal of Environmental Research and Public Health*, 16(24), 4941.
- Bowler, R. M., Kornblith, E. S., Li, J., Adams, S. W., Gocheva, V. V., Schwarzer, R., & Cone, J. E. (2016). Police officers who responded to 9/11: Comorbidity of PTSD, depression, and anxiety 10–11 years later. *American Journal of Industrial Medicine*, 59(6), 425–436.
- Bradford, D., & Pynes, J. E. (1999). Police academy training: Why hasn't it kept up with practice? *Police Quarterly*, 2(3), 283–301.
- Bryant, R. A., & Harvey, A. G. (2002). Delayed-onset posttraumatic stress disorder: A prospective evaluation. *Australian & New Zealand Journal of Psychiatry*, *36*(2), 205–209.
- Buker, H., & Wiecko, F. (2007). Are causes of police stress global?: Testing the effects of common police stressors on the Turkish National Police. *Policing: An International Journal of Police Strategies and Management*, 30(2), 291-309.
- Carlier, I. V., Lamberts, R. D., & Gersons, B. P. (1997). Risk factors for posttraumatic stress symptomatology in police officers: A prospective analysis. *The Journal of Nervous and Mental Disease*, 185(8), 498–506.
- Carlier, I. V., Voerman, A. E., & Gersons, B. P. R. (2000). The influence of occupational debriefing on post-traumatic stress symptomatology in traumatized police officers. *British Journal of Medical Psychology*, 73(1), 87–98.
- Chapin, M., Brannen, S. J., Singer, M. I., & Walker, M. (2008). Training police leadership to recognize and address operational stress. *Police Quarterly*, 11(3), 338–352.
- Clark, R. D., Distelrath, C., Vaquera, G. S., Winterich, D., & DeZolt, E. (2015). Critical-incident trauma and crime scene investigation: A review of police organizational challenges and interventions. *Journal of Forensic Identification*.

- Collins, P. A., & Gibbs, A. C. C. (2003). Stress in police officers: a study of the origins, prevalence and severity of stress-related symptoms within a county police force. *Occupational Medicine*, *53*(4), 256–264.
- Dormann, C., & Zapf, D. (2004). Customer-related social stressors and burnout. *Journal of Occupational Health Psychology*, *9*(1), 61.
- Ehlers, A., Hackmann, A., & Michael, T. (2004). Intrusive re-experiencing in post-traumatic stress disorder: Phenomenology, theory, and therapy. *Memory*, *12*(4), 403–415.
- Erwin, M. J., Gershon, R. R., Tiburzi, M., & Lin, S. (2005). Reports of intimate partner violence made against police officers. *Journal of Family Violence*, 20(1), 13–19.
- Euwema, M. C., Kop, N., & Bakker, A. B. (2004). The behaviour of police officers in conflict situations: How burnout and reduced dominance contribute to better outcomes. *Work & Stress*, 18(1), 23–38.
- Friedman, M., & Higson-Smith, C. (2003). Building psychological resilience: Learning from the South African police service. In Paton, D., Violanti, J. M., & Smith, L. M. (Eds.), *Promoting capabilities to manage posttraumatic stress: Perspectives on resilience* (pp. 103–118). Charles C Thomas.
- Galatzer-Levy, I. R., Madan, A., Neylan, T. C., Henn-Haase, C., & Marmar, C. R. (2011). Peritraumatic and trait dissociation differentiate police officers with resilient versus symptomatic trajectories of posttraumatic stress symptoms. *Journal of Traumatic Stress*, 24(5), 557–565.
- Galovski, T. E., Peterson, Z. D., & Fox-Galalis, A. (2018). Trajectories of posttraumatic stress and depression in police and community members following the violence during civil unrest in Ferguson, Missouri. *American Journal of Community Psychology*, 62(3–4), 433–448.
- Garbarino, S., Magnavita, N., Elovainio, M., Heponiemi, T., Ciprani, F., Cuomo, G., & Bergamaschi, A. (2011). Police job strain during routine activities and a major event. *Occupational Medicine*, *61*(6), 395–399.
- Gerber, M., Hartmann, T., Brand, S., Holsboer-Trachsler, E., & Pühse, U. (2010). The relationship between shift work, perceived stress, sleep and health in Swiss police officers. *Journal of Criminal Justice*, 38(6), 1167–1175.
