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New York City Police Officers' Experiences of 9/11

Christine Fiore
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Walden University

College of Social and Behavioral Sciences

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Christine Ann Fiore

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Walden University
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Abstract

New York City Police Officers' Experiences of 9/11

by

Christine Ann Fiore

MPhil, Walden University, 2019

MA, New York University, 1997

BA, Niagara University, 1988

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

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Abstract

Police officers were some of the first responders to the World Trade Center bombings on September 11, 2001. Longitudinal studies have revealed that some New York City (NYC) police officers were better able to cope than others, yet the long-term effects of officers' coping strategies are unknown. The purpose of this qualitative, phenomenological study was to explore the coping strategies used by NYC police officers during 9/11 and how these police officers continue to cope with their experiences today. Lazarus and Folkman's transactional model of stress and coping provided the foundation for this study. The participants included nine NYC police officers who worked on 9/11 or one shift after. Semi-structured, open-ended, in-depth interview questions were used to obtain detail-rich descriptions from the participants. A purposeful sample was obtained using snowball sampling to recruit participants. Participants reported using problem- and emotion-focused coping, but problem-focused coping more frequently. During and after 9/11, prior knowledge, work experience, personal beliefs, values, and motivation were used to appraise the level of risk involved and what could be done. The most frequent reported theme was attention placed on work related tasks and changing the environment; this was followed by talking to co-workers because this helped normalize their experience. Gaining clarity regarding how NYC police officers were able to cope while fearing for their own lives may further clinicians' understanding of how coping strategies can lead to adaptive or maladaptive functioning and lead to positive social change.

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Dedication

First and foremost, thank you, God! “*I can do all things through Christ who strengthens me* (Philippians 4:13).” Without my faith, I do not believe I could have gotten this far in my life or completed this project, thank you, Jesus!

I dedicate this study to my mother, my father, and my children, Chloe and Chase. My mother always instilled in me that I could do anything I put my mind to; thank you, Mom, for believing in me and constantly reminding me of this fact. Mom you have been a great example of what courage and strength look like. Thank you for raising me to be the woman that I am. To my father, thank you for giving me your love, support, patience, and encouragement, and for telling me “Never Give Up,” “Never Ever Give Up.” Well, I never gave up Pops! To my children, Chloe and Chase, who watched me struggle as I pursued this goal: I hope that I have shown you both that hard work pays off and to keep reaching for the stars. Thank you for being patient with Mommy during this process, and always stay humble and kind. I love you both the whole wide world and back again and again and again (Ad infinitum). Both of you are my love, my heart, and my whole wide world!

Lastly, I want to say a special thank you to my soul sisters (and you know who you are). Thank you for your love, encouragement, and continued support, especially during those times when my tank was empty. I am so grateful to be on this journey with you.

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I would also like to extend my gratitude to my family and friends; thank you for believing in me. There were so many times that I hung on to your words of encouragement for support. It was your love that carried me through this process.

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Finally, I am indebted to my participants. It was a privilege to hear their stories of what it was like to work on 9/11/01 and the days that followed. The courage displayed by all of you was remarkable. It is my sincere hope that this dissertation will allow others to also hear your voices in a manner that conveys the deep admiration that I have for each one of you. I also hope that this writing provides all police officers with the dignity and respect that they so deserve.

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Chapter 1: Introduction to the Study

The United States has experienced many traumatic events that have caused grief for the American people, including the loss of life, loss of property, and economic damage (Garcia-Vera et al., 2016; Mao et al., 2018). One of the most traumatic events was the terrorist attacks that occurred on September 11, 2001 (hereafter referred to as “9/11” or “September 11”). When challenged with death and threat to life, individuals must find ways to cope (Lazarus & Folkman, 1984). Coping with traumatic events can cause individuals to challenge their worldviews, redefine the experience, and reevaluate their life goals, thus creating a stronger investment in priorities and relationships (Chopko, Papazoglou, et al., 2018; Feder et al., 2016). In this study, I explore the lived experiences of coping of New York City (NYC) police officers during and after 9/11.

September 11th and its aftermath challenged the coping abilities of NYC police officers (Schwarzer et al., 2016), and longitudinal studies reveal that NYC police officers involved in 9/11 continue to suffer today (Feder et al., 2016; Jacobson et al., 2018; Jordan et al., 2018; Lowell et al., 2018; Schwarzer et al., 2016). Yet, few researchers have looked at the coping experiences of NYC police officers through their own perspectives, and those who have done so have used mixed samples that included individuals from other occupational groups (Bills et al., 2009; Ekenga et al., 2011; Freedman, 2004). Therefore, a need existed to understand how NYC police officers coped and continue to cope with the events of 9/11. Police officers are the first to respond in crisis situations, and although they are trained to deal with daily stressful situations, they are often unaware of the magnitude of the emergency they will encounter upon their arrival.

The results of this exploration have positive social change implications. Police officers may be better equipped to cope with their reactions to terrorist attacks in the future, and mental health counselors and/or clinicians working with police may be better able to provide them with strategies that could assist them in coping when faced with tragedy. For example, researchers and clinicians may learn about mental health practices and treatment programs that could be used to improve care for officers. Understanding a police officer's ability to cope during crisis situations has implications for police families, the police department, professionals working with police department employees, and society in general (Chopko, Papazoglou, et al., 2018; Frank et al., 2017; Schwarzer et al., 2016).

In this chapter, I will provide a detailed description of the problem and the purpose of the study. I will present the research questions (RQs) and will discuss the theoretical framework of the study. A description of the nature of the study; the methodology; and the assumptions, scope and delimitations, limitations, and significance of the study will also be provided. Finally, this chapter will end with a summary of the main points.

Background

The events of 9/11 constituted a unique situation that affected many first responders and imposed long-term physical and mental health burdens on those who were involved (Bromet et al., 2016; Dasaro et al., 2017; Diab et al., 2020; Dornbach-Bender et al., 202; Feder et al., 2016; Gargano et al., 2018a; Jordan et al., 2018; Lowell et al., 2018; Mao et al., 2018; Schwarzer et al., 2016; Smith et al., 2019; Yu et al., 2016). Some NYC police officers reported feeling unprepared for the situation (Bromet et al., 2016; Feder et

al., 2016). NYC police officers had duties that included dealing with the deceased, managing grieving family members, and being hypervigilant, all while working in unsecured areas and fearing for their own lives and the lives of others (Mao et al., 2018; Smith et al., 2019). Police officers required special coping skills both during and after their participation in rescue, recovery, and cleanup operations to cope (Lowell et al., 2018). During and after 9/11, police officers engaged in activities such as assisting other individuals to escape and cope with the death and destruction that engulfed the city while containing their own grief related to the uncertainty that surrounded the situation and the possibility of having lost their own family, friends, and coworkers.

Navigating the emotional waters during and after such a tragic event like 9/11 also posed other challenges for NYC police officers. Schwarzer et al. (2016) reported that NYC police officers served long hours under perplexing circumstances and conditions. Longitudinal research studies conducted in the aftermath of 9/11 reveal that some police officers continue to face challenges in their ability to cope long after the events of 9/11 (Bowler et al., 2016; Bromet et al., 2016; Clouston et al., 2019; Dasaro et al., 2017; Diab et al., 2019; Feder et al., 2016; Jacobson et al., 2018; Jordan et al., 2018; Lowell et al., 2018; Schwarzer et al., 2016).

Difficulty coping with the events of 9/11 is seen in increased reports of mortality and suicide rates (Jordan et al., 2018; Stanley et al., 2016; Violanti et al., 2017), police employment attrition (Bowler et al., 2016; Brooks et al., 2016; Violanti et al., 2019; Yu et al., 2016), and in the physical and mental ailments that continue to be monitored in longitudinal studies (Bowler et al., 2016; Bromet et al., 2016; Diab et al., 2020; Jordan et al., 2018; Mao et al., 2018; Maslow et al., 2016; Schwarzer et al., 2016). After looking back at

the events of that day, researchers (Bowler et al., 2016; Lowell et al., 2018; Mao et al., 2018; Schwarzer et al., 2016) learned that some NYC police officers were better able to cope than others. A better understanding was needed as to what NYC police officers thought did and did not work to assist them in their coping.

Little was known about what NYC police officers' thought was the most or least helpful coping strategies during the terrorist attack (Feder et al., 2016; Lowell et al., 2018; Mao et al., 2018; Schwarzer et al., 2016; Smith et al., 2019). Researchers (Bowler et al., 2016; Bromet et al., 2016; Feder et al., 2016; García-Vera et al., 2016; Jordan et al., 2018; Lowell et al., 2018; Mao et al., 2018; Schwarzer et al., 2016; Welch et al., 2017) provided valuable information on coping during 9/11; however, some inconsistencies are present in the literature on the specific variables that influence police coping after a traumatic, life-threatening event. Police officers are trained to handle crisis situations subsequent to recruitment (Adams, Bowler, et al., 2019; Regehr et al., 2019). The extant research (Bowler et al., 2016; Brunetto et al., 2017; Chopko, Papzoglou, et al., 2018; Frank et al., 2017; Geiger, 2016; Matusiak et al., 2017; McCarty & Lawrence, 2016; Padyab et al., 2016; Patterson, 2016; Schwarzer et al., 2016; Singh & Ram, 2016) on the nature of police work and a police officer's ability to cope during traumatic incidents and crisis is generally mixed. For example, some researchers (Bowler et al., 2016; Bromet et al., 2016; Brunetto et al., 2017; Chopko, Palmieri, et al., 2018; Clifton et al., 2018; Schwarzer et al., 2016; Violanti et al., 2017) have emphasized the stressful nature of police work, but empirical studies conducted by Bowler et al. (2016); Frank et al. (2017); McCarty and Lawrence (2016); and Regehr et al. (2019) allude to police being

adequately trained to handle and cope with the stress and frustration of crisis situations and the trauma that are inherent in the job.

When examining the years following the events of 9/11, researchers have learned that some NYC police officers were better able to cope, whereas others were not. More research was needed regarding what factors influenced NYC police officers' ability to cope with crisis. This knowledge is needed if professionals are to help police officers to understand that they are dealing with compounded stressors that may be cumulative and circumvented. Greater awareness may improve police responsiveness to treatment and educate officers on ways to promote positive mental health outcomes.

The events of 9/11 resulted in the death of 2,726 people including over 400 police officers and firefighters (Centers for Disease Control and Prevention [CDC], 2002). The mortality rates continue to increase as more and more responders die from health issues related to 9/11 (CDC, 2018b; Jordan et al., 2018). Civil servants, such as those of the New York Police Department, who were employed that day and in the days that followed had to deal with the stress experienced by others in addition to being consumed by their own experiences. The long-term effects of coping strategies employed by NYC police officers were unknown. A need existed to reveal long-term effects to continue to provide successful posttraumatic growth (PTG) services for survivors of the WTC terrorist attacks and any future catastrophic events.

Problem Statement

The problem addressed in this study was the lack of understanding related to NYC police officers' coping mechanisms during and after the events of 9/11.

Understanding how NYC police officers coped during and after 9/11 is important because

it may inform professionals about what is beneficial or detrimental when working with police officers. NYC police officers used various means of coping with the stress and trauma related to the incident (Bowler et al., 2016; Diab et al., 2019, Feder et al., 2016; Mao et al., 2018; Schwarzer et al., 2016). The means utilized included problem- and emotion-focused coping and avoidance of stimuli that reminded them of traumatic events (Bromet et al., 2016; Chopko, Palmieri, et al., 2018; Clifton et al., 2018; Feder et al., 2016).

Coping skills involve cognitive mechanisms and involve behavior. Problem-focused coping strategies are used when individuals perceive the stress they are experiencing as changeable. Two common strategies include confrontation and problem-solving skills (Clifton et al., 2018; Giannini et al., 2016; Patterson, 2016). Emotion-focused coping involves cognitive coping strategies that may include avoidance, distancing, self-control, and accepting responsibility (Giannini et al., 2016; Patterson, 2016). Avoidance is the process where individuals make attempts at removing themselves from a perceived threat by ignoring information or psychologically distancing oneself from the stressor (Arble & Arnetz, 2017; Brough et al., 2018; Chopko, Papazoglou, et al., 2018; Sollie et al., 2017). Avoidance and emotion-focused coping are often accompanied by negative coping. The experience of trauma includes emotional reactions such as fear, vulnerability, grief, and survivor guilt (Arbel et al., 2018; Brough et al., 2018; Chopko, Papazoglou, et al., 2018; Gargano, Nguyen, et al., 2016). The United States continues to experience terrorist threats; therefore, the ability to positively cope during stressful circumstances such as wide-scale terrorist attacks is an important topic for both society

and those who serve the public (Frank et al., 2017; Garcia-Vera Sanz, & Gutiérrez, 2016; Greinacher et al., 2019; Haugen et al., 2017; Regehr et al., 2019).

NYC police officers are required to perform duties as emergency personnel regardless of their circumstances (Stanley et al., 2016). These men and women are expected to remain calm and stoic during times of crisis (Chopko, Palmieri, et al., 2018; Clouston et al., 2019; Frank et al., 2017; Geiger, 2016; Greinacher et al., 2019; Haugen et al., 2017). Although a human's instinct is to run from a crisis or tragedy to a safer environment, police officers are often found running toward the unpleasant unknown (Smith et al., 2019). Many NYC police officers who served on 9/11 had no idea what to expect when they arrived at the World Trade Center (WTC) Twin Towers, nor did they have any idea of the consequences of their actions that day (Geiger, 2016). Most of the police officers who were involved in 9/11 served long hours under horrific circumstances and conditions (Bromet et al., 2016; Schwarzer et al., 2016). Their duties included working at morgues, identifying bodies, managing grieving family members, and being hypervigilant while working in unsecured areas, all of which required special coping skills both during and after their participation (Bromet et al., 2016; García-Vera et al., 2016). Moreover, NYC police officers were susceptible to the same stressors that everyone exposed to disaster face, and although the officers were greatly affected, they still had to focus their attention on protecting and serving the public (Schwarzer et al., 2016).

Some police officers subsequently developed maladaptive behaviors after the attacks on the WTC that stemmed from the combination of the type of traumatic incidents observed, coping mechanisms used, perceived, and received mental health supports, and

ongoing stressors inherent in the life of a NYC police officer (Bowler et al., 2016; Bromet et al., 2016; Diab et al., 2019; Feder et al., 2016). Still, other police officers reported positive experiences that enhanced their skills of coping (Dornbach-Bender et al., 2020; Feder et al., 2016). Additionally, Geiger (2016) and Haugen et al. (2017) found that law enforcement personnel are the least likely to seek professional therapy despite any emotional or physical discomfort they may experience. Many NYC police officers who did not initially receive treatment after 9/11 went on to experience mental health issues and continue to suffer from negative mental health symptoms today (Bowler et al., 2016; Bromet et al., 2018; Clouston et al., 2019; Dasaro et al., 2017; Diab et al., 2020; Feder et al., 2016; Klimley et al., 2018; Mao et al., 2018; Schwarzer et al., 2016; Smith et al., 2019).

There is a void in the scholarly literature regarding the lived experiences of NYC police officers during and post 9/11. To date, there was no single qualitative study that solely examined the crisis and coping practices of NYC police officers during and after the events that took place on 9/11 from a positive perspective. Information is available regarding the mental health outcomes of NYC police officers during 9/11, but the research is mostly from heterogeneous samples that include other populations (Adams, Bowler, et al., 2019; Gargano, Gershon, et al., 2018; Lowell et al., 2018; Smith et al., 2019). Although many researchers have examined posttraumatic stress disorder (PTSD) (Bowler et al., 2016; Bromet et al., 2016; Dornbach-Bender et al., 2020; Feder et al., 2016; Schwarzer et al., 2016; Yu et al., 2016), they have not adequately explored the experiences of trauma through the voices and stories of the sample participants. I conducted this study to address this gap in the literature.

Purpose of the Study

The purpose of this qualitative, phenomenological study was to explore NYC police officers' understanding of coping strategies used subsequent to the events of 9/11. Gaining clarity regarding how NYC police officers were able to cope while fearing for their own life and safety may lead to a better understanding of how coping strategies can lead to adaptive or maladaptive functioning. The terrorist attack on the WTC towers provides a unique opportunity to understand the coping practices of a small group of NYC police officers during and after the 9/11 attacks. Understanding negative and positive coping practices during extreme stress may be useful to foster a strengths-based approach to treatment that encourages individuals to be able to quickly heal and sustain healthy coping practices during and after crisis situations. In one study, the authors identified resilient and vulnerable characteristics during extreme times of distress as being specific to individuals who serve the public (Chopko, Papazoglou, et al., 2018).

I conducted the study to provide a deeper understanding of the lived experiences of a small sample of NYC police officers who responded to the attacks on the WTC towers on 9/11. I also wanted to ascertain what the participating police officers felt worked best for coping with and after such a tragedy. The intention of this phenomenological study was to understand how NYC police officers describe their experiences of coping during a chaotic and uncertain time specific to the aftermath of a terrorist attack.

To better understand what factors may have influenced NYC police officers in their ability to cope during and after a terrorist attack, I asked participants to describe the coping practices they used during and after the 9/11 attacks on NYC. Much is known

about coping with crisis (Arbel et al., 2018; Bowler et al., 2016; Feder et al., 2016; Singh et al., 2016); however, research was lacking on the experience of NYC police officers and the coping practices they used during and after 9/11. I explored those lived experiences, focusing on the positive coping practices participants described as most helpful. I also explored those lived experiences, focusing on the negative coping practices participants described as least helpful. The study findings contribute to the scholarly literature about best coping practices for NYC police officers during and after future terrorist attacks.

Research Questions

I sought to answer the following RQs in this qualitative, phenomenological study:

RQ1. What coping mechanisms does a small sample of NYC police officers perceive worked best during and after 9/11?

RQ2. What coping mechanisms does a small sample of NYC police officers perceive did not work well during and after 9/11?