- Griffin, B. J., Purcell, N., Burkman, K., Litz, B. T., Bryan, C. J., Schmitz, M., Villierme, C., Walsh, J., & Maguen, S. (2019, January 28). Moral injury: An integrative review. *Journal of Traumatic Stress*, 32(3), 350–362. 10.1002/jts.22362

- Hammond, J., & Brooks, J. (2001). The World Trade Center attack: Helping the helpers: The role of critical incident stress management. *Critical Care*, *5*(6), 1–3.
- Hart, P. M., & Cotton, P. (2003). Conventional wisdom is often misleading: Police stress within an organisational health framework. In Dollard, M., Winefield, H. R., & Winefield, A. H. (Eds.), *Occupational stress in the service professions* (pp. 103–141).
- Henry, V. E. (2004). *Death work: Police, trauma, and the psychology of survival*. Oxford University Press.
- Hickman, M. J., Fricas, J., Strom, K. J., & Pope, M. W. (2011). Mapping police stress. *Police Quarterly*, 14(3), 227–250.
- Hodgins, G. A., Creamer, M., & Bell, R. (2001). Risk factors for posttrauma reactions in police officers: A longitudinal study. *The Journal of Nervous and Mental Disease*, 189(8), 541–547.
- Hur, Y. (2013). Turnover, voluntary turnover, and organizational performance: Evidence from municipal police departments. *Public Administration Quarterly*, 3–35.
- Ioannis, N., & Ioannis, T. (2002). Emotional intelligence in the workplace: Exploring its effects on occupational stress and organizational commitment. *International Journal of Organizational Analysis*, 10(4), 327–342.
- Jenkins, S. R., & Baird, S. (2002). Secondary traumatic stress and vicarious trauma: A validational study. *Journal of Traumatic Stress: Official Publication of The International Society for Traumatic Stress Studies*, 15(5), 423–432.
- Jetelina, K. K., Molsberry, R. J., Gonzalez, J. R., Beauchamp, A. M., & Hall, T. (2020). Prevalence of mental illness and mental health care use among police officers. *JAMA Network Open*, *3*(10). 10.1001/jamanetworkopen.2020.19658
- Kardiner, A. (1941). *The traumatic neuroses of war*. National Research Council. https://doi.org/10.1037/10581-000
- Kelley, D. C., Siegel, E., & Wormwood, J. B. (2019). Understanding police performance under stress: Insights from the biopsychosocial model of challenge and threat. *Frontiers in Psychology*, *10*, 1800.
- Kelling, G. L., & Moore, M. H. (1989). *The evolving strategy of policing* (No. 4). US Department of Justice, Office of Justice Programs, National Institute of Justice.
- Koper, C. S., & Lum, C. (2012). Incorporating research into daily police practices: The Matrix Demonstration Project. *Translational Criminology*, 16–17.

- Krohne, H. W. (2002). Stress and coping theories. *International Encyclopedia of the Social Behavioral Sciences*, 22, 15163–15170.
- Liberman, A. M., Best, S. R., Metzler, T. J., Fagan, J. A., Weiss, D. S., & Marmar, C. R. (2002). Routine occupational stress and psychological distress in police. *Policing: An International Journal of Police Strategies & Management*, 25(2), 421–439. https://doi.org/10.1108/13639510210429446
- Lindemann, E. (1944). Symptomatology and management of acute grief. *American Journal of Psychiatry*, 101(2), 141–148.
- Loader, I., & Walker, N. (2001). Policing as a public good: Reconstituting the connections between policing and the state. *Theoretical Criminology*, *5*(1), 9–35.
- Maguen, S., Metzler, T. J., McCaslin, S. E., Inslicht, S. S., Henn-Haase, C., Neylan, T. C., & Marmar, C. R. (2009). Routine work environment stress and PTSD symptoms in police officers. *The Journal of Nervous and Mental Disease*, 197(10), 754.
- Maguire, E. R., Nix, J., & Campbell, B. A. (2016, September 29). A war on cops? The effects of Ferguson on the number of US police officers murdered in the line of duty. *Justice Quarterly*, 34(5), 739–758.
- Marchand, A., Nadeau, C., Beaulieu-Prévost, D., Boyer, R., & Martin, M. (2015). Predictors of posttraumatic stress disorder among police officers: A prospective study. *Psychological Trauma: Theory, Research, Practice, and Policy*, 7(3), 212.