Theoretical Framework

Coping is a complex process that is thought to be the result of social, emotional, physical, behavioral, and community-based factors (Clifton et al., 2018; Feder et al., 2016; Loo et al., 2016; McCarty et al., 2016; Patterson, 2016; Paulson & Leuty, 2016; Singh & Ram, 2016; Sollie et al., 2017). One's ability to cope produces a dynamic state of adaptation and includes response patterns that are orchestrated by physiological occurrences. Hans Selye (1956) began writing about the physiological effects stress has on the body; these effects later became known as the general adaptation syndrome. Lazarus and Folkman (1984), who were influenced by Selye, provided a cognitive-behavioral

theory for coping with stress and developed the framework for the transaction model of stress and coping (TMSC) that was used in this study.

Lazarus and Folkman's (1984) TMSC provided an appropriate foundation from which to explore NYC police officers' coping strategies following 9/11 because it offers an appraisal of police officers' ability to cope that is distinctive. Lazarus and Folkman contended that when faced with a stressful situation, an individual will cycle through a primary and secondary appraisal process until homeostasis returns. Stress is viewed as a stimulus that demands a response to adjust or adapt to the experience. The experience can be appraised as positive or negative based on cognitive and emotional factors. The appraisal process is highly individualistic. The TMSC was appropriate because it provided a way to assess situational occurrences within the environment and individualistic ways to manage and cope (see Lazarus & Folkman, 1984). I will explain the constructs included in the TMSC cycle in further detail in Chapter 2 under the section labeled "Theoretical Foundation."

Calhoun and Tedeschi (2018) wrote extensively about coping with crisis, and their investigations have influenced the professional understanding of positive growth and will be incorporated in this study. Positive growth occurs when an individual experience something productive following a crisis (Chopko, Palmieri, et al., 2018; Tedeschi et al., 2017). The growth represents more than just returning to a state of homeostasis because it involves individual understanding. The individual evaluates the situation and creates positive meaning from the event to cope with the tragedy (Lazarus & Folkman, 1984). In 2004, Calhoun and Tedeschi focused on the cognitive appraisal

process that a person engages in after experiencing a traumatic event and how a reconstruction of personal worldviews is needed.

Several researchers have touched upon how a police officer will cope with stress. Greinacher et al. (2019) conducted a systematic review that focused on the police process of coping and concluded that coping with stress is a complex interaction between the subjective police officer and their objective environment. Arbel et al. (2018) contended that police officers cope differently when compared with other first responders. These findings support that coping with stress can be interpreted as a positive or negative experience by the individual. However, little was known about the experiences of NYC police officers who lived through the events of 9/11 and whether they utilized coping skills that enhanced or hindered their coping.

Meaning-focused active coping is known to be a protective measure when dealing with the events of 9/11. Feder et al. (2016) looked at trajectories of WTC-related PTSD symptoms over a 12-year period using the WTCHP data, which encompassed a large representative sample of police officers ($N = 1,874$). Results showed that participants found ways of making sense of the situation and this process assisted in the reduction of feelings of fear and anger that surrounded the event. Further, the researchers found that finding meaning facilitated psychological adjustment. Feder et al. contended that meaning-focused active coping is an adaptive process that contributed to positive mental health outcomes for their sample. Such studies provide insight on the mental health of trauma survivors, especially police officers who deal with compounded stress on the job daily.

In addition, meaning-focused active coping fits the TMSC paradigm (Feder et al., 2016; Sollie et al., 2017). Violanti et al. (2018) used the TMSC to study the moderating effects of coping on a police sample ($N = 342$). The stress appraisal process was found to be an important variable when considering the relationship between coping and work engagement. Appraisals were often personal and idiosyncratic, and the perception of control aligned with beneficial outcomes, displaying a positive side to stress and coping. Using the transactional model as the theoretical framework for this study assisted me in analyzing how NYC police officers reported their ability to cope with the events of 9/11, including how they processed their feelings related to the environment at the time, their adaptation to the challenges they experienced, and the meaning they ascribed to the experiences they encountered. The utilization of the TMSC helped uncover the pathway that produces positive adaptation in a hazardous profession.

I also used Tedeschi and Calhoun's (1996) model of PTG in the study to extend Lazarus and Folkman's model. This study allowed for the inclusion of a component of having positive experiences after trauma. PTG describes possible growth from traumatic events. Both the TMSC and the PTG models were used as a lens through which to explore and better understand how NYC police officers made sense of and coped with their experience. PTG will be explored in depth in the literature review in Chapter 2. Using both models, which have been found successful in previous research (Clifton et al., 2018; Geiger, 2016; McCarty & Lawrence, 2016; Ogińska-Bulik & Kobylarczyk, 2017; Patterson, 2016; Sollie et al., 2017; Violanti et al., 2018), improved the rigor of the study.

Both the TMSC and the PTG models related to the study's approach and RQs in several ways. First, both models use a cognitive-behavioral lens to scrutinize how

individuals manage stressful situations. The TMSC is interested in the interactions between the person and environment and the demands that produce stress upon the individual (Lazarus & Folkman, 1984). Because stress is unavoidable, how and what makes an individual vulnerable and sensitive to events will depend on the interpretation and reaction an individual makes regarding the situation. I asked the NYC police officers in the study to engage in a cognitive appraisal process about their behavior and the survival skills they employed to determine whether these skills were useful. The participating NYC police officers had 19 years to cycle through the cognitive appraisal process (primary and secondary) to derive meaning from the event.

PTG is a dynamic outcome that looks at how cognitive structures are challenged and changed by the individual (Calhoun & Tedeschi, 2004). Both models see coping as a dynamic process of adaptation. When meaning-focused coping is engaged it often relates to having a positive interaction between the person and their environment. The RQs were used to determine the ways NYC police officers who worked on 9/11 or a shift after described the ways they coped initially, what they felt worked best or did not work to assist them in their ability to cope and, lastly, what they might do differently. I also asked the participants to describe how they coped after 9/11; what they might do differently; how they coped; and what worked best or did not work for them in the days, months, and years following the terrorist attack. To answer the interview questions, participants reflected on their experiences, thought about the meaning they placed on the events in 2001, and discussed how they view their ability to cope today, 19 years past the event, and the meaning they ascribed to the event back in 2001 and now. The hope was that this

research would uncover a positive pathway to coping that may be useful to police officers when they are faced with stressful crisis situations.

Nature of the Study

This research was a qualitative study using a hermeneutic phenomenological design (Heidegger, 2008; Husserl, 1970). The design allowed for the participants to be conscious of coping mechanisms they employed during and after the crisis associated with 9/11 and to provide detail-rich reports of their personal experience. By using a hermeneutic phenomenological design, researchers are able to elicit descriptions from the participants that enrich understanding of the “universal essence” of the phenomenon being explored (Creswell & Poth, 2018, p. 278). The universal essence of the phenomenon is the meaning individuals attach to their experience of it. The phenomenon of interest in this study was what it was like for a NYC police officer to live through the terrorist attacks of 9/11.

I asked the former NYC police officers to provide detailed descriptions of their lived experiences to further understand the study phenomenon. Participants were asked to describe the coping practices they used during and after the 9/11 attacks on NYC and to reflect on how well their coping skills assisted them in coping with the events of that day and the days following the terrorist attack. This study was conducted to seek NYC police officers’ descriptions and interpretations of their lived experience to gain a deeper understanding of their perception of coping. The use of a hermeneutic phenomenology approach allowed for these descriptions to emerge (see Englander, 2016; Harris, 2017). The methodology allowed for a collective understanding of how NYC police officers managed through the terrorist events, including the coping strategies they used.

I asked open-ended questions in my semi-structured interviews to prompt narrative descriptions from the participants related to how they coped during 9/11. In-depth interviews were conducted with a sample of nine individuals who were employed by the New York Police Department during 9/11 and who worked at least one shift in the 6 months post-9/11. Only NYC police officers who were present on 9/11 were asked to participate in the study. Participants were asked the same questions presented in an open-ended format to provide them with a voice and allow them to discuss issues on a variety of topics related to coping during and after the terrorist attacks on 9/11. According to Moser and Korstjens (2018), a sample of fewer than 10 participants is needed when conducting a phenomenological study to ensure descriptions from participants that are rich in detail.

The phenomenological approach provided a closer look at police officers' functioning as a bounded system. This approach allows the researcher to experience hearing the perceptions of a few select individuals who are included in one population (Malterud et al., 2016). I slightly oversampled to account for any participants who might choose to drop out of the study or who did not want to share their experiences related to 9/11 coping. I interviewed nine participants. Saturation was reached after seven interviews, but two additional interviews were scheduled and conducted. After the ninth interview, saturation was achieved and no further recruitment was needed (see Hennink, et al., 2017; Saunders et al., 2018). All interviews were audio-recorded and transcribed by me.

I followed Creswell and Poth's (2018) data analysis procedure. The procedure is a structural approach that provides several steps to analyze data. I began by determining the

phenomenon to be studied. I also bracketed out any of my preconceived notions or experience and collected data from several individuals who had the same experiences (see Alase, 2017; Englander, 2016; Husserl, 2012; Levitt et al., 2017; Willis et al., 2016). I read through the written transcripts several times to understand the feelings relayed in the descriptions offered by participants of their experiences. I identified significant words and phrases as I read through the transcripts. Information was transcribed and reduced into smaller concepts for analysis into themes common to participant experiences. I developed textural and structural descriptions from the transcriptions that provided the essence of the experience (see Creswell & Poth, 2018). After all interviews were transcribed, I reread and reviewed each interview and began looking for emergent themes and patterns in the data. NVivo 12 coding software (<https://www.qsrinternational.com/nvivo-qualitative-data-analysis-software/home>) was used to facilitate the coding of the themes. Transcribed interviews were input into NVivo 12 for analysis. NVivo 12 was useful because it allowed for a significant amount of data to be input to assist with organization and the identification of themes and patterns that existed in the data. The results were integrated into descriptions of the phenomenon, and the findings were member checked and validated by the participants. Participant remarks, when appropriate, are included in the presentation of the findings in Chapter 4. The data analysis process will be detailed further in Chapter 3 in the Data Analysis Plan subsection.

Definitions

The following terms are used throughout this study and are defined here for clarity:

Avoidance: An individual decision to remove oneself from a perceived threat that may include filtering out or ignoring information, or psychologically distancing oneself from the stress (Brough et al., 2018; Chopko, Palmieri, et al., 2018).

Coping: “Constantly changing cognitive and behavioral efforts to manage specific external and internal demands appraised as taxing or exceeding the resources of the person” (Lazarus & Folkman, 1984, p. 141). In this study, coping was limited to psychological stress that exceeds personal resources and was viewed as process-orientated rather than as a trait-orientated construct. Coping will be discussed specific to the demands and conflicts that are continually changing in a situation.

Critical incidents: Any event that has a stressful effect that overwhelms the usually effective coping skills of an individual (Panjali, 2017).

Emotion-focused coping: A strategy used when an individual appraises a situation as unchangeable but needs to accept it (Patterson, 2016). Emotion-focused coping strategies include cognitive coping skills such as avoidance, distance, self-control, and accepting responsibility (Patterson, 2016).

Posttraumatic stress: A disorder that is the result of an individual living through or witnessing an event where a threat to life or physical integrity and safety were compromised, and in which an individual experiences fear, terror, or helplessness. Posttraumatic stress also includes functional impairment that is maladaptive (Lowell et al., 2018).

Posttraumatic growth (PTG): A positive change that is experienced as a result of a struggle with a crisis or a traumatic event (Blackie et al., 2017; Chopko et al., 2019; Tedeschi et al., 2017; Violanti et al., 2018). PTG involves individual characteristics,

support, and disclosure and can manifest in a variety of ways (Chopko, Palmieri, et al., 2018). Individuals who experience PTG have an increased appreciation for life and more meaningful and interpersonal relationships (Feder et al., 2016). Furthermore, PTG includes a heightened sense of personal strength, changed priorities, and a more productive existential and spiritual life (Gargano, Gershon, et al., 2016). PTG is a dynamic outcome and an ongoing process where cognitive structures are challenged and changed by the traumatic experience (Chopko, Palmieri, et al., 2018; Geiger, 2016).

Problem-focused coping: A strategy used when an individual appraises a stressor as changeable (Patterson, 2016). Problem-focused coping strategies include confrontation and the use of problem-solving skills (Patterson, 2016).

Traditional rescue workers: Workers who provide emergency medical care to individuals who are in crisis (Gärtner et al., 2019). This group of individuals can include firefighters, police, military workers, healthcare workers, and volunteers (Bromet et al., 2016).

The World Trade Center Health Program (WTCHP): A program that was designed to monitor the treatment provided to emergency responders, recovery workers, and volunteers who were engaged during and after 9/11 (Schwarzer et al., 2016).

The World Trade Center Health Registry (WTCHR): A longitudinal health study initiated in 2002 by the Department of Health to investigate the residual long-term effects of the WTC terrorist attacks on residents and first responders (Bowler et al., 2016).

Assumptions

Several assumptions were present in this study. I assumed that the police officers who elected to participate in this study would participate in a meaningful way and would

be truthful in their responses. It was also assumed that the answers to each question provided by participants would be thoughtful. It was necessary to maintain these assumptions because this phenomenological study would not meet with any level of success if credibility was lost because of invalid collected data (Creswell & Poth, 2018).

It was also assumed that positive coping would be present and possible in the New York Police Department and that positive coping would be represented within the sample used for this study. The current literature and research indicated that negative and positive coping behaviors are present in the New York Police Department (Arble & Arnetz, 2017; Bowler et al., 2016; Dasaro et al., 2017; Feder et al., 2016; McCarthy & Lawrence, 2016; Patterson, 2016; Regehr et al., 2019; Schwarzer et al., 2016). Longitudinal research (Chopko, Palmieri, et al., 2018; Jacobson et al., 2018; Jordan et al., 2018; Lowell et al., 2018) suggested that negative mental health concerns continue within the police departments of NYC. Some of the most recent findings indicated the after-effects of 9/11 remain an ongoing concern for NYC police officers (Bromet et al., 2016; CDC, 2018a; Clouston et al., 2019; Dornbach-Bender et al., 2020; Gargano, Gershon, et al., 2018; Smith et al., 2019).

Scope and Delimitations

This study was focused on NYC police officers and their ability to cope during and after the 9/11 terrorist attacks. It was hopeful that by examining NYC police officers' perceptions of their ability to cope during and after 9/11, additional insights would be uncovered regarding the mechanisms that are effective or ineffective when coping with unexpected events. NYC police officers had ample time to appraise the transactions that took place between themselves and their environment. Meaning was established and

formed from their 9/11 experiences. Further, NYC police officers were asked to think about not only how they coped on 9/11 and the days that followed, but how they perceive they are coping today.

Longitudinal studies (Feder et al., 2016; Jacobson et al., 2018; Jordan et al., 2018; Lowell et al., 2018; Schwarzer, et al., 2016) outlined some of the positive and negative coping experiences of surviving the 9/11 terrorist attacks, but very few focused on NYC police officers' coping skills as a homogenous group. The population included in this study was limited to a small sample of NYC police officers. No other occupational groups were included in the sample. It was not reasonable to assume that all first responders coped with the events of 9/11 the same way as NYC police officers. Therefore, gaining clarity as to how NYC police officers coped during and after 9/11 was warranted.

The boundaries set for the study allowed for minimal transferability. The results only apply to NYC police officers. The boundary was intentional and unique because the demands of 9/11 placed police officers in a distinctive setting. The officers selected for this study were required to have worked at least one shift during or after 9/11. NYC police officers were chosen because they are an understudied group. Most research studies conducted placed police officers in the group with other rescue workers and did not look at police officers as a distinctive homogeneous group. The focus of this study was on a small sample of NYC police officers as a purposeful delimitation, which established a clear boundary so that just NYC police officers were included in the sample. This research did not focus on any other rescue group and did not focus on stress processes that may or may not have been experienced by NYC police officers. The

study's interest was about how NYC police officers perceive they coped and continue to cope today with the events of 9/11 so that a clearer understanding of how NYC police officers describe their experiences with coping could be established.

Stress theories are categorized into stimulus and response definitions for coping. Both categories are useful but have limited utility because they do not allow for the cognitive-behavioral complexity of individual differences. Stimulus definitions focus on the event in the environment and view stress as the cause of the experience. Stress is often considered to be an independent variable where the same level of adjustment is needed across populations. This way of thinking of stress places the individual as a passive recipient of stress and ignores life experience, environmental issues, personality, and prior learning. Response definitions include the state of stress and how an individual reacts to the stress they experience. Hans Selye's (1956) GAS model depicted stress as a dependent variable and as a defense and a physiologically based response (Tan & Yip, 2018). Lazarus and Folkman's (1984) TMSC is a psychological model that places the individual at the center of the stress experience and views stress as a complex systematic transaction. The TMSC includes personal interpretation that is involved in the active or passive coping process. The conservation of resource theory held by Hobfoll (2001) relates to some of the constructs in the study because it looks at the loss of resources by focusing on the ability of the individual to use resources to preserve their well-being. However, the conservation of resource theory seeks to understand the personal and social resources available to the individual and how these relate to others at the communal level. In this study, I was interested in viewing not only the resources available to NYC police

officers but also in understanding NYC police officers' perspectives on how they coped during and after the 9/11 crisis.

Coping theories are also categorized as having either a focus or approach lens. A focus lens looks at both trait and state orientations, while an approach focus gazes at the micro and macro analytic levels of coping. Lazarus and Folkman (1984) offered a process-oriented model that includes an interaction between the person and their environment with a focus on what the individual perceives as being stressful. The TMSC includes cognitive and behavioral attempts to master or tolerate the internal and external demands that created the stress. By asking NYC police officers how they coped during and after 9/11, findings provided detail-rich information on coping. The TMSC offered by Lazarus and Folkman can flow between state and trait characteristics at the micro or macro level. Therefore, Lazarus and Folkman's model offers a process-orientated approach that was best suited to answer the RQs in this study.

It is unrealistic to believe human behavior is not context-driven and that the experiences individuals have are qualitatively similar. The results of this research are useful to NYC police officers only and, therefore, cannot be generalizable or transferred to other groups. The research was conducted in a consistent manner and followed the specific procedures outlined in the research design. Consistency was a continuous process during the study in the data collection phase, in how interviews were conducted and transcribed, and how the data were analyzed. Reflective field notes were written throughout the study and were based on thoughts and decisions that were made during the research process. Lastly, the sampling procedures, findings from the study, and data

management were outlined and conducted with rigor in the same manner with all participants for consistency purposes.

Limitations

I utilized a purposive sampling technique for this study by selecting information-rich cases for in-depth study using the snowball sampling method. Snowball sampling is one type of purposeful sampling in which the researcher finds information that might be relevant to the problem being investigated from chosen individuals (Creswell & Poth, 2018). The selected participants were not representative of the population because volunteers for the study were not chosen at random. Instead, participants were selected because they met specific qualifications that included being a police officer who worked on 9/11 or at least one shift thereafter. This type of sampling technique creates difficulty when generalizing the findings, especially when they are related to sources of stress because individuals' experiences are personal and idiosyncratic. The snowball sampling method fails to recognize the socioeconomic, ethnic, and cultural diversity of the sample. Each of these factors influenced the coping behaviors of NYC police officers in some way. The profile of each participant was different as were the prevalence of the coping skills used to manage the experiences encountered related to 9/11.

Subjects were selected who had experience or knowledge of the issue addressed in the research. Purposive sampling takes the form of a maximum variation approach in which the researcher identifies different characteristics of the target population and then selects the sample of subjects based on how well they match the defined attributes. Purposive sampling relies on the researcher's ability to identify the variables that might affect a participant's response to the questions posed by utilizing the knowledge gained

from the relevant variables in selecting the sample of the study (Moser & Korstjens, 2018).

Dependability establishes the stability of findings over time and further helps overcome some of the limitations that are present in the design of the study (Korstjens & Moser, 2018). Dependability requires participants to review and evaluate a summary of their transcripts and confirm that the transcripts accurately reflect what they were trying to convey during the interview. Participant descriptions were transparent as they were precisely transcribed. Step-by-step procedures were outlined as information was obtained and completed for the study; this process continued until the end of the study.

The choice of variables depends on my expertise and understanding of the area of research, information gained from relevant literature, and clues from the ongoing study (Creswell & Poth, 2018). There was a concern for observer bias and observer effect. To reduce some of the prejudice and any effect I had on the study procedures, I clearly discussed any personal thoughts and feelings in a journal. I recorded conversations, noted interactions, activities, and anything about the physical setting in this journal.

Significance

There are very few studies that specifically targeted the perspective of NYC police officers and their coping mechanisms during 9/11 (Bowler et al., 2016; Bromet et al., 2016; Lowell et al., 2018). Many of the researchers who looked at coping during 9/11 did so through the lens of other populations such as firefighters, non-rescue workers, utility workers, the general public, spouses of firefighters, and paramedics (Clouston et al., 2019; Dasaro et al., 2017; Diab et al., 2019; Feder et al., 2016). Although a substantial amount was learned from the existing research, less was understood about the

experiences of police officers who were involved in the terrorist attacks on 9/11. Few qualitative studies exist that explored the constructs of police officers and terrorism (Adams, Bowler, et al., 2019; Bills et al., 2009; Geiger, 2016). After a review of the literature on police and coping, the following studies are offered in support of this study.

1. Dasaro et al. (2017) conducted quantitative analysis utilizing the WTCHP data that included a large sample of police officers ($N = 8881$). The study supports significant findings that police officers continue to suffer from the effects of 9/11 and require assistance.
2. McCarty and Lawrence (2016), Patterson (2016), and Violanti et al. (2018) conducted quantitative analysis on police recruits utilizing the transactional model and found that coping is a dynamic process, and the appraisal process is important when looking at work engagement and coping in police recruits.
3. Clifton et al. (2018) provided information on the dynamic nature of coping in police officers after a mass shooting in Dallas and Baton Rouge. In the researcher's representative sample ($N = 2659$) of police officers three coping strategies that included problem-focused, emotion-focused coping, and seeking support.
4. Geiger (2016) conducted a qualitative study on police officers ($N = 11$) who managed critical incidents and found that chaotic memories can be transformed into resilience and growth.
5. Chopko, Palmieri, et al. (2018) provided the first study to explore different types of trauma exposures in police as they relate to PTG. The researchers tested a model looking for a pathway from trauma exposure to PTG. The

researchers exposed some of the complexities of police trauma and noted differences between cognitive and behavioral PTG. In 2019, Chopko et al. looked at trauma frequency and severity with PTG. Findings revealed that trauma exposure and severity type played a significant role in shaping the level of PTG that was experienced. The researchers further found that initial cognitive avoidance allowed for police to process their stress.

6. Arble and Arnetz (2017) designed a program to strengthen resilience during stressful encounters in police officers. The researchers found positive reframing and the use of humor was significant in reducing anxiety and substance use. Positive reframing and humor assisted not only in reducing stress, but encouraged resilience in the face of adversity
7. Violanti et al. (2019) studied suicides occurring between 1997-2016 in police officers and Jordan et al. (2018) studied mortality among rescue workers exposed to 9/11. Both studies provided findings that mortality in police officers is related to high levels of trauma exposure and lack of organizational support. Organizational support reduced the effects of trauma exposure.

This study contributes to filling a gap in the literature by interviewing retired NYC police officers regarding how they coped with the terrorist attacks on the WTC towers on 9/11 and the days that followed. This research is unique because it explored the coping experiences of NYC police officers who responded during and in the aftermath of 9/11. The findings of this study contribute to the scholarly literature on working with police officers who respond to terrorist events. Ultimately, this research is put forth with

the hope that it makes a small contribution to the thinking on best practices for self-care of NYC police officers responding to terrorist events.

This study was necessary because there are very few qualitative studies in which the lived experiences of a NYC police officer during and post- 9/11 were explored (Bills et al., 2009; Ekenga et al., 2011). Additionally, there are only limited studies on coping mechanisms, police personnel, and 9/11 experiences (Diab et al., 2020; Feder et al., 2016; Schwarzer et al., 2016). This research, which was conducted to record the perspective of civil servants during crisis situations, adds to the knowledge base, and informs mental health practices in crisis intervention. Information gleaned from the study may contribute to positive change in the area of policy and procedure specific to mental health care in the police population. Positive social change may be created in the NYC police department by the information collected from this study to improve attrition rates and overall mental health functioning in police personnel.

Summary

Some NYC police officers continue to engage negative coping skills that adversely influence their well-being, and these are related to the terrorist events of 9/11 (Bromet et al., 2016; Dasaro et al., 2017; Diab et al., 2019), while others do not (Cone et al., 2015; Feder et al., 2016). Additional research was needed to uncover what was beneficial and what hindered the coping practices of NYC police officers. Lazarus and Folkman's (1984) TMSC provided the theoretical foundation for the study, Calhoun and Tedeschi (2004) focused on cognitive appraisals and growth, which was used to extend Lazarus and Folkman's model and look at positive coping. The researcher explored the

coping practices of a small sample of NYC police officers who worked during or after the terrorist events of 9/11.

NYC police officers were asked during interviews to describe the coping strategies they utilized during and post- 9/11. An interview protocol was utilized as the primary source of data for this study. An interview guide with open-ended questions provided detail-rich information that gave a voice to NYC police officers regarding their personal experiences including both positive and negative thoughts, feelings, and actions taken during that time. The researcher obtained a purposive sample with a snowballing technique.

I examined the essence of the phenomenon of what it was like for a NYC police officer to live through a terrorist attack. To accomplish this goal, a qualitative hermeneutic phenomenological approach was used for the purpose of exploring how participants interpret, understand, and make sense of their coping experiences during and after 9/11. An emergent strategy allowed the researcher to describe the phenomenon under investigation with an inductive approach to gain a deeper understanding of meaning participants placed on their lived experiences of responding to the terrorist attacks.

Chapter 2 is a presentation of the literature regarding NYC police officers' coping practices during and after 9/11. An analysis of the theoretical foundation, the literature search strategy, and a review of the literature relating to key variables that are used in this study will also be discussed.

Chapter 2: Literature Review

In the United States, the police are the public's first line of defense against an attack of a small or large scale (Geiger, 2016; Greinacher et al., 2019). Maintaining a healthy and effective police force is, therefore, a crucial priority worthy of studying. Following the terrorist events that took place on 9/11, a need arose to understand the lived experiences of NYC police officers in relation to their coping during and after the terrorist attack. The problem this research addressed is the gap in the literature concerning NYC police officers' coping experiences concerning their service during and after 9/11.

First responders on the scene in NYC included members of the fire department, ambulance workers, police officers, and paramedics (Bromet et al., 2016). In the days following 9/11, additional first responders and volunteers within those organizations came from other states including military personnel, heavy equipment operators, construction workers, and laborers to assist in the rescue and recovery operations. The initial reports following 9/11 included information about how police officers were resilient and experienced the lowest rates of mental health issues in comparison to other occupations (Bowler et al., 2016; Chopko, Papazoglou, et al., 2018; Feder et al., 2016). In contrast, longitudinal research studies conducted over a decade following 9/11 revealed that some police officers experienced negative mental health consequences that continue to interfere with their employment, relationships, and overall life satisfaction more than 19 years after the terrorist attacks (Chopko, Palmieri, et al., 2018; Jordan et al., 2018; Lowell et al., 2018).

The NYC police department is one of the largest municipal police departments in the United States (NYC Police Department, 2018a, 2018b). As of late January 2018, there were approximately 36,975 full-time police officers employed by the police department of NYC (Council of the City of New York, 2018, p. 2). The problem addressed in this study was that police officers of the NYC police department continue to experience negative psychological effects related to the terrorist events of 9/11 (Bromet et al., 2016; Dasaro et al., 2017; Diab et al., 2019). Well over a decade after 9/11, 47.7% of NYC police officers who responded to 9/11 continue to suffer from the collective symptoms of PTSD, comorbid depression, and anxiety disorder (Bowler et al., 2016, p. 4). Comorbidity refers to two disorders occurring at the same time in one individual (Li et al., 2018). Bowler et al. (2016) reported that some police officers had diagnoses of anxiety and depression before the 9/11 terrorist attacks. Bowler et al. (2016) found that 21.8% of NYC police officers who responded to 9/11 met the criteria for PTSD, 24.7% met the criteria for PTSD and comorbid depression, and 5.8% met the criteria for PTSD and comorbid anxiety.

The purpose of this qualitative study was to explore and gain an in-depth understanding of the general lived experience of a small sample of NYC police officers during and following the terrorist attacks of 9/11. I conducted this study to understand what these officers experienced in terms of supportive coping practices and coping practices that may have hindered them. The data obtained from NYC police officers' experiences of working and living through 9/11 contribute to the scholarly literature on helpful coping practices during and following terrorist attacks for NYC police officers.

There are limited qualitative research studies focused on the coping practices of NYC police officers as a heterogeneous group following the terrorist attacks on 9/11 (Bills et al., 2009; Ekenga et al., 2011; Freedman, 2004). The majority of studies conducted post-9/11 regarding the psychological effects of that day were from mixed samples such as individuals who were in the vicinity of the WTC when the planes hit its towers. These included studies of children and staff in schools in lower Manhattan at that time and other occupants of the many businesses of the WTC towers. Various occupational groups (volunteer or on-duty workers) such as fire, emergency medical services, construction, and sanitation workers were also studied, and sometimes police were combined into these studies (Blackie et al., 2017; Bowler et al., 2017; Dasaro et al., 2017; Gargano, Gershon, et al., 2016; Haugen et al., 2017; Jacobson et al., 2018; Lowell et al., 2018). Three qualitative studies that focused on the coping practices of NYC police officers during and following the events of 9/11 utilized mixed-method research and mixed samples that comprised, in part, short narratives about coping with stress (Bills et al., 2009; Ekenga et al., 2011; Freedman, 2004). I was unable to find any qualitative study strictly focused on the lived experience of NYC police officers during and after 9/11 regarding their coping practices.

It is well documented that police work, in general, is stressful (Frank et al., 2017; Kula, 2017; Padyab et al., 2016). Research findings indicate that police officers are well trained to handle and cope with the stress and frustration involved in crisis situations and the critical incidents that are inherent in the job (Arbel et al., 2018; Chopko, Palmieri, et al., 2018; Geiger, 2016; Patterson, 2016). Researchers who have examined how individuals coped with the stress related to the 9/11 terrorist attacks have found that some

NYC police officers who responded to 9/11 were better able to cope with the stress of the events than others (Bowler et al., 2016; Cone et al., 2016; Feder et al., 2016; Schwarzer et al., 2016). Moreover, scholars (Bowler et al., 2016; Feder et al., 2016; Geronazzo-Alman et al., 2016; Jacobson et al., 2018; Mao et al., 2018) emphasized the psychological health of police officers after the events of 9/11, and many of these articles were concentrated on the negative mental health issues that ensued following the tragic outcomes of the day. Some psychological issues that individuals reportedly developed post-9/11 include somatic complaints, PTSD, depression, anxiety, substance and alcohol abuse, and suicide (Alper et al., 2020; Smith et al., 2019). There are also some studies (e.g., Chopko, Palmieri, et al., 2018; Ogińska-Bulik & Kobylarczyk, 2017) on the growth that can come from traumatic experiences. I found only two qualitative studies that focused on the breadth and depth of personal experiences of NYC police officers as a result of the trauma they experienced on 9/11 (Bills et al., 2009; Ekenge et al., 2011).

Bills et al. (2009) used a responder sample taken from the World Trade Center Worker and Volunteer Medical Screening Program that screened-in for a mental health evaluation ($n = 413$). Themes uncovered included attitudes/feelings about their activities, nature of exposure, occupational role, and outcomes following their work. Many of the workers reported witnessing the attacks firsthand, and several made comments about survival response and fearing for their life. Some of the psychosocial factors reported by responders included supervisor pressure, disorganized work conditions, and long working hours. Themes uncovered included the surreal nature of responding, engaging in rituals to cope, and recall of the grotesque nature of their experience, such as odors (Bills et al., 2009).

In their qualitative study, Ekenga et al. (2011) interviewed 20 workers and volunteers who participated in the WTCHR, the largest registry in U.S. history to track the long-term health effects of individuals involved in 9/11. Participants discussed their experiences, tasks, and responsibilities and reflected on their post-9/11 experience. Further, participants reported being exposed to odors, fumes, and dust. Assignments included sorting through debris and searching for evidence, recovering human remains, and providing counseling service to the families of the deceased. The importance of the Ekenga et al. (2011) study was that 10 years after the terrorist attack of 9/11, disaster workers continued to express concerns about the lack of communication with supervisors regarding the risks that were involved pre- and post-9/11, their participation in the recovery and cleanup efforts, and the long-term mental health risks (Ekenga et al., 2011).

To date, only two qualitative studies (Bills et al., 2009; Ekenga et al., 2011) have been conducted on the coping experiences of workers, both of which included small samples of police officers. Thus, a need continued to exist for research solely focused on NYC police officers who experienced the terrorist attacks of 9/11. There was a lack of understanding of the general lived experience of NYC police officers pre- and post-9/11 (Bills et al., 2009; Ekenga et al., 2011), which supported the need for this study. The study addressed NYC police officers' lived experiences of their coping practices pre- and post-9/11. The study was intended to capture the exclusive lived experiences of NYC police officers. No other occupational group was included in this study to provide the fullest picture possible of NYC police officers' lived experiences of coping.

Data from this study helped fill a gap in the literature. I explored the lived experiences of a small sample of NYC police officers regarding what, if anything, helped

or hindered their coping pre- and post-9/11 terrorist attacks. This chapter will include a review and analyses of current and seminal literature regarding NYC police officers' coping practices pre- and post-9/11. It will also include the literature search strategy, an analysis of the theoretical foundation of this study, and a summary.

Literature Search Strategy

Articles retrieved for this literature review came from a search of empirical literature from the Walden University Library's electronic psychological databases that included peer-reviewed research in digital format. To locate literature, I searched databases that included PsycINFO, PsycARTICLES, SAGE Publications, Academic Search Complete, and MEDLINE. I also conducted an online search through Google Scholar. I searched for peer-reviewed journal articles about responding to, coping with, and recovering from the traumatic events of 9/11 in first responders, including NYC police officers. The list of research terms used in varied combinations included *September 11, 2001, 9/11, World Trade Towers, World Trade Center, police, NYPD, New York Police Department, NYC police officers, officers, emergency workers, emergency medical service workers (EMS), first responders, terrorism, terrorist attack, coping, rescue workers, recovery workers, stress, stress appraisal, posttraumatic stress, resiliency, posttraumatic growth, transactional model of stress and coping, recovery, and trauma.*

I searched for peer-reviewed journal articles published during the past 10 years, between 2010 and 2020, as well as seminal works. I restricted the articles retrieved in *Traumatology, International Journal of Emergency Mental Health, and the International Security and Counter-Terrorism Reference Center* to articles that include the search

terms *September 11, 2001, 9/11, World Trade Towers, World Trade Center, Twin Towers, NYPD, New York Police Department, NYC police officers, police, officers, police officers, law enforcement officers, terrorism, and terrorist attacks*. Qualitative dissertations were also searched from ProQuest Dissertation Abstracts because there were limited qualitative studies available on NYC police officers' ability to cope with the events of 9/11 in the literature. Finally, information gleaned from non-peer-reviewed sources was searched and verified in peer-reviewed journals.