- Marmar, C. R., McCaslin, S. E., Metzler, T. J., Best, S., Weiss, D. S., Fagan, J., Liberman, A., Pole, N., Otte, C., Yehuda, R., Mohr, D., & Neylan, T. (2006). Predictors of posttraumatic stress in police and other first responders. *Annals of the New York Academy of Sciences*, 1071, 1–18. https://doi.org/10.1196/annals.1364.001
- Mazerolle, L., Antrobus, E., Bennett, S., & Tyler, T. R. (2013). Shaping citizen perceptions of police legitimacy: A randomized field trial of procedural justice. *Criminology*, 51(1), 33–63.
- McCraty, R., & Atkinson, M. (2012). Resilience training program reduces physiological and psychological stress in police officers. *Global advances in health and medicine*, *1*(5), 44–66.
- Morash, M., Haarr, R., & Kwak, D. H. (2006). Multilevel influences on police stress. *Journal of Contemporary Criminal Justice*, 22(1), 26–43.
- Nikolaou, I., & Tsaousis, I. (2002). Emotional intelligence in the workplace: Exploring its effects on occupational stress and organizational commitment. *The International Journal of Organizational Analysis*, 10(4), 327–342. 10.1108/eb028956

- Palm, K. M., Polusny, M. A., & Follette, V. M. (2004). Vicarious traumatization: Potential hazards and interventions for disaster and trauma workers. *Prehospital and Disaster Medicine*, 19(1), 73–78.
- Palmiotto, M., Birzer, M., & Unnithan, N. P. (2000). Training in community policing: A suggested curriculum. *Policing: An International Journal of Police Strategies and Management, 23*(1), 8–21. https://www.researchgate.net/publication/242337519_Training_in_community_policing_A_suggested_curriculum
- Papazoglou, K., & Tuttle, B. M. (2018). Fighting police trauma: Practical approaches to addressing psychological needs of officers. *Sage Open*, 8(3). 2158244018794794.
- Police Executive Research Forum. (2019, October). An occupational risk: What every police agency should do to prevent suicide among its officers. Police Executive Research Forum. https://www.policeforum.org/assets/PreventOfficerSuicide.pdf
- Ramsey, C., & Robinson, L. (2015). *Interim report of the President's task force on 21st century policing*. Washington, DC: Office of Community Oriented Policing Services.
- Rosete, D., & Ciarrochi, J. (2005, July 1). Emotional intelligence and its relationship to workplace performance outcomes of leadership effectiveness. *Leadership & Organization Development Journal*, 26(5), 388–399. 10.1108/01437730510607871
- Rudofossi, D. (2009). A cop doc's guide to public safety complex trauma syndrome: Using five police personality styles (death, value, and meaning). Baywood.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, Cognition and Personality*, 9(3), 185–211. https://journals.sagepub.com/doi/pdf/10.2190/DUGG-P24E-52WK-6CDG?casa_token=-ffZ854v7hwAAAAA:DYxmiXeIQud8YyFCFHY spykg77m1FchTVFbAYpDKSH7Auou-VMDRACUIe6uMpmYJdBbn8mXG010g
- Saunders, J., Kotzias, V., & Ramchand, R. (2019). Contemporary police stress: The impact of the evolving socio-political context. *Criminology, Criminal Justice, Law & Society*, 20(1), 35–52.
- Shane, J. M. (2019). Stress inside police departments. Routledge.
- Smid, G. E., Mooren, T. T., van der Mast, R. C., Gersons, B. P., & Kleber, R. J. (2009). Delayed posttraumatic stress disorder: Systematic review, meta-analysis, and meta-regression analysis of prospective studies. *Journal of Clinical Psychiatry*, 70(11), 1572.
- Snider, J. J. (2015). *Moral injury: Repair through self-forgiveness*. [Doctoral dissertation, George Fox University]. http://digitalcommons.georgefox.edu/psyd/182
- Sokol, L., & Fox, M. (2020). The comprehensive clinician's guide to cognitive behavioral therapy. Pesi.

- Spencer, K. B., Charbonneau, A. K., & Glaser, J. (2016). Implicit bias and policing. *Social and Personality Psychology Compass*, 10(1), 50–63.