Theoretical Foundation

The theoretical foundation used for this study came from Lazarus's (1966) and Lazarus and Folkman's (1984) TMSC. Lazarus and Folkman viewed the stress and coping process as a triadic reciprocal exchange between the person, the environment, and the behavior within that environment. They defined coping as "constantly changing cognitive and behavioral efforts to manage specific external or internal demands that are appraised as taxing or exceeding the resources of the person" (p. 141). Further, Lazarus and Folkman posited that individuals use cognitive thought to make coping judgments about their abilities to influence stress experienced through their environment. During the triadic reciprocal exchange between personal, behavioral, and environmental influences, individuals will appraise the stressful situation to determine what resources are available and what can be done to effectively cope (Lazarus & Folkman, 1984; McCarty & Lawrence, 2016).

Researchers use the TMSC theory in an integrative process to focus on coping with stress. During this process, cognitive appraisals of situations are made to evaluate whether a threat or harm is present in the environment (Lazarus & Folkman, 1984;

McCarty & Lawrence, 2016). Based on the interpretation of the threat analysis, individuals will perform certain behaviors to reduce the threat and manage the stress experienced (Clifton et al., 2018; Patterson, 2016; Paulson & Leuty, 2016). During a cognitive appraisal, individuals evaluate the situation for meaning, significance, and danger. They use prior knowledge, personal beliefs, values, and goals to evaluate the level of risk involved and what can be done to cope (Lazarus & Folkman, 1984). It is through this integrative process of the person, environment, and behavioral response that a person will expend a significant amount of mental and physical energy to resolve, minimize, tolerate, or escape a stressful situation (Bandura, 1986; Lazarus & Folkman, 1984). The ability to cope with stressful situations is dependent on the cognitive appraisal process and an individual's perception, interpretation, and reaction to the event (Lazarus & Folkman, 1984; Paulson & Leuty, 2016).

TMSC's Three Stages and Functions of Coping

Lazarus and Folkman (1984) used the TMSC to theorize about how individuals cope with stress. The theory provides three stages of events that individuals can encounter when stressed. These include the anticipatory and warning, impact and confrontation, and postimpact phases. During the anticipatory and warning stage, the event has yet to occur, and individuals have time to judge whether they can escape the experience or that it must be endured and decide whether there is anything that can be done to prepare for the event. In the impact and confrontation stage, individuals encounter the harmful event. The final stage is the postimpact stage, where individuals decide how they will ascribe personal meaning to the situation and what reappraisals may be needed to manage and cope (Lazarus & Folkman, 1984). Cognitive reappraisals may

begin at the anticipatory or impact stage and carry into the final post-impact stage (Lazarus & Folkman, 1984). These stages of coping are important because coping behavior directs the regulation of the emotional response and behavior that is displayed, rather than changing the situation. When situations are difficult to change, the regulation of emotional response and behavior can assist individuals in coping with stress that is present.

According to Lazarus and Folkman (1984), TMSC has two primary functions of coping that accompany the three stages. These include problem-focused (task-oriented) and emotion-focused coping (Clifton et al., 2018; Lazarus & Folkman, 1984; McCarty & Lawrence, 2016). When faced with a stressful situation, individuals will engage in one or both primary functions. If a situation is perceived as changeable, problem-focused coping will be engaged, and attempts will be made to modify or eliminate the source of stress. Problem-focused coping is associated with adaptive functioning and positive outcomes (Clifton et al., 2018). The experience of a positive outcome will reinforce the need for the behavior change, and often this behavior will be used in future attempts at solving similar problems (Lazarus & Folkman, 1984).

In contrast, emotion-focused coping includes cognitive and behavioral responses aimed at managing emotional reactions to stress (Clifton et al., 2018; McCarty & Lawrence, 2016). When individuals appraise a situation as being unchangeable, they will often use emotion-focused coping and make attempts at changing their relationship with the situation and exert effort in the direction that lessens the experienced emotional burden (Lazarus & Folkman, 1984). Emotion-focused coping, however, is associated with negative coping outcomes (Clifton et al., 2018). Some examples of emotion-focused

coping are the use of denial and avoidance (Lazarus & Folkman, 1987). For example, a police officer may refrain from thinking or talking about the events of 9/11 or physically avoid going to downtown Manhattan because it reminds them of the experience.

Avoidant coping involves an individual's attempt at avoiding the problem and is a negative emotion-focused coping technique (Clifton et al., 2018; McCarty & Lawrence, 2016). For example, in studies of the coping practices of police officers during academy training, some police officers reported that their coping shifted over time, with recruits using more avoidant coping at the end of their training (McCarty & Lawrence, 2016). NYC police officers possibly performed their duties without initially processing the horror of the 9/11 event and experienced mental health issues. Recent research findings have shown that initial avoidant coping can have protective qualities for individuals to allow them time to process and assimilate to the event that they experienced (Chopko, Palmieri, et al., 2018; Geiger, 2016). Research has shown that individuals who had early cognitive disruptions following traumatic events that involved denial or avoidance were also able to experience personal growth after their involvement (Chopko, Palmieri, et al., 2018; Geiger, 2016). Avoidance possibly provided a period of contemplation for police officers to process the trauma experienced on 9/11 (Chopko, Palmieri, et al., 2018). Nevertheless, when individuals use long-term avoidant coping, they are engaging a negative coping strategy that can have detrimental mental health consequences (Geiger, 2016). Avoidance by NYC police officers will be examined in the current study as a coping method used to manage and reduce emotional distress following the 9/11 experiences of police officers.

Appraisal Process

Researchers used the TMSC theory to understand how stressful situations engage emotions and cognitions through the primary and secondary appraisal process (Clifton et al., 2018; Lazarus & Folkman, 1984; McCarty & Lawrence, 2016). The transaction between individuals and their environment has three central mediators: the cognitive appraisal (the perceptual meaning ascribed to the situation), the individual, and the individual's ability to cope in the situation (Bandura, 1986; Lazarus & Folkman, 1984). When individuals face a stressful situation, they initiate a primary appraisal process to determine whether the event represents a threat (Lazarus & Folkman, 1984). When making secondary appraisals of a situation, individuals will make various evaluations to assess whether they possess what they need to cope with the present stress (Clifton et al., 2018; Lazarus & Folkman, 1984; McCarty & Lawrence, 2016).

The theoretical assumption of the TMSC is the interaction between dispositional and situational influences that individuals encounter. This model offers an alternative method for handling psychological responses to perceived stress and handling unexpected events and situations such as those experienced by NYC police officers on and after 9/11. In addition, researchers (Lazarus & Folkman, 1984; Geiger, 2016; McCarty & Lawrence, 2016) used the TMSC theory as a process-oriented approach that allows for core beliefs and world assumptions to be challenged. The theory accommodates individual differences that assist in explaining why individuals appraise situations differently (McCarty & Lawrence, 2016). The researcher used the TMSC theory to provide a framework for understanding the responses and coping practices of NYC police officers

following the terrorist events of 9/11, as it is well suited to help understand the changes in coping behavior in the days that followed.

The TMSC was used as a framework to address feelings, thoughts, and experiences of what it is like to be a police officer (Clifton et al., 2018; Geiger, 2016; McCarty & Lawrence, 2016; Sollie et al., 2017; Violanti et al., 2018). Several researchers (Feder et al., 2016; Geiger, 2016; McCarty & Lawrence, 2016; Patterson, 2016) used the TMSC to gain an understanding of the various stages of coping that are unique to police officers. Researchers (Feder et al., 2016; Geiger, 2016; Patterson, 2016) also used the TMSC to conceptualize stress and uncover relationships that exist between coping styles and other constructs that influence the psychological well-being of police officers. The TMSC is useful when looking at the mediating effects of coping on stress (Chopko, Palmieri, et al., 2018; Clifton et al., 2018) and in understanding the occupational and operational stressors and perception of control that are a fundamental part of being a police officer (McCarty & Lawrence, 2016; Patterson, 2016). Lastly, the TMSC was used to understand stress-management interventions in police recruits during academy training (McCarty & Lawrence, 2016; Patterson, 2016).

The Relevance of the TMSC to This Study

The ability to cope with and address stressful circumstances is a process that involves multiple functions. Lazarus and Folkman (1984) defined coping as a process-orientated approach that includes cognitive and behavioral efforts that are constantly changing to manage demands that are appraised as taxing or exceeding resources. The trait perspective of coping assumed by researchers is that coping is a personality characteristic that can align with active (positive) or passive (negative) coping practices

(Blackie et al., 2017; Bosman et al., 2016; Paulson & Leuty, 2016; Rice & Liu, 2016; Singh & Ram, 2016). Trait perspectives are considered stable personal characteristics that limit individuals in their ability to change (Blackie et al., 2017). In this study, the researcher explored and analyzed coping as a process viewed through the lens of the TMSC originated by Lazarus and Folkman (1984). The theory helped address some of the limitations found in previous traditional trait definitions of coping when applied to the population of police officers in this study.

Lazarus's (1990; see also Paulson & Leuty, 2016) contention was that the best way to understand stress in individuals is to consider the types of coping and appraisal processes they use. Lazarus's recommendation provided the rationale for choosing the TMSC to study the coping practices of police officers following 9/11. The TMSC was selected for this study because it offers a means of explaining the initial and post-event reactions of police officers as they describe their experiences and ability to cope during and after the 9/11 terrorist attacks. Using the TMSC to understand NYC police officers' coping practices provided an opportunity to analyze their responses regarding what, if anything, they believe assisted or hindered their coping during and after 9/11. The initial event of the terrorist attack on 9/11 happened suddenly and many police officers were not mentally prepared for the situation, the images, or the emotional reactions they experienced in the days that followed (Bromet et al., 2016; Geiger, 2016). Unprepared NYC police officers had to respond on 9/11, with little time to evaluate or think about what was taking place. The TMSC was an appropriate framework for this study, as the researcher interviewed NYC police officers 19 years post the events of 9/11. With the lapse of time since the event, all participants had time to think about both the positive and

negative aspects of the event, and what these experiences have come to mean to them 19 years later.

The TMSC involves individuals' perceptions and cognitive appraisals that allow for temporal considerations of the capacity to change over time (Clifton et al., 2018; Lazarus & Folkman, 1984; McCarty & Lawrence, 2016). Therefore, individuals may cope with a situation by initially appraising the situation one-way and later appraise it differently. For example, during the immediate aftermath of the planes hitting the WTC towers, police officers may have feared for their own lives and the lives of others because they felt vulnerable by perceiving a lack of resources to adequately manage the situation (Gargano, Nguyen, et al., 2016). Later that day when the immediacy of the situation ended, they may have been able to engage in police activities such as securing the area and recovery efforts because their appraisal of the situation had changed, and they viewed their current situation as being less life-threatening to the point they were better able to function. Today, police officers may appraise the events of 9/11 differently because their perceptions of the events have changed (McCarty & Lawrence, 2016).

Lazarus and Folkman's (1984) contention was that coping with stress involves individual emotion at the macro analytic-oriented level, which allows for comparisons from one period to another. This comparison was appropriate when looking at how NYC police officers coped with the perceived stress involved on 9/11 and the days that followed because the perspective permits changes in emotional states over time (Bills et al., 2009; Lazarus & Folkman, 1984). A police officer can think, evaluate, and react to a situation through the engagement of primary and secondary appraisals by working to cope with the immediacy of the situation and by repeating the cycle (reappraisal), as

necessary, until a diminished sense of threat is experienced (McCarty & Lawrence, 2016). Time comparisons were important in this study because the researcher requested participants to describe retrospective accounts of the coping mechanisms they engaged when thinking about that day, how they coped immediately after, and how they continue to cope today.

Literature Review Related to Key Concepts

In the following sections, I will present details of studies concerning factors related to stress, trauma, and coping that influence police officers' psychological response to trauma, and organizational and operational stress related to police work. Following this will be a discussion of mental health provisions and resources that were made available to police officers post-9/11.

Hans Selye, the father of stress research, was interested in physiological and psychobiological aspects of stress; he was a scientific researcher who conducted studies using animals (Selye, 1936; Tan & Yip, 2018). Selye postulated that stress was a “nonspecific response of the body to any demand” and that physical response to stress causes disease (Selye, 1976). In 1936, Hans Selye wrote about General Adaptation Syndrome (GAS), later renamed stress response or stress syndrome (Selye, 1936). In the GAS, stress was distinguished from acute stress (fight or flight) in that it encompasses the total response to a chronically applied stressor. Three stages were incorporated into GAS that involves the alarm reaction, resistance, and finally, exhaustion. Initially, when faced with stress, individuals are caught off guard. During this phase, the individual makes attempts to adjust back to a balanced homeostatic state. This back-and-forth process involves resisting change and eventually exhausts the individual as they attempt to

counteract the stress they are experiencing. After 40 years of research, Han Selye became keenly aware that stress reactions are different for everyone and involve emotional and perceptual factors that lead to the differences in the type of stress reactions individuals can experience.

Further, Selye introduced the term eustress (good stress) as a counter term to stress; this is when positive emotions are experienced in stressful states. Selye maintained that stress is not what happens to the individual, but how one reacts to it (Selye, 1974, 1977). Although Selye's theory of GAS led to further inquiry into stress being subjective and dependent on the interpretations made by individuals, it failed to take into consideration cognitive responses to stress or the differences between individuals.

TMSC and Posttraumatic Growth

An underexplored area in the research on stress and coping in police officers is optimal functioning, engagement, and human strength. In 2015, Borowicz and Sokowski looked at coherence and stress coping strategies in a sample of police recruits. Borowicz and Sokowski found the appraisal process to be an important aspect of coping, along with finding meaning, making an interpretation, and the implementation of task-orientated coping. Some of the researchers (e.g., Lazarus & Folkman, 1984, 1987; Park, 2017; Park & Folkman, 1997) who conducted extensive work in the area of stress and coping ascertained that individuals seek meaning because meaning is a part of human existence. The ability to find meaning in life includes cognition, motivation, emotions, beliefs, and the aptitude to create goals. Lazarus and Folkman (1984, 1987) distinguished between situational meaning and personal environmental influences. Situation meaning includes

the appraisal process where meaning is created from experience (Lazarus & Folkman, 1984, 1987).

Chopko, Palmieri, et al. (2018) tested a model looking for a pathway from type of trauma exposure to PTG in a police sample ($N = 193$). Chopko, Palmieri, et al. wanted to distinguish between cognitive and behavioral PTG. Trauma exposure played a significant role in the level of PTG experienced, and that positive changes were experienced through the use of cognitive avoidance, contrary to most other studies. A year later, Chopko et al. (2019) looked at the severity and trauma frequency of PTG and found trauma severity shaped PTG through personal experience and that trauma severity was strongly associated with PTG when compared with trauma frequency.

Patterson (2016) conducted a brief exploratory analysis of coping strategies among police recruits during training utilizing the TMSC ($N = 81$). Patterson looked at coping, work stress, and appraisals in police recruits over 7 months. Police recruits used problem-focused coping more frequently than emotion-focused coping at the end of the training. The stress appraisals that police recruits made were often personal and idiosyncratic, and when the perception of control aligned with positive outcomes, it displayed a positive side to the stress and coping process (Patterson, 2016). Stress appraisal, thus, is an important variable to consider when working with police officers and the relationship between coping and work environments through primary and secondary appraisals (Patterson, 2016).

Similarly, McCarty and Lawrence (2016) were interested in what might help or hinder police recruits ($N = 227$) to cope over a 5- to 6-month period. McCarty and Lawrence found that coping changed significantly over time. Recruits used more task-

orientated coping at the beginning of training in comparison to the end of their training. McCarty and Lawrence concluded the socialization process of the academy teaches recruits to inhibit their emotions and leads them to numb their feelings and use more avoidance to cope. Patterson's (2016) and McCarty and Lawrence's (2016) studies displayed that perception of control and stress appraisal are important variables to consider when assessing the relationship between the police work, environment, and coping.

In a quantitative study, Feder et al. (2016) used a mixed sample ($N = 4,487$) of rescue and recovery workers from the WTC and accessed them over 12 years. Included in this sample was a large police representation ($n = 1,874$). The researchers found risk factors included being of Hispanic ethnicity, pre psychiatric history, greater exposure, greater medical burden, life stress, and the use of maladaptive coping. Positive emotion-focused coping included the use of acceptance, positive reframing, and humor, as these aligned with less symptomatic trajectories (Feder et al., 2016).

Current research remains mixed on the use of avoidance, problem-focused coping, or emotion-focused coping as most beneficial in police samples. Nineteen years post-9/11, chronic mental health issues continue to emerge for NYC police officers. Other factors influence mental health outcomes for individuals who have experienced a traumatic event. Lazarus and Folkman's (1984) model explains how the cognitive appraisal process influences coping at various stages.

I utilized TMSC in this study to assist me in analyzing the perspective of NYC police officers as they reported on their ability to cope with the events of 9/11 and after. The TMSC was useful in how they describe processing their feelings related to the

environment at the time and their adaptation to the challenges that followed. TMSC was applied to uncover the pathways that influence the psychological response to trauma that produce positive and negative adaptive states in a hazardous profession (Folkman & Lazarus, 1988; McCarty & Lawrence, 2016).

Experiencing growth and resiliency after trauma is also a reality for individuals. Chopko, Palmieri et al. (2018) and Ogińska-Bulik and Kobylarczyk (2017) conducted studies in which they discovered individuals can become empowered in the aftermath of the trauma they experience. For example, Chopko et al. studied police officers ($n = 193$) post-9/11 and found direct versus in-direct exposure to trauma played a significant role in the level of PTG experienced by police officers. A direct threat to life was closely related to PTG through an indirect pathway related to PTSD symptoms. Police officers who were exposed to trauma used emotional detachment or avoidance to cope. Chopko et al. concluded that cognitive engagement is not a necessary skill required for growth to occur in police officers.

Ogińska-Bulik and Kobylarczyk (2017) looked at individuals ($n=74$) who had someone close to them die. Using the Posttraumatic Growth Inventory (PTGI) developed by Tedeschi and Calhoun (1996), Ogińska-Bulik and Kobylarczyk found that resilience and PTG played a mediating role in the direct impact of temperament traits and positive coping. Changes in self-perception and a greater appreciation in life were correlated with resiliency and PTG. Chopko, Palmieri et al. (2018) and Ogińska-Bulik and Kobylarczyk (2017) offered important findings because both study results displayed that both positive and negative post-trauma outcomes can co-occur and that many factors can influence growth and distress in individuals.

Factors That Influence Psychological Response to Trauma

Many NYC police officers experience death and threat to life (theirs and others) daily, but they experienced these on a much larger magnitude on 9/11 (Bowler et al., 2016). Police officers' involvement included unpleasant sensory experiences for extended periods while cleaning up around the area of the WTC and the Staten Island landfill. Police officers were exposed to visual and olfactory stimuli while working around a site, which may have affected their schematic memories and recall of the event (Bills et al., 2009; Ekenge et al., 2011). Exposure to stressful sensory information invokes immediate and long-term recall of vivid images that influence memories and recall of the event, which, in turn, can negatively impact NYC police officers' abilities to cope.

In general, police officers are at a higher risk than the general population of developing mental health issues (Chopko, Palmieri, et al., 2018; McCarty & Lawrence, 2016). Extensive research conducted on the events of 9/11 identified negative mental health outcomes experienced by those who responded to the terrorist events during and after 9/11 (Haugen et al., 2017; Jacobson et al., 2018; Jordan et al., 2018; Lowell et al., 2018). The severity of the trauma experienced on 9/11 and the ongoing exposure to negative, unpleasant sensory information in the days that followed influenced long-term psychological harm to some NYC police officers (Bowler et al., 2016; Feder et al., 2016; Schwarzer et al., 2016). Based on the literature relating to factors that influence psychological responses to trauma, researchers uncovered common psychological outcomes that include somatic symptoms, major depression, PTSD, substance use problems, anxiety, vicarious trauma, survivor's guilt, and psychosocial difficulty (Alper et al., 2020; Bowler et al., 2016; Feder et al., 2016; Jacobson et al., 2018; Jordan et al.,

2018; Mao et al., 2018; Schwarzer et al., 2016). The following sections will provide discussion on some of these issues in detail including the influence of comorbidity, lack of social support, prior trauma history, exposure, and suicide, contributing to some of the negative coping experienced by police officers.

One major concern related to experiences with stressful events is the mental health consequences that follow exposure (Adams, Allwood, et al., 2019; Feder et al., 2016). Adams, Allwood, et al. (2019) revealed that some mental health symptoms self-resolve within a few weeks, whereas others do not. Since 2002, researchers have conducted and reported findings from an abundance of studies and written articles focused on the psychological consequences of 9/11 (Bowler et al., 2016; Bromet et al., 2018; Clouston et al., 2019; Dasaro et al., 2017; Diab et al., 2020; Dornbach-Bender et al., 2020; Feder et al., 2016; Jordan et al., 2018; Lowell et al., 2018; Mao et al., 2018; Schwarzer et al., 2016; Smith et al., 2019; Welch et al., 2017). Most of the scholarly literature focused on PTSD symptoms (Adams, Allwood, et al., 2019; Adams, Bowler, et al., 2019; Bowler et al., 2017; Bromet et al., 2016; Dornbach-Bender et al., 2020; Feder et al., 2016; Lowell et al., 2018; Schwarzer et al., 2016). Some other researchers (e.g., Bowler et al., 2016; Clouston et al., 2019; Dasaro et al., 2017; Smith et al., 2019) found increased PTSD along with comorbid anxiety and depression, while other research (i.e., Bowler et al., 2016; Mao et al., 2018) revealed correlates that relate to PTSD along with resilience and PTG. Negative coping continues to be a significant problem among NYC police officers (Jacobson et al., 2018; Jordan et al., 2018; Lowell et al., 2018; Mao et al., 2018) and the need for stress-management interventions persist (Bromet et al., 2016; Lowell et al., 2018; Smith et al., 2019).

A significant body of research included findings of how increased cases of negative mental health outcomes, such as PTSD, anxiety, substance use, and suicide follow stressful experiences (Chopko, Palmieri, et al., 2018; Feder et al., 2016; Jacobson et al., 2018; Mao et al., 2018; Schwarzer et al., 2016; Violanti et al., 2019). Theories about the factors that contribute to these mental health outcomes for police officers are still unclear (Bowler et al., 2016; Feder et al., 2016). A need existed to study the most beneficial uses of avoidance, problem-focused coping, or emotion-focused coping when working with police samples and how these contribute to negative-, avoidant-, and positive-coping mechanisms (Feder et al., 2016; Padyab et al., 2016; Patterson, 2016). Chronic mental health issues continue to emerge almost 20 years post-9/11 for many NYC police officers, which signifies their persistent vulnerability to mental health difficulties after the terrorist events of 9/11. These issues leave continuous uncertainty regarding police coping and what works best to promote mental health outcomes in the police population (Bowler et al., 2016; Feder et al., 2016).

Comorbidity

The WTCHR includes a cohort of more than 71,000 people who worked on 9/11 and directly experienced its effects (Schwarzer et al., 2016). From 2003 to current, longitudinal information emerged from the literature that included negative mental health outcomes for those who experienced the trauma of 9/11. Comorbidity is the presence of two or more mental health conditions at the same time, is more difficult to treat, and produces negative health outcomes. For example, PTSD, along with comorbid anxiety, panic, and depression was prevalent in the WTCHR participants and the rescue, recovery, and cleanup workers (Bowler et al., 2016; Chopko, Palmieri, et al., 2018; Jacobson et al.,

2018; Li et al., 2018; Schwarzer et al., 2016). Researchers estimated 30% of employed police officers experience clinically significant symptoms of PTSD at any given time (Chopko, Palmieri, et al., 2018).

Moreover, the numbers of reported cases of anxiety, depression, panic, and PTSD in police officers post-9/11 continue to climb (Bowler et al., 2016). Bowler et al. (2016) used the WTCHR to track the long-term mental health of residents and crisis workers post-9/11. Bowler et al. found the PTSD scores for police officers increased over time and many of the officers experienced additional comorbid disorders (Bowler et al., 2016). Nearly half of the police sample had PTSD, along with comorbid depression and anxiety (Bowler et al., 2016). These findings provide evidence that police officers with existing depression or anxiety are more susceptible to having PTSD.

Posttraumatic Stress Disorder

PTSD is a psychological disorder that is often experienced post-trauma and is prominent in the research as producing negative mental health outcomes. PTSD was identified in the research conducted post-9/11 and is one of the most frequently reported mental health issues researched (García-Vera et al., 2016). Using WTCHR data, Bowler et al. (2012) conducted a quantitative study over several years (2003-2004 and 2006-2007) post-9/11 with police officers who worked at least one shift from September 2001 to November 2004. Bowler et al. found an increase in the prevalence of PTSD in their police sample from 7.8% in 2003-2004, to 16.5% in 2006-2007 (Bowler et al., 2012). The increased PTSD cases reported in this study displayed a delayed onset of PTSD in police officers post-9/11 (Bowler et al., 2012). Initially, psychologists had not diagnosed police officers with PTSD, but 6 months post-9/11, many police officers developed PTSD along

with comorbid anxiety, panic, and depression. Bowler et al. found some risk factors for developing mental health issues included being female, age, witnessing the event, being a smoker, losing their job post-9/11, and an inability to socially integrate post-9/11. Other risk factors for developing PTSD included ethnicity (Hispanic), low socioeconomic status, having a physical injury, lack of social support, and prior posttraumatic experiences (Bowler et al., 2012).

Bowler et al. (2016) conducted a follow-up study using a large sample ($n=1884$) from the WTCHR that included NYC police officers. Bowler et al. found 21.8% of police enrollees had probable PTSD, 24.7% had PTSD and depression, 5.8% had PTSD and anxiety, and 47.7% had PTSD, along with comorbid anxiety and depression (Bowler et al., 2016), displaying a rise in negative health outcomes for police officers over the years post-9/11. Using the same sample from the WTCHR, Schwarzer et al. (2016) evaluated police officers between 2010 and 2011 and found that chronic PTSD continued to be an issue among NYC police responders more than 10 years post-9/11. These research studies are central to the problem of this study because they included samples of police officers that provided evidence of increased cases of PTSD and other comorbid disorders over time (Bowler et al., 2016; Schwarzer et al., 2016). A need continues for further investigation into interventions and prevention strategies for police officers after terrorist incidents to increase their ability to cope.

Although researchers concluded police officers are a resilient group when faced with stressful circumstances (Feder et al., 2016; Tedeschi et al., 2017), other factors such as lack of training, physical injury (disability), knowing a victim, ethnicity, gender, unemployment, age of exposure, life stressors, unmet health needs, comorbidity, and

insufficient social support contributed to the trajectories of chronic PTSD (Bowler et al., 2016; Li et al., 2018; Schwarzer et al., 2016). The 9/11 terrorist experiences for some police officers may have contributed to the high unemployment rates reported post-9/11 that aligned with reported cases of PTSD (Yu et al., 2016). A cumulative effect of stress and PTSD also emerged among a sample of police officers from WTCHR data over time (Schwarzer et al., 2016). Other research studies also included information about some challenges in the coping process for police officers such as personality changes, operational and organizational stress, previous trauma experience, mental health issues, gender differences, exposure, and lack of social support (McCanlies et al., 2018; Schwarzer et al., 2016; Singh & Ram, 2016; Violanti et al., 2017).

PTSD is a major mental health concern for police officers after the 9/11 terrorist attacks (Adams, Allwood, et al., 2019; Adams, Bowler, et al., 2019; Bowler et al., 2016; Bromet et al., 2016; Dornbach-Bender et al., 2020; Feder et al., 2016; Lowell et al., 2018; Schwarzer et al., 2016). For example, Bromet et al. (2016) found that 11 to 13 years following 9/11, police officers continue to have symptoms of PTSD and unmet treatment needs. Bromet et al. utilized a sample taken from WTCHR data from 2011 to 2012 and found those officers who had symptoms of PTSD continued to have difficulty coping at follow-up (11–13 years later) and some participants had delayed-onset PTSD. Lowell et al. (2018) reported that PTSD rates did not peak until 5–6 years post-9/11. Although police officers initially showed the lowest rates of PTSD compared to other occupations, some police officers displayed delayed onset years later (Bowler et al., 2016). Some of the factor's researchers attributed to PTSD include the police officer's age at the time of exposure, prior life stressors, lower social support and unmet health needs that predicted

chronic PTSD and job loss (Bromet et al., 2016; Lowell et al., 2018; Schwarzer et al., 2016).

The difficult nature of the work during 9/11 made the experience challenging for some NYC police officers and even more difficult for some to return to work post-9/11 (Yu et al., 2016). Several factors could have contributed to police officers' inability to cope with the events of the 9/11 terrorist attacks. Initially, many police officers were underreported in their challenges with coping with stressful situations experienced on and after 9/11 (Diab et al., 2019). Some constructs that may have influenced police officers in underreporting may have included the fear of losing their job, being placed in a lower status position, being requested to take a leave of absence from the job, having their weapon taken away, or some may have been unaware that their symptoms related to 9/11 exposure (Haugen et al., 2017; Schwarzer et al., 2016; Violanti et al., 2019). The delayed course of PTSD in rescue-and-recovery workers may have also contributed to early retirement for some police officers (Yu et al., 2016). Research findings on NYC police officers post-9/11 showed that initially, police officers had the lowest reported incidence of PTSD compared to other crisis workers (Bowler et al., 2016; Bromet et al., 2016; Feder et al., 2016). Despite these reports, police officers continue to experience mental health difficulties today that include anxiety, panic, depression, and PTSD (Bowler et al., 2016; Bromet et al., 2016; Dasaro et al., 2017; Diab et al., 2019; Mao et al., 2018; Schwarzer et al., 2016; Welch et al., 2017; Yu et al., 2016). Understanding what factors influence positive coping and declines in negative mental health symptoms will be beneficial for professionals working to assist police officers in dealing with future terrorist attacks. In several studies, social support was found to buffer some of the

negative mental health outcomes in police officers post-9/11 (Bowler et al., 2016; Feder et al., 2016; Jacobson et al., 2018; Schwarzer et al., 2016; Smith et al., 2019).

Social Support

Training in crisis management begins for police officers after recruitment (McCarty & Lawrence, 2016; Patterson, 2016). However, police officer training effectiveness in coping with terrorist incidents is mixed, leading some researchers to agree with current training efforts. In contrast, others continue to believe more specific training measures are needed. One consistent variable that has contributed to positive outcomes for police officers is social support (Bowler et al., 2016; Feder et al., 2016; Jacobson et al., 2018; McCanlies et al., 2018; Schwarzer et al., 2016). Lack of social support contributes to negative mental health outcomes. The social support that police officers received from family, friends, co-workers, and upper management after facing stressful experiences, can buffer the effects of experiences with crisis and trauma (Feder et al., 2016; Jacobson et al., 2018; Schwarzer et al., 2016; Violanti et al., 2006).

Feder et al. (2016) observed a protective effect derived from social support. The researchers used a mixed sample taken from the WTCHP that included police officers assessed over the periods of 3, 6, 8, and 12 years following 9/11. Police officers who had social support, regardless of its source (e.g., co-workers and family) experienced a lower level of negative mental health effects (Feder et al., 2016). Therefore, social support had a buffering effect in stressful situations and provided police officers with a more effective way to cope with the trauma they experienced on 9/11 (Clifton et al., 2018; Crowe et al., 2017; Feder et al., 2016; Schwarzer et al., 2016). The results of the Feder et al. study is important because it demonstrated the significance of relying on others to manage stress

and the buffering influence that social support has had on police officers when addressing positive coping outcomes following a major crisis.

Ekenga et al. (2011) considered the experiences of recovery and cleanup workers from the WTC recovery operation in a qualitative study ($N = 20$) that included a few police officers ($n = 4$). The researchers interviewed recovery workers about their experiences during the operation at Fishkill in Staten Island, where police officers helped sort debris for evidence, body parts, and personal items. When asked about their experiences 7 years following 9/11, some police officers reported being grateful for the social support and assistance offered by other occupational groups in the cleanup effort (Ekenga et al., 2011). One police participant said, “We saw the worst and best in humanity within a 24-hour period following 9/11” (Ekenga et al., 2011, p. 6). The use of communal-based coping strategies and positive emotions were beneficial in addressing the stress of recovery efforts. (Dornbach-Bender et al., 2020; Feder et al., 2016). Social support is an important factor for police officers in coping with stress and in the promotion of growth after a crisis (Bosman et al., 2016; Feder et al., 2016; Schwarzer et al., 2016).

Further, Schwarzer et al. (2016) found as police officers have untreated PTSD, they lose support from others. These findings are important because they demonstrated how retrospective accounts of perceived stress and the recollection of social support from others could be beneficial in the coping process of police officers (Bosman et al., 2016; Dornbach-Bender et al., 2020). In addition to social support benefiting police officers in coping with stress, prior trauma experience was also deemed successful and indicated to

influence police officers in their coping process (Feder et al., 2016; McCanlies, Sarkisian, et al., 2017; Tedeschi et al., 2017).

Prior Trauma Experience

For police officers, previous experiences with trauma may play into the evaluation during the stress appraisal process (Bowler et al., 2016; Feder et al., 2016). However, research is inconclusive on prior trauma experiences being positive or negative to the coping process. For example, Tedeschi et al. (2018) studied crisis-prevention interventions in a sample of police officers to assess whether previous experiences with trauma facilitated positive reactions to future stressful encounters. Successful reconciliation of trauma in the past influenced self-efficacy in police officers and in their ability to handle current stress (Tedeschi et al., 2018; Geiger, 2016). Results from this study revealed that previous life experiences with adversity positively influenced the conceptualization of present stress and produced positive outcomes for police officers (Tedeschi et al., 2018). In contrast, McCanlies, Sarkisian, et al. (2017) conducted a cross-sectional study finding that prior trauma moderated the effects of peritraumatic dissociation in a police sample ($N = 328$), and peritraumatic dissociation is associated with depression and PTSD. Further, peritraumatic dissociation was associated with PTSD regardless of trauma experiences.

The process of using experience to mitigate current stress requires a carry-over of thoughts called schematic transition (Tedeschi et al., 2018). Schematic transitions are said to be adaptive to major life events and environmental influences because some police officers report positive outcomes from adverse situations (Tedeschi et al., 2018). The researchers revealed that police officers displayed an adaptive response to stress and that

this process relied on previous conceptualizations of the meaning placed on the trauma (Tedeschi et al., 2018). Further, this study's findings showed the importance of educating police officers regarding trauma experiences and the use of cognitive reappraisals that positively contribute to the coping process. Appraisals are important in cognitive processes because they accommodate emotional states and verify that emotional states can change over time (Geiger, 2016; Lazarus & Folkman, 1984; McCarty & Lawrence, 2016).

Contrary to these findings, stress experiences have been shown to have a negative influence on processing current stress (Arbel et al., 2018; Feder et al., 2016; Smith et al., 2019). Smith et al. (2019) conducted a systematic literature review of the long-term challenges of 9/11 on first responders. Smith et al. found that previous traumatic experiences and injury had a cumulative stress effect and found that repeated experiences with stress negatively influenced police officers' coping. Continued research is needed in this area because current findings are inconclusive in distinguishing if previous stress experiences help or hinder police officers in their ability to cope with present stress (Arbel et al., 2018; Feder et al., 2016; Smith et al., 2019).

The following sections include literature related to key concepts for this study, including research about how police officers experience and cope with stress in their work environment. Police officers experience organizational and operational stress in their work environment, and they experience this stress differently from individuals working in other occupations (Violanti et al., 2017; Violanti et al., 2018). Violanti et al. (2018) found that police officers experience organizational stress when they have limited independence, are subjected to a strict chain of command, and when they feel policies

and procedures are unclear. Police officers experience operational stress because of limited control over work schedules, overtime, paperwork, and threats to physical and psychological harm (Brunetto et al., 2017; Violanti et al., 2018). A combination of operational and organizational stressors can accumulate over time and can produce negative or positive outcomes. Difficulty managing stress made it challenging for police officers to function and perform their duties post the 9/11 terrorist attacks and contributed to their experiences with negative health outcomes (Bowler et al., 2016; Bromet et al., 2018; Clouston et al., 2019; Dasaro et al., 2017; Diab et al., 2019; Feder et al., 2019; Jordan et al., 2018; Lowell et al., 2018; Mao et al., 2018; Schwarzer et al., 2016; Smith et al., 2019; Welch et al., 2017).