- Spielberger, C. D., Westberry, L. G., Grier, K. S., & Greenfield, G. (1981). *The police stress survey: Sources of stress in law enforcement*. Washington, DC: National Institute of Justice.
- Stephens, C., & Long, N. (2000). Communication with police supervisors and peers as a buffer of work-related traumatic stress. *Journal of Organizational Behavior*, 21(4), 407–424.
- Ursano, R. J., Mash, H. B. H., Kessler, R. C., Naifeh, J. A., Fullerton, C. S., Aliaga, P. A., Stokes, C. M., Wunn, G. H., Ng, T. H. H., Dinh, H. M., Gonzalez, O. I., Zaslavsky, A. M., Sampson, N. A., Kao, T. C., Heeringa, S. G., Nock, M. K., & Stein, M. B. (2020). Factors associated with suicide ideation in US Army soldiers during deployment in Afghanistan. *JAMA Network Open*, *3*(1). e1919935-e1919935.
- Van Brunt, A. A., Bedi, S. A., Bowman, L. E., & Futterman, C. B. (2016). Complaint submitted to the United States Department of Justice documenting the role of the Independent Police Review Authority in perpetuating a code of silence and culture of violence in the Chicago Police Department. https://www.law.northwestern.edu/legalclinic/macarthur/projects/police/documents/Complaint%20to%20DOJ%20Concerning%20IPRA.pdf
- Van der Kolk, B. A. (1988). The trauma spectrum: The interaction of biological and social events in the genesis of the trauma response. *Journal of Traumatic Stress*, *1*(3), 273–290.
- van der Velden, P. G., Kleber, R. J., Grievink, L., & Yzermans, J. C. (2010). Confrontations with aggression and mental health problems in police officers: The role of organizational stressors, life-events and previous mental health problems. *Psychological Trauma: Theory, Research, Practice, and Policy*, *2*(2), 135. https://doi.org/10.1037/a0019158
- Violanti, J. M., & Aron, F. (1994). Ranking police stressors. *Psychological Reports*, 75(2), 824–826.
- Violanti, J. M., Charles, L. E., McCanlies, E., Hartley, T. A., Baughman, P., Andrew, M. E., Fekedulegn, D., Ma, C. C., Mnatsakanova, A., & Burchfiel, C. M. (2017). Police stressors and health: a state-of-the-art review. *Policing (Bradford, England)*, 40(4), 642–656. https://doi.org/10.1108/PIJPSM-06-2016-0097
- Violanti, J. M., Ma, C. C., Mnatsakanova, A., Fekedulegn, D., Hartley, T. A., Gu, J. K., & Andrew, M. E. (2018). Associations between police work stressors and posttraumatic stress disorder symptoms: examining the moderating effects of coping. *Journal of Police and Criminal Psychology*, 33(3), 271–282.
- Wartick, S. L., & Cochran, P. L. (1985). The evolution of the corporate social performance model. *Academy of Management Review*, 10(4), 758–769.

- Weichselbaum, S., & Lewis, N. (2020). Support for defunding the police department is growing. Here's why it's not a silver bullet. *The Marshall Project*.
- Weisburd, D. (2000). *Police attitudes toward abuse of authority: Findings from a national study*. US Department of Justice, Office of Justice Programs, National Institute of Justice.
- Weiss, D. S., Brunet, A., Best, S. R., Metzler, T. J., Liberman, A., Pole, N., Fagan, J. A., & Marmar, C. R. (2010). Frequency and severity approaches to indexing exposure to trauma: the Critical Incident History Questionnaire for police officers. *Journal of Traumatic Stress*, 23(6), 734–743. https://doi.org/10.1002/jts.20576
- Wexler, C. (2019, October). An occupational risk: What every police agency should do to prevent suicide among police officers. Police Executive Research Forum.
- Worrall, J. L., Bishopp, S. A., Zinser, S. C., Wheeler, A. P., & Phillips, S. W. (2018). Exploring bias in police shooting decisions with real shoot/don't shoot cases. *Crime & Delinquency*, 64(9), 1171–1192.
- Zhao, J. S., He, N., & Lovrich, N. (2002). Predicting five dimensions of police officer stress: Looking more deeply into organizational settings for sources of police stress. *Police Quarterly*, 5(1), 43–62. 10.1177/109861110200500103