Organizational and Operational Stress

Being an employee of a police department is a stressful, challenging job. Many researchers consider being a police officer as one of the most dangerous and demanding professions a person can have (Brunetto et al., 2017; Frank et al., 2017; Kula, 2017; Padyab et al., 2016). A police officer's daily work may include operational and organizational demands, which may cause some police officers to have difficulty coping with incidents on the job (Brunetto et al., 2017; Patterson, 2016; Sollie et al., 2017; Violanti et al., 2018; Wagner et al., 2020). According to Chopko, Palmieri, et al. (2018) Violanti et al. (2018), and Frank et al. (2017) a police officer can encounter chaos, trauma, homicide, suicide, the death of a work partner or children in the field, and violence on any given workday. Operational stressors of the job can also include domestic violence incidents and fatal traffic accidents, and police officers must find ways to reconcile their emotions to cope and continue to function on the job. Police officers

can also experience organizational stressors inherent in the job such as poor leadership, low social status, and lack of organizational support that contribute to negative coping techniques, declined health, burnout, substance use, and suicide (Brunetto et al., 2017; Violanti et al., 2019). In 2017, Brunetto et al. utilized a U.S. sample of police officers ($N = 588$) to explore a combination of risk factors thought to be associated with the job assignments of law enforcement officers and found that personal factors and perception of work conditions contributed to poor health and distress in their police sample. Brunetto et al. suggested the police officers be offered stress reduction treatment that target job-related stress to assist police officers in their ability to cope effectively.

Some additional undesirable physical and mental health risks associated with police organization and operational stress include high blood pressure, insomnia, heart disease, stomach and digestive disorders, sleep disorders, anxiety, depression, suicide, and PTSD (Bowler et al., 2016; Violanti et al., 2019; Wagner et al., 2020). Because police officers' jobs include addressing various job-stressors, they must develop a unique set of coping skills to manage both internal and external stress that promotes resilient characteristics because the stress they experience daily can negatively influence their physical and psychological well-being (Violanti et al., 2017).

Organizational Stress

A public assessment related to the organizational aspects of the police force includes its bureaucratic structure and strict chain of command, narrow span of control, and an abundance of impersonal rules (Brunetto et al., 2017; Frank et al., 2017; Violanti et al., 2017). The organizational aspects of working as a police officer can suppress one's individuality and impede the decision-making process (McCarty & Lawrence, 2016;

Patterson et al., 2016). Furthermore, the organizational aspects of the job can hinder the maturation and development of positive skills that can include self-confidence, autonomy, self-determination, self-efficacy, empathy, and self-control. Organizational aspects of the job place constraints on police officers that negatively influence their mental health and psychological well-being (Brunetto et al., 2017; Sollie et al., 2017; Violanti et al., 2018).

Societal responsibility and the strict legal structure, such as conscious knowledge of federal, state, and local laws and ordinances, may place added stress on police officers during a daily day of work (Violanti et al., 2018). Police officers must always be on guard and analyze situations quickly and objectively to determine the appropriate course of action while staying within the limits of their organizational policies as well as state and local ordinances (McCarty & Lawrence, 2016). In addition to reacting quickly, police officers must remain calm in emergencies, display the ability to cope with stress firmly and tactfully, conduct themselves within the law, while also respecting the rights of others in the execution of organizational operations (Violanti et al., 2018). During times of crisis, situations can appear overwhelming to individuals and difficult to manage, leading to poor coping skills and poor behavioral responses.

Police officers' perceptions of being unable to live up to the organizational demands placed on them may contribute to the amount of stress they experience (Brunetto et al., 2017; Sollie et al., 2017; Violanti et al., 2018). For example, police officers live under the constant fear of reacting poorly in any given situation and reacting poorly can cause them to face disciplinary action that can include having their gun taken away or placing them on limited duty, such as a desk position (Geiger, 2016; Haugen et

al., 2017). Being a police officer is an identity, it is who the individual becomes, and all they know; facing disciplinary action for any wrongdoing could strip them of their identity. Living under the constant fear of doing something wrong may limit police officers in their ability to make quick decisions, solve problems, and stay safe while remaining within the strict confines of the organization (Haugen et al., 2017; McCarty & Lawrence, 2016). Difficulty in problem-solving situations can produce changes in an officer's judgment and feelings of self-efficacy, and any problems experienced in these areas may delay the normal process of maturation (Boettche et al., 2016). Being so limited in what they can do while working within the confines of the organization may affect the stress officers feel when addressing critical incidents, thereby impeding their psychological well-being, and hindering their ability to cope with organizational stress (Haugen et al., 2017).

As police officers become stressed by the nature of the job, they feel less in control of their work environment. Many police officers also report experiencing a lack of support from the organization in which they work (Violanti et al., 2017). Feeling unsupported by their organization contributes to many police officers living under the constant fear of being suspended for wrongdoings and being reported for displays of misconduct to upper management (Brunetto et al., 2017; Violanti et al., 2018). Police officers are enmeshed in a social system that does not promote the coping skills needed to address the events experienced on the job (Arbel et al., 2018; Bowler et al., 2016; Brunetto et al., 2017; Clifton et al., 2018; Haugen et al., 2017; Violanti et al., 2019). High rates of suicide, early retirement, and adverse mental health outcomes in some police

departments confirm the lack of organizational support many police officers face (Griffin & Sun, 2018; Sollie et al., 2017; Stanley et al., 2016; Violanti et al., 2019).

Smith et al. (2019) conducted a large systematic review of 156 publications from September 11, 2001, to September 11, 2018. Smith et al. were interested in the challenges faced by first responders and found 15% of their sample had PTSD 10 years after the events of 9/11. The lack of organizational support in some police departments may contribute to high rates of suicide and adverse mental health outcomes that were experienced by some police officers during and after 9/11 (Violanti et al., 2019). The role of organizational support and adverse mental health outcomes will be explored more thoroughly in the current study.

Fear of being stigmatized or experiencing negative job consequences may prevent police officers from seeking mental health services (Haugen et al., 2017; Violanti et al., 2019). Moreover, being employed by an organization that does not encourage help-seeking behavior may hinder the psychological well-being of its employees (Haugen et al., 2017; Violanti et al., 2019). This lack of health promotion in the work environment may not accurately reflect the shortcomings of officers or failure in their ability to cope effectively. The lack of health promotion in the work environment may represent a failed social system (Clifton et al., 2018). In addition, the findings from several studies of police samples revealed organizational stress, such as supervisor and public scrutiny, as a problem for many police officers (Brunetto et al., 2017; Frank et al., 2017; Matusiak et al., 2017; Singh & Ram, 2016; Sollie et al., 2017).

Violanti et al. (2018) conducted a study with police officers (N=342) that looked at the associations and moderating effects of coping. The researchers found that

organizational factors played a significant role in how police officers managed stress. Organizational factors included cultural influence, limitations in the decision-making process, multiagency response, and the post-event period. Having to address management concerns and the operational demands of 9/11 increased the compounded stress that NYC police officers experienced; thus, making it difficult to adapt to their current and future situations (Gargano, Nguyen, et al., 2018; Violanti et al., 2018). Because of the nature of the job, police officers are more susceptible to adverse mental health outcomes that incorporate the cumulative effects of stress along with other multiple compounded stressors (Brenetto et al., 2017). In a recent study, Wagner et al. (2020) found that PTSD levels are elevated in police officers and related to workplace exposure. NYC police officers were vulnerable to stressors on and following 9/11 that affected their ability to cope (Bowler et al., 2016; Bromet et al., 2016; Clouston et al., 2019; Feder et al., 2016; Gargano, Nguyen, et al., 2016; Jordan et al., 2018; Lowell et al., 2018; Mao et al., 2018). Learning what factors police officers felt assisted them in their coping could inform mental health practices and those who work with police officers in the development of programs that encourage positive coping skills.

Continuous exposure to critical incidents and the simultaneous handling of multiple stressors, such as exposure to the physical and psychological danger on 9/11, created cumulative exposure effects that caused detrimental mental health issues for police officers (Arter & Menard, 2018; Violanti et al., 2017). It is imperative for mental health professionals working with police officers to understand the officers' experiences with trauma, how daily struggles from the job compound stress, and how the cumulative

effects of stress impede police officers in their coping ability (Feder et al., 2016; Geronazzo-Alman et al., 2016; Violanti et al., 2017).

Police officers experienced residual risk post-9/11. After the completion of rescue and cleanup efforts, police officers reintegrated back into a routine work schedule (Jacobson et al., 2018; Mao et al., 2018). Reintegration included catching up with previous workloads, addressing legal issues, engaging back into family life, and managing public scrutiny regarding how well they performed their job duties during the 9/11 terrorist attacks (Sollie et al., 2017). The reintegration process does not include addressing the emotional well-being of police officers as this has been addressed poorly in the literature, and the components of the reintegration process are not transparent (Bowler et al., 2016; Feder et al., 2016; Haugen et al., 2017; Lowell et al., 2018; Regehr et al., 2019; Violanti et al., 2019).

Evaluating organizational stress in law enforcement may explain how police officers currently handle stress and how they could potentially handle stress in the future. Additionally, work-related psychosocial factors contribute to the distress NYC police responders experienced on 9/11 (Bowler et al., 2016; Cone et al., 2015; Feder et al., 2016). For example, Feder et al. (2016) conducted a longitudinal analysis of trauma-exposed police officers ($n = 1,874$) of a larger sample of rescue workers ($N = 4,487$) taken from the WTCHP who worked on 9/11 and in the recovery efforts the days that followed. Organizational stress and the work environment were reported as a hindrance. Some organizational stressors police officers experienced included long hours, dangerous work environments, disorganized working conditions, and supervisory pressure, which led to and contributed to stressful experiences during and after 9/11 (Dasaro et al., 2017;

Feder et al., 2016, Schwarzer et al., 2016; Smith et al., 2019). These organizational aspects of the job were complex and different for each police officer, depending on where they worked.

In an earlier quantitative study, Paton and Violanti (2006) found organizational aspects of the job and the police officers' duties during and after the 9/11 terrorist attacks added to their stress, negatively influencing their mental health and daily performance over a prolonged period (Paton & Violanti, 2006). Some police officers' perceptions that have been found include identification with the victims and families, causing secondary trauma reactions (Feder et al., 2016). For others, the loss of fellow officers and daily organizational and operational stressors in their work environment forced many police officers to evaluate their mortality and re-evaluate their life, linking trauma to a revision in their worldview (Clousten et al., 2019; Feder et al., 2016; Jordan et al., 2018; Smith et al., 2019).

The police organization is responsible for putting in place risk management procedures to ensure the well-being of police officers post terrorist attacks (Adams, Allwood, et al., 2019; Adams, Bowler, et al., 2019; Frank et al., 2017; Regehr et al., 2019; Turgoose et al., 2017). There appears to have been a lack of risk management procedures that were in place post-9/11 to assist police officers in dealing with the organizational stress that they experienced during and after the 9/11 terrorist attacks. Some police officers felt unprepared and improperly trained to deal with the events that day, leaving them alone in their ability to cope (Bromet et al., 2016; Feder et al., 2016). More research is needed to understand how organizational and operational stress intersects with the psychological strain experienced by police officers during and after

9/11 and how strain and stress are perceived and influence the types of coping mechanisms police officers employed.

Operational Stress

Some police officers experience less daily organizational stress and more operational stress associated with the daily duties inherent to the job (Violanti et al., 2017). Some operational demands of police work include managing domestic disputes, securing crime scenes, and detecting and investigating criminal activity (Padyab et al., 2016; Violanti et al., 2017). Other operational demands of police work involve the use of a weapon and making instant decisions that can be life-altering (Sollie et al., 2017). Some life-altering situations police officers experience in the line of work can be emotionally overwhelming, making it difficult for them to cope (Papazoglou & Chopko, 2017; Turgoose et al., 2017). Situational occurrences may invoke more stress than the routine dangers associated with police work (Violanti et al., 2017). Some life-altering situations reported by police officers include taking the lives of others, investigating the victimization of children, and experiencing the death of their partner (Violanti et al., 2017). The operational demands placed on NYC police officers during and after 9/11 included more difficult job demands than normally encountered. Police officers worked with grieving families and sorting through personal items and body parts thus placing additional stress on police officers which negatively influenced their mental health and ability to cope (Bowler et al., 2016; Bromet et al., 2016; Clouston et al., 2019; Feder et al., 2016; Schwarzer et al., 2016).

Because police officers are public servants who protect and serve the community, the operational demands of the job require that they assist individuals in need. The nature

of police work requires police officers to address violence and mistrust daily and to be constantly vigilant of danger (Brough et al., 2018). However, the immediate duties of many police officers on 9/11 involved operational tasks such as securing the perimeter of the terrorist attack site and providing assistance to individuals and families who were trying to cope with the terrorist events while remaining calm in their demeanor and performing within the operational structures of their job (Bowler et al., 2016; Bromet et al., 2016). On 9/11, having a sense of control emotionally and physically may have been overly difficult for some police officers because some may have perceived the situation as dangerous, including the threat to their lives and others being beyond their control. In contrast, other officers did not perceive the situation as being out of their control or fear for their life (Bowler et al., 2016). Understanding the perception of the lived experience for police officers during and after the 9/11 terrorist attacks could inform in-service training for police officers and better prepare police officers for coping with future terrorist attacks.

Stress played into police officers' perceptions of control over the situation and how they interpreted the terrorist events. It exacerbated their stress and influenced their ability to cope (Bowler et al., 2016; Bromet et al., 2016; Clouston et al., 2019; Feder et al., 2016; Schwarzer et al., 2016). According to Feder et al. (2016), some police officers experienced performance guilt because they felt that they could not perform their duties. The 9/11 terrorist attack added more stress to the responding NYC police officers by compounding the operational stress police officers experienced. Police officers are more susceptible to negative mental health outcomes when they experience multiple compounded stressors related to occupational operations, and these can influence their

performance on the job (Feder et al., 2016; Violanti et al., 2017). Some officers may not have been aware that the stress they experienced directly related to their 9/11 involvement because they were doing their job and performing their duty as a public servant (Gargano, Nguyen, et al., 2016).

Operational stressors are a hindrance when police officers are attempting to manage job-related compound stressors, such as the unusual circumstances experienced by police officers during and after the 9/11 terrorist attacks. Brough et al. (2018) referred to these types of stressors as extraorganizational stress. Extraorganizational stress is any occurrence that is intentional and human-initiated above and beyond any other normal occurring organizational stressors. Some police officers performed duties that were outside of their normal responsibilities such as the on-going long-term communications with grieving families and sorting through body parts and personal items at the Staten Island landfill (Feder et al., 2016). Police officers were not prepared for the amount of devastation they experienced or their extensive work dealing with grieving families.

According to Dasaro et al. (2017), working with grieving families and sorting body parts and personal items were very different tasks that police officers completed after the terrorist attacks of 9/11 in comparison to their routine day-to-day activities. The prolonged exposure of handling body parts and addressing grieving families created challenges that negatively influenced police officers in their ability to cope (Dasaro et al., 2017; Violanti et al., 2017). Similarly, Feder et al. (2016) found the handling of dead bodies traumatized police officers through tactile, olfactory, and visual sensations. Some of the negative effects police officers experienced also included vicarious trauma, compassion fatigue, and survivor guilt, and these reactions can be delayed for months or

even years (Papazoglou & Chopko, 2017). The work that NYC police officers engaged in during and after the 9/11 terrorist attacks exposed police officers to witness the pain, fear, terror, and loss experienced by the family survivors, to those who suffered the incidents of the 9/11 terrorist attacks (Bromet et al., 2016). Dealing with compounded stress above normal daily stress contributed to reduced resources as well as absenteeism, waning work performance, and diminished job satisfaction (Bowler et al., 2016; Greinacher et al., 2019; Jacobson et al., 2018; Yu et al., 2016).

Police officers who worked on 9/11 and the days that followed, reported working long hours under difficult conditions (Bromet et al., 2016; Feder et al., 2016; Schwarzer et al., 2016). Long-term exposure to stressful environments causes stress, and if left untreated may cause long-term mental health issues (Bowler et al., 2016; Bromet et al., 2016; Clouston et al., 2019; Diab et al., 2020; Feder et al., 2016; Jordan et al., 2018; Smith et al., 2019; Welch et al., 2017). The events of 9/11 exposed NYC police officers to extraorganizational stress for long periods that compounded the operational and organizational stressors they already experience (Violanti et al., 2017; Brough et al., 2016). Kula (2017) found extra organizational stressors contribute to a lack of job satisfaction and places added psychological strain on police officers. Extraorganizational stress may have also contributed to the high rates of police officer absenteeism post-9/11 (Brough et al., 2016; Brunetto et al., 2017; Jacobson et al., 2018). Without effective risk management interventions, some police officers had no means to process the stressors they experienced that day and the days that followed.

Types of Coping

Stress does not affect all people in the same way and the types of coping strategies that are employed vary from individual to individual (Clifton et al., 2018; Lazarus & Folkman, 1984). Stress and coping variables are idiosyncratic and personal (Chopko et al., 2019; Clifton et al., 2018; McCarty & Lawrence, 2016). Some individuals can handle certain situational stressors better than others (Geronazzo-Alman et al., 2016; Patterson, 2016). Stress has a physical effect on the body causing high blood pressure, shortness of breath, and heart disease (Gargano, Gershon, et al., 2016; Yu et al., 2016). Stress also has a psychological influence on an individual's thoughts, feelings, and behaviors, which can lead to disorders such as panic, anxiety, depression, and PTSD (Bowler et al., 2016; Jacobson et al., 2018; Mao et al., 2018). Changes in the environment trigger a human response when stress is felt (Lazarus & Folkman, 1984). Patterson (2016) contended that when faced with a stressful situation, individuals will engage one of three coping strategies that include problem-focused, emotion-focused, or avoidance and that the type of coping strategy engaged may lead to negative or positive mental health outcomes. A review of the literature did not reveal a clearly defined pathway to each of these strategies when faced with stressful situations (Patterson, 2016). For example, avoidance coping in some research is considered an emotion-focused strategy. At the same time, other researchers (Arbel et al., 2018; Chopko, Palmieri, et al., 2018; Padyab et al., 2016; Patterson, 2016) sectioned off avoidance coping as its own strategy because it was often thought of as a negative coping behavior and more recently it has been viewed as both a positive and negative coping technique. The following sections

will include information about the different ways a person can experience negative and positive coping and the variables that influence the process.

Negative Coping

Negative coping mechanisms are behavioral responses to stress that can result in unhealthy and harmful outcomes, such as excessive sleeping, substance use, drinking, smoking, overeating, escaping, disengagement, avoidance, or suicide (Bromet et al., 2016; Feder et al., 2016; Kula, 2017; Violanti et al., 2019; Welch et al., 2017). Some police officers post the 9/11 terrorist attacks engaged in negative coping behaviors (Jacobson et al., 2018; Jordan et al., 2018; Lowell et al., 2018; Mao et al., 2018). For example, Mao et al. (2018) conducted a review of the literature on the impacts of disaster workers. They found that police officers engaged in excessive drinking to cope emotionally with their experience and that drinking is an accepted form of coping behavior in the police culture.

Following events such as 9/11, it is common among the police population to see an increase in successful suicides (Jordan et al., 2018). In the months following 9/11, there was an increase in suicidal ideation phone calls among police officers, and the number of suicidal ideations calls for this population remained high throughout 2004 (Violanti et al., 2019, 2006). Jordan et al. (2018) used a sample from the WTCHR to consider the death prevalence of community and rescue workers. Researchers listed suicide using a firearm as the major cause of death among rescue-and-recovery workers (Jordan et al., 2018). Although the majority (76.5%) of suicides reported in the Jordan et al. study occurred in nontraditional rescue workers (volunteers, electricians, ironworkers, construction workers), the study was important because it was the first longitudinal study

to report elevated suicide deaths of rescue-and-recovery workers post-9/11. The study also included information about how traditional rescue workers did not have the highest suicide rates post-9/11 in comparison to nontraditional workers. The researchers contended the training of individuals who do rescue work as a profession might have contributed to their preparedness during the events of 9/11 (Jordan et al., 2018). Elevated rates of suicide in police officer's post-9/11 is a concern that indicates some police officers did not cope well with their traumatic experiences.

Some of the factors that can negatively influence coping with traumatic experiences include the source of the trauma, the duration of exposure, physical injury, available social support, feelings of belongingness, and the extent to which the person engages in practices of self-care (Clifton et al., 2018; Geiger, 2016; Sollie et al., 2017; Violanti et al., 2018). Some NYC police officers, who were highly exposed to the traumatic events of 9/11 and worked for long periods under dangerous working conditions, faced negative mental health consequences, such as panic, depression, anxiety, substance abuse, and PTSD (Arbel et al., 2018; Bromet et al., 2016; Dasaro et al., 2017; Feder et al., 2016; Mao et al., 2018; Yu et al., 2016). Police officers who use negative coping are more likely to experience long-term negative mental health outcomes (Bromet et al., 2016). For example, long-term alcohol abuse has been associated with marital difficulty, low self-esteem, depression, fatigue, moodiness, poor coping, and reduced work performance (Arbel et al., 2018; Clifton et al., 2018; Haugen et al., 2017; Welch et al., 2017). Some police officers, when stressed, will engage in negative coping practices that may produce temporary immediate improved coping, but long-term negative coping outcomes (Brooks et al., 2016; Regehr et al., 2019). Currently, there is

some confusion in the literature regarding whether avoidance is a positive short-term coping technique or a long-term negative coping mechanism. The literature reveals discrepancies regarding what constitutes a negative or positive coping skill. For example, avoidant coping often thought of as a negative coping skill, has recently been determined to be a positive short-term coping practice that provides individuals with a respite for appraisal of the situation (Arbel et al., 2018; Chopko, Palmieri, et al., 2018; Sollie et al., 2017). The use of long-term avoidant coping when stressed influences a person's overall ability to cope and causes long-term negative mental health difficulty (Arbel et al., 2018; Feder et al., 2016; Violanti et al., 2018). Gaining a better understanding of the police officers' coping perceptions and perceptions post-9/11 may assist mental health professionals in understanding how police officers adopt healthy coping or go on to develop immediate or latent mental health issues.

Avoidant Coping

Long-term escape-avoidance coping is a type of coping that can produce a maladaptive behavioral response in which individuals will do anything possible to evade the problem, and the long-term use of this type of coping may produce negative mental health consequences (Arbel et al., 2018; Lazarus & Folkman, 1987; Sollie et al., 2017). Police recruits develop numbing techniques and social distancing that assist them in avoiding emotional responses when faced with tragic events so they can continue to perform their duties (Chopko, Palmieri, et al., 2018; Geiger, 2016; Violanti et al., 2018). Engaging in avoidant-coping techniques to focus on their job duties and remain in control during emotionally charged situations requires police officers not to show any signs of emotional weakness and avoid their feelings (Chopko, Palmieri, et al., 2018; Gargano,

Nguyen, et al., 2016). Social distancing is also part of police training and is a needed skill so that police officers can continue doing their jobs when they experience traumatic events. To manage themselves during and after critical incidents, police officers do not discuss their feelings or seek treatment when emotional and overwhelmed in fear of being called out on a mental health issue or losing the use of their gun (Bowler et al., 2016; Bromet et al., 2016).

Longitudinal studies have shown an underreporting of PTSD in rescue workers and an increase in PTSD rates over time, while in the general population, PTSD rates continue to decline over time (Chopko, Palmieri, et al., 2018; Lowell et al., 2018). Police officers are always concerned about being labeled with a mental health issue and having their weapon taken (Bowler et al., 2016; Bromet et al., 2016). Retirement and having their gun taken away may contribute to the underreporting of distress among police officers. In contrast to this view, recent research findings have shown that exposure to traumatic events can also produce positive outcomes and intrusive thoughts and avoidant behavior may be part of the process of working through the traumatic situation and provide pathways to positive coping, resilience, and PTG (Arbel et al., 2018; Chopko, Palmieri, et al., 2018; Sollie et al., 2017).

Providing police officers with training on how to process emotions in stressful situations would likely promote resilient coping, which is a healthier way to deal with stress that produces positive outcomes (Chopko, Papazoglou, et al., 2018; Feder et al., 2016; Laureys & Easton, 2019; Sollie et al., 2017). Currently, in-service training is not mandatory and seldom used. This study was intended to look at the lived experiences of NYC police officers during and after the terrorist attacks to gain clarity regarding how

police officers process their emotions, and to increase professional understanding about how police officers use positive coping strategies and how these influence mental health outcomes.

Positive Coping, Resilience, and Posttraumatic Growth

Positive coping includes elements that promote sustainable health and continued performance. The perception of control during the stress-appraisal process for police officers is essential for healthy coping and required when assessing the relationship between the work environment and coping abilities of police officers who deal with critical incidents (Brough et al., 2018; Clifton et al., 2018; McCarty & Lawrence, 2016; Greinacher et al., 2019; Park, 2017). When police officers appraise their situation and any available resources, they perceive themselves to have an internal or external locus of control and they will engage various coping techniques.

Problem-focused (task-orientated) coping is associated with positive coping outcomes (Patterson, 2016). Police officers use problem-focused (task-orientated) coping when they view their situation as changeable and feel in control of the situation (Patterson, 2016). When stressed, individuals engage in fight or flight responses, looking for ways to change the situation, or when change is not possible, they will look for ways to cope (Patterson, 2016). For example, engagement in physical exercise is a form of problem-focused coping that allows individuals to relieve stress and experience health benefits. Physical exercise provides individuals with a sense of control in their life (Arbel et al., 2018). If police officers cannot change the situation that is causing them stress, they may engage the use of a positive coping technique that can produce multiple positive health benefits and outcomes (Patterson, 2016). Engagement in positive coping behavior

can also produce positive experiences and PTG for individuals after their experiences with trauma.

Researchers such as Chopko, Palmieri, et al. (2018) Feder et al. (2016), and Geiger (2016) reported on some of the positive experiences that could come from traumatic events. Dornbach-Bender et al. (2020) stated how it is possible to minimize the psychological effects of trauma by focusing on the positive aspects of the situation to find some personal benefit or meaning. Greinacher et al. (2019) conducted a systematic review of secondary trauma in first responders. Greinacher et al. were interested in looking at what might help or hinder police officers when coping with secondary stress. Self-care and positive emotions served as protective factors that further generated positive reappraisal, problem-focused coping, and meaning-making of the critical incidents in general duty officers. Feder et al. (2016) examined the coping traits of rescue and recovery workers over 12 years, following 9/11. The longitudinal study was conducted 3-, 6-, 8-, and 12-years post-9/11. The authors recorded coping traits in rescue and recovery workers ($N = 4,487$), including 1,874 police officers. Four trajectories were found for police officers that included worsening (12.1%), chronic (4.4%), improving (7.5%), or no/low symptoms (76.1%). The researchers found that positive emotion-focused coping such as the use of acceptance, humor, perceived preparedness, positive reframing of one's purpose in life, and social support aligned with less symptomatic trajectories (Feder et al., 2016). Results from Greinacher et al. (2019) and the Feder et al. (2016) studies are important because they demonstrated the buffering effects of positive emotion-focused coping in promoting resilience in police officers after terrorist experiences. Further, they explain the importance of social support as a protective factor

in addressing trauma and promoting resiliency (Infurna & Luthar, 2016; Ogińska-Bulik & Kobylarczyk, 2017; Rice & Liu, 2016; Sollie et al., 2017).

Resiliency develops as a result of positive coping techniques and involves individuals moving through, recovering from, and rebounding in a healthy direction after experiencing a distressing event (Crowe et al., 2017; Infurna & Luthar, 2016; Rice & Liu, 2016; Sollie et al., 2017). Being resilient requires that one's body and mind go through processes that are activated by stress, but individuals are still able to function in the face of adversity. Crowe et al. (2017) described resilience as a form of normal development under difficult conditions and both a process and an outcome. Optimism and social support connect resilient characteristics with positive outcomes and stimulate health in the face of environmental risks (Brooks et al., 2016; Laurey & Easton, 2019). Feder et al. (2016) looked at the prevalence of PTSD among police officer's post-9/11. Feder et al. found that resilience, support, exercise, optimism, new perspective on life, and finding meaning buffered the effects of PTSD, displaying the effectiveness of approach-based coping and some of the positive effects experienced post-trauma and how these can buffer psychological dysfunction.

Laurey and Easton (2019) explored the empirical literature in public officers and found resilience is a process that changes over time. The researchers identified three elements related to resilience that included stressful life events, coping ability, and adaptability. Some of the protective factors that were found to predict resilience included high self-esteem, life satisfaction, self-efficacy, empathy, positive world view, and the use of emotions. Feder et al. (2016) found higher perceived preparedness, emotion-

focused coping, humor, and a higher sense of purpose to be protective in the sample of their longitudinal study.

Demographic results from Brooks et al.'s (2016) study showed discrepancies with some police officers who are younger and had fewer years on the job had higher resilience scores than officers who were older with 10 or more years on the force. Police officers who were 46 years or older tended to use more emotion-focused coping (Brooks et al., 2016). Similarly, Klimley et al. (2018) found in a review of the literature that police, firefighters, and emergency dispatchers who were older had higher PTSD scores. Also, some police officers used detached coping, but detached coping was unrelated to resilience and found to be a maladaptive coping skill. Klimley et al. suggested this behavior might be influenced by the cumulative effects of stress from being on the job for years.

Contrary to these findings, Arbel et al. (2018) found that older age and experience on the job assisted officers in engaging in spiritual thinking and associated with growth and higher resilience scores. Police training reinforces problem-focused coping but might do so at the expense of officers being unable to process their emotions successfully (Chopko, Palmieri, et al., 2018; Clifton et al., 2018). Especially since organizational training teaches police recruits to be unemotional to perform work duties, this instruction may not prepare recruits for sustainable resiliency (Arbel et al., 2018; Chopko, Palmieri, et al., 2018; Diab et al., 2020; Geiger, 2016). Overall, the variables that influence police officers' abilities to cope positively include age, years of service, training, and experiences on the job (Chopko, Palmieri, et al., 2018; Geiger, 2016). However, the direction of these influences remains undetermined.

Some police officers have reported experiencing positive growth from posttraumatic experiences (Chopko et al., 2019; Feder et al., 2016; Geiger, 2016; Ogińska-Bulik & Kobylarczyk, 2017; Violanti et al., 2018). Teaching police officers how to promote skills of resilience in the face of adversity could influence the high rates of burnout and turnover that are often reported in studies using a police sample (Brooks et al., 2016; Kula, 2017; Smith et al., 2019; Turgoose et al., 2017; Yu et al., 2016). However, it is important to note that the pathway from distress to resilience and growth are not demarcated, nor are they explained clearly in police studies. Further research is needed in the area of positive coping and what factors promote resilience and growth in police officers.

Police Coping

The unpredictable nature of policing can place enormous stress on a police officer's ability to cope. Some researchers reporting on the events of 9/11 contended that NYC police officers served long hours under horrific circumstances and conditions (Bromet et al., 2016; Brooks et al., 2016; Clouston et al., 2019; Diab et al., 2020; Dornbach-Bender et al., 2020) thereby creating a unique situation for NYC police officers (Smith et al., 2019). Many officers expressed thoughts about being in a chaotic environment and how they could never anticipate a scenario like the events of that day and the days that followed (Clouston et al., 2019). NYC police officers had duties that included dealing with dead bodies, assisting grieving family members, and being hypervigilant while working in unsecured areas (Bromet et al., 2016; Smith et al., 2019). Experiences that are sudden and unexpected involving exposure to dead bodies are traumatizing to police officers (Feder et al., 2016; Schwarzer et al., 2016; Smith et al.,

2019; Violanti et al., 2017). Officers required special coping skills during the execution of their duties on 9/11 and after their participation in the cleanup efforts (Bowler et al., 2016; Bromet et al., 2016). Thus, the uniqueness of the circumstances surrounding the events of 9/11 posed many challenges for NYC police officers that went beyond those they experienced daily. For example, in Ekenga et al.'s study (2011), police officers revealed that they lacked resources, such as protective equipment and training. That lack of resources negatively influenced how they coped during and after the 9/11 terrorist attacks.

Research findings on the coping practices of police officers include information on various coping techniques that influence coping (Allison et al., 2019; Chopko et al., 2019; Greinacher et al., 2019; Laureys & Easton, 2019; Regehr et al., 2019; Violanti et al., 2019). For example, academy training changes the way police officers cope and process stressful situations. McCarty and Lawrence (2016) conducted a study on police recruits that looked at the coping strategies utilized at the beginning of training and the end of their training. McCarty and Lawrence found statistically significant changes in police recruits' use of coping strategies. Police recruits used more problem-focused (task-orientated) coping at the beginning of training and more avoidance coping at the end of training (McCarty & Lawrence, 2016). These findings are important because they show how police recruits are trained to inhibit their emotions when they face challenging experiences and engage in avoidance as a coping strategy at the end of their training. Violanti et al. (2017) found that personality and identity changes influence coping among police officers. As recruits begin training their identity in being a police officer is engendered, where it becomes not just part of a job, but who they become. Police training

instigates personality changes as the police officer's identity forms, and as a result, changes occur in their beliefs, values, and behavior.

Personality Changes

A police officer's job includes addressing multiple stressors; therefore, training includes learning special coping skills to manage these stressors (McCarty & Lawrence, 2016). Police officers' abilities to cope with stressful circumstances involve efforts exerted in addressing the day-to-day stressors they might experience as well as addressing the organizational and occupational stressors of the job (Brunetto et al., 2017; Frank et al., 2017; Kula, 2017; Laureys & Easton, 2019; Sollie et al., 2017; Violanti et al., 2017; Wagner et al., 2020). The nature of police work can change an officer's personality (Brough et al., 2016). Changes in personality are important considerations for coping because although training as a police officer may prepare them for job challenges, the training itself changes how police officers think and behave (Kula, 2017; McCarty & Lawrence, 2016). If police officers are trained to address stress and engage in practices that go against their personality or beliefs, this incongruity will cause additional internal stress (Griffin & Sun, 2018). As a police officer becomes seasoned in the job, a new identity is formed. The exposure to compounded stressors such as critical incidents can change their normal thinking, such that they ignore adaptive coping, which leads to long-term coping difficulties (Chopko et al., 2019; Klimley et al., 2018; McCarty & Lawrence, 2016).

Identity Changes

A police officer's identity forms through training and exposure to traumatic situations. The responsibilities associated with the job can produce changes in the police

officer's identity (McCarty & Lawrence, 2016; Patterson, 2016). From the initial stages of recruitment to ongoing active duty, a police officer's identity forms and changes with every newly encountered experience (Diab et al., 2020; Geiger, 2016; Kula, 2017; McCarty & Lawrence, 2016; Patterson, 2016). McCarty and Lawrence (2016) looked at police recruits training in four police agencies on how coping evolved. McCarty and Lawrence found a police officer's personality narrowed during their training. The police subculture influences and reinforces this narrowing in self-identification with the profession and often leads to isolation and a lack of social support (Diab et al., 2020; Geiger, 2016; Kula, 2017; McCarty & Lawrence, 2016; Patterson, 2016; Violanti et al., 2019). Officers may initially define themselves as parents, partners, friends, community members, and team members. As they spend time on the job, they take on the persona of their employment, and some of these old roles fade, and a police identity emerges that soon becomes all they know (Clifton et al., 2018; Violanti et al., 2019). A police officer will not share any difficulty they experience on the job with fellow officers in fear it will influence their job status (Bowler et al., 2016). Additionally, police officers will not seek the support of family members to shield them from unpleasant aspects of the job leaving them alone to deal with their challenges (Clifton et al., 2018; Geiger, 2016).

As a police officer's identity narrows, their ability to solve problem situations outside of the work environment diminishes (Klimley et al., 2018). Being police officers becomes all they are and all they know (Violanti et al., 2019). This narrowing of police officers' identities and entrenchment in the job limits their ability to receive the social support needed to buffer stressful times, which can negatively influence their ability to find solutions to situations they encounter (McCarty & Lawrence, 2016; Schwarzer et al.,

2016). The identity of the officer forms through the organizational and operational aspects of the job that exists as part of being a member of the police profession and this contributes to their inability to seek out the mental health assistance they may need (Crowe et al., 2017; Violanti et al., 2018). In a qualitative study by Crowe et al. (2017), the researchers were interested in uncovering how responders ($n = 70$) and the general public ($n = 10$) look at the concept of resilience. They conducted four focus groups and found some similarities and differences between police and others. Some of the similarities were that both groups saw positive coping as using a strategy to manage stress and the importance of social support. One major difference between the groups was that police saw dealing with trauma as an individual process, something internal, something needed to deal with occupational stress. Social support was also viewed differently compared to the general population in that police viewed support as a place where they can go to detach from the world, someplace they were accepted (Crowe et al., 2017). First responders did not feel a need to process their emotions, and therefore, did not seek treatment, leaving them alone in their ability to deal with life and stress. It is important to note that first responders endorsed being emotionless as an effective strategy, and this could stem from the training they receive so they can perform their occupational duties.

Posttraumatic Growth

Beginning in the 1960s, there was a major paradigm shift in psychology from looking at the negative effects of trauma on coping toward looking at positive outcomes that may come from stressful situations (Calhoun & Tedeschi, 2004). The posttraumatic-growth model (PTGM) is an outflow of the positive-psychology movement, where

researchers have focused on the facilitation of growth post-trauma (Arbel et al., 2018; Chopko, Palmieri, et al., 2018; Gargano, Gershon, et al., 2016; Leppma et al., 2018). In PTG, individuals are capable of achieving resilient levels of coping and gain value from a troubling or stressful experience (Ogińska-Bulik & Kobylarczyk, 2017). This process occurs when individuals ascribe positive meaning to an adverse event (Ogińska-Bulik & Kobylarczyk, 2017). Some factors that influence PTG in police officers include meaning-making, social support, gratitude, and life satisfaction (Violanti et al., 2017). Calhoun and Tedeschi (2004) posited that growth occurs when individuals' perceptions of how they view negative events change in positive ways such that growth is encountered from their experiences. The PTG model includes information about improved relationships, enhanced personal strength, increased sense of purpose, changed worldviews, spiritual development, openness to experiences, and a greater appreciation of life (Arbel et al., 2018; Chopko et al., 2019; Feder et al., 2016; Gargano, Gershon, et al., 2016; Geiger, 2016; Klimley et al., 2018; Leppma et al., 2018; McCanlies, Gu, et al., 2017; Schwarzer et al., 2016).

Calhoun and Tedeschi (2004) developed the PTG model to explain how individuals extract positive meaning from their negative experiences. Moreover, PTG extends further than resilience and includes a process of growth for individuals that can change over time (Calhoun & Tedeschi, 2004; Chopko et al., 2019; Leppma et al., 2018). PTG enables individuals to produce new schemas that incorporate trauma and stress into a new worldview through the reexamination of core beliefs that produce personal strength and a greater appreciation for life (Chopko et al., 2019). The PTG model is part of a paradigm shift that offers a strengths-based, positive perspective of the phenomenon of

resilience and growth that some NYC police officers may be experiencing several years post-9/11 (Chopko, Palmieri, et al., 2018; Feder et al., 2016; Geiger, 2016; Leppma et al., 2018; Tedeschi et al., 2017; Violanti et al., 2018).

Researchers have theorized that a direct threat (to oneself) and an indirect threat (the witnessing of a threat to others) contribute to PTG reactions when processing trauma (Chopko, Palmieri, et al., 2018). However, a review of the current research reveals inconclusive results regarding the type of threat to life that contributes to resilience and PTG, and whether it involves a direct or indirect threat to life (Chopko, Palmieri, et al., 2018). Research findings have been inconsistent and are not clearly understood. Further, the link between PTSD and PTG continues to be poorly understood, and very few research studies on PTG include samples with police officers (Chopko et al., 2019; Geiger, 2016). Exploration of PTG with police samples after the terrorist events of 9/11 may add to the literature on PTG on how police officers perceive PTG and process trauma after a traumatic experience.

Chopko et al. (2019) looked at the frequency and severity of PTG with health variables and trauma severity to address some of the inconsistencies that have been found in the literature regarding a relationship between the two variables. A positive relationship was found between distress and growth. Still, the benefits of each depend on the type of trauma exposure experienced and, more specifically, trauma that involves a personal threat to life (Chopko, Palmieri, et al., 2018, 2019). When police officers reported a threat to their life, they had an increased appreciation of life, enhanced personal relationships, and were able to bounce back in the face of adversity displaying

resilience and PTG. Additionally, Chopko, Palmieri, et al. (2018, 2019) found differences between emotional and behavioral PTG.

Several researchers were interested in the mediating effect of PTG and found the participants' ability to make sense of the situation was important (Chopko, Palmieri, et al., 2018; Feder et al., 2016; Leppma et al., 2019; Padyab et al., 2016; Sollie et al., 2017). Finding meaning when faced with tragedy is a form of active coping and a protective measure when addressing the terrorist events of 9/11 (Blackie et al., 2017; Feder et al., 2016; Sollie et al., 2016; Violanti et al., 2018). Researchers (Chopko, Palmieri, et al., 2018; Feder et al., 2016; Leppma et al., 2019; Padyab et al., 2016; Sollie et al., 2017) contended that meaning-focused active coping is adaptive and contributes to positive emotions and positive mental health outcomes for individuals in their samples. If PTG is a mixture of positive function, continued distress, and coping efforts then it is possible that NYC police officers who experience distress from experiences related to 9/11 to find positive meaning that may assist them in their coping (Chopko, Palmieri, et al., 2018; Dornbach-Bender et al., 2020; Feder et al., 2016; Leppma et al., 2019; Padyab et al., 2016; Sollie et al., 2017). In this study, I explored PTG in police officers' experiences with the terrorist attacks of 9/11 and the role of coping in supporting that PTG.

In 2018, Chopko, Palmieri, et al. tested a model for a pathway from type of trauma exposure to PTG in police officers. The researchers viewed denial as a negative long-term coping mechanism. However, after the 9/11 terrorist attacks, denial may have provided a needed respite to individuals so that a positive reinterpretation could aid in the adaptation and assimilation process, allowing them to adjust back to a homeostatic state and find meaning from the traumatic event (Chopko, Palmieri, et al., 2018). Traumatic

events may challenge and disrupt individuals' basic assumptions that allow for reinterpretation and adaptation of the experience. Chopko et al. referenced this renunciation as healthy growth-promoting denial and concluded that it serves as a positive factor in the adaptation process. Denial allows individuals to make attempts at cognitively processing the event and provides time to understand the event and find meaning. Therefore, early cognitive disruption following trauma that involves denial, avoidance, and intrusive experience was found to assist individuals in experiencing positive growth from negative events (Chopko, Palmieri, et al., 2018). Feder et al. (2016) longitudinal study also found that over time positive reframing and acceptance, along with reduced trauma symptoms, were associated with higher PTG scores. More information is needed to understand whether this is also true among other populations, including police officers, who are the focus of this proposed study.

Contrary to most findings, the use of denial and avoidance when experiencing trauma may allow individuals to find positive meaning from the situation and encourage positive coping skills (Brooks et al., 2016; Chopko, Palmieri, et al., 2018; Feder et al., 2016). Similar to Chopko, Palmieri, et al. (2018), Arbel et al. (2018) and Brough et al. (2018) contended that denial serves as a respite for positive reinterpretation of the event. Denial aided police officers in their ability to assimilate and reinterpret training events, thereby leading to positive coping and growth (Brough et al., 2018). Other researchers feel that PTG may follow distinct pathways that differ for each person and that positive changes in individuals are actually cognitive distortions that are created by an individual to moderate experiences with continued pain (Chopko et al., 2019; Leppma et al., 2018). Some police officers may have found some positive meaning from their personal

experiences by being resilient and creating positive meaning from their interpretation of the terrorist events of 9/11. PTG contends that growth and distress can co-exist, and short-term denial provides individuals with time to adapt to the distressing situation.

Mental Health Programs After 9/11

After 9/11, the Federal Emergency Management Agency (FEMA) authorized funding to provide treatment and to monitor the mental health status of individuals with reported exposure to the 9/11 terrorist attacks (Leppma et al., 2018). Three popular programs were created that specifically related to the attacks on 9/11 were the WTCHR, the WTCHP, and Project Liberty (Bromet et al., 2016; Diab et al., 2020; Feder et al., 2016; Gargano, Gershon, et al., 2016; Sederer et al., 2011). City, state, and federal leadership initiated these three programs to undergird supportive efforts related to the mental health stabilization and recovery of thousands of individuals directly affected by the events of 9/11, including police officers (Bromet et al., 2016; Gargano, Gershon, et al., 2016).

The World Trade Center Health Registry

WTCHR is a New York-based organization that monitors and evaluates those directly exposed to the 9/11 disasters regarding long-term physical and mental effects. The NYC Department of Health and Mental Hygiene and the U.S. Department of Health and Human Services (2002) jointly administer the registry in collaboration with the Toxic Substances and Disease Registry, the National Institute for Occupational Safety and Health and the Center for Disease Control and Prevention (Jacobson et al., 2018). The registry enrolled more than 70,000 individuals who lived or worked in the area surrounding the WTC, who were exposed to the collapse of the towers (Gargano,

Gershon, et al., 2016; Yu et al., 2016). From 2001 to 2003, the September 11th Victim Compensation Fund processed claims related to death and injuries caused by the terrorist attacks of September 11, 2001. The WTCHR was intended to be a time-limited program and closed in November 2004 and no longer accepts applicants (NYC 9/11 Health, n.d.). The WTCHR became a prospective cohort study of individuals ($N = 71,427$) with reported exposure to 9/11 incidents during four waves that ranged from 2003-2004 (Wave 1), 2006-2007 (Wave 2), 2011-2012 (Wave 3), and 2015-2016 (Wave 4) to explore longitudinal outcomes from 9/11 (Jacobson et al., 2018).

The World Trade Center Health Program

In 2015, President Barack Obama reauthorized the James Zadroga 9/11 Health and Compensation Act supporting the establishment of the WTCHP. Initially, researchers at Mount Sinai Hospital created a program in 2002, called the WTC Worker and Volunteer Medical Screening Program that later became the WTCHP (Bromet et al., 2018). The National Institute for Occupational Safety and Health receives funds from the federal CDC (Bromet et al., 2018). The staff of the WTCHP delivers services to police and non-traditional responders at the WTC and survivors who were in the NYC disaster area and other related sites in NYC, Shanksville, PA, and the Pentagon in Washington, DC (CDC, 2017; 2018a). The program currently has 88,484 WTC responders and community members (CDC, 2017; 2018b). The program includes residents, students, emergency responders, recovery-and-cleanup workers, and volunteers who were in the disaster area during and after the 9/11 attacks (CDC, 2018a). Currently, the program remains open, continues to accept new applicants, and provides medical benefits to

survivors and responders who were present in the NYC area, the Pentagon, and Shanksville, Pennsylvania (CDC, 2018a).

Project Liberty

Project Liberty is a FEMA funded program formed under the New York State Office of Mental Health (Gargano, Gershon, et al., 2016). Project Liberty provided crisis-counseling services for anyone involved in or affected by the events of 9/11 (Gargano, Gershon, et al., 2016). Local mental health authorities supported this program, providing services to individuals who were affected by the 9/11 terrorist attacks for the first three subsequent years (Gargano, Gershon, et al., 2016). Services offered included crisis counseling, outreach, and education, serving individuals of various populations with different levels of psychological distress and demographics included age, culture, educational level, socioeconomic status, and race (Gargano, Gershon, et al., 2016). The program served more than 750,000 individuals, with 20% (40,000) being children who received services through collaboration with the New York State Office of Children and Family Services (Gargano, Gershon, et al., 2016). Project Liberty ended its program in 2003. Although these services were offered, many individuals did not realize services were available, or their health issues were related to their work during and after the terrorist attacks of 9/11. Therefore, they did not receive services (Gargano, Gershon, et al., 2016).

Mental Health Resource Use

Barriers to seeking mental health care post-9/11 have continued over the past decade following 9/11 (Bowler et al., 2016; Bromet et al., 2016). Police officers are known to be reluctant to seek mental health treatment even when it may be offered and

needed (Lowell et al., 2018). Current research shows a need persists for more effective interventions that target at-risk populations like NYC police officers. Haugen et al. (2017) conducted a systematic review and meta-analysis of stigma and barriers to care and their relationship with mental health and psychosocial variables in first responders. Of the 14 studies reviewed, 12 of the studies included police samples. Stigma was reported in 33.1% of responders as a barrier to care. The researchers found that stigma and barriers to care continue for police officers and that these can delay mental health presentation and treatment. Some of the participants endorsed items that included ambivalence in seeking care, cost, scheduling concerns, and not knowing where to access the mental health care services being offered (Haugen et al., 2017). Issues surrounding confidentiality was the most frequently endorsed item for police officers.

Utilizing a large sample taken from the WTCHP ($N = 16,179$), where half of the sample included ($n = 8,881$) police officers, Diab et al. (2020) looked at the mental health care needs of rescue and recovery workers. Although higher scores were found for non-traditional workers, police officers continue to report unmet mental health care needs. The researchers showed that of the unmet health care needs reported by police officers included factors such as being older, being female, having somatic complaints, pre-screened in as having WTC-related PTSD, depression, substance use, having a prior diagnosis of anxiety/ depression/ PTSD before 9/11, and experiencing more life stressor after 9/11, indicating a need for continued care. After almost 2 decades, 20.6% of the sample continue to report having unmet mental health care needs (Diab et al., 2020). This study is important because it reported police officers continue to suffer today with the effects of 9/11 and have unmet mental health care needs that need to be addressed.

Although police officers initially had the lowest reported prevalence rates for PTSD among 9/11 responders (Bowler et al., 2016; Feder et al., 2016; Mao et al., 2018), police officers possibly underreported their symptoms (Lowell et al., 2018). Police officers are equally as susceptible as other occupations to mental health difficulties (Frank et al., 2017), and their exposure to the events of 9/11 placed them at a higher risk for psychological sequelae (Brunnetto et al., 2017; Chopko, Palmieri, et al., 2018; Clifton et al., 2018; Griffin et al., 2018; Mao et al., 2018; Violanti et al., 2017). The underreporting and resistance to seeking help in police officers may potentially be an outcome of their training (Lowell et al., 2018), leaving their mental health needs untreated.

Feder et al. (2016) also used data from the WTCHR to examine PTSD symptom trajectories among police officers ($n = 1,874$) assessed at 3, 6, 8, and 12 years and found chronic PTSD in WTC responders. Of the police participants, 12.1% had worsening symptoms, 4.4% had chronic PTSD, and 7.5% had improving symptoms. Like Hagen et al. (2017), Feder et al. (2016) uncovered some risk factors related to 9/11 that included being Hispanic, prior psychological history, greater WTC exposure, life stress, medical issues, post-traumatic experiences, and maladaptive coping. Some of the protective factors that the researchers found included feeling prepared, positive emotion-focused coping, and a greater sense of purpose. As risk factors continue to exist from the effects of 9/11, a need persists in targeting mental health risks and services for police officers who served during that time.

Some barriers to seeking mental health care continue to include stigma related to mental health treatment, which may foster delayed presentation in symptoms and delays

in receiving mental health care as identified by Haugen et al. (2017). Fear of losing one's job or changes in status on the job are some of the main factors that contribute to increased substance use, suicide, failure to seek treatment, and declining mental health status often reported by police officer samples (Bowler et al., 2016; Bromet et al., 2018; Feder et al., 2016; Jordan et al., 2018; Schwarzer et al., 2016; Violanti et al., 2019). Police officers have had difficulty discussing their experiences post-9/11, and some police officers may minimize the psychological effects and symptoms they experienced in the days that followed 9/11 (Bromet et al., 2016).

In Haugen et al.'s (2017) systematic review of the literature on first responders, job-status changes negatively influenced the emotional and psychological well-being of responders. Violanti et al. (2019) asserted that police officers who strongly identified with their job had difficulties coping with changes in their employment status because their identities included being members of a police organization. Fear of losing one's job because of discussing emotions about events from 9/11 and having no social support may be a contributing factor regarding why some officers chose to suffer the after-effects alone (Diab et al., 2020). Gaining clarity on how police officers experience job-status changes is important for police organization leaders to consider when seeking an understanding of the stress officers experience (Violanti et al., 2019).

Further, stigma and barriers to care can lead to chronicity of symptoms, such as depression and psychopathology (Haugen et al., 2017). Along with the stigma and barriers to care, police officers have limited social support from within the organization, and many police officers use negative coping strategies and vices that include increased substance abuse, alcohol use, or suicide (Feder et al., 2016; Jordan et al., 2018; Violanti

et al., 2019). The unacceptable aspect of these negative outcomes is that with assistance and intervention, they are subject to change.

Summary

After the events of 9/11, NYC police officers sought various ways to cope with the strain and distress they experienced. Symptoms identified as resulting from the trauma experienced include emotional reactions of fear, vulnerability, grief, and survivor's guilt (Greinacher et al., 2019). Some police officers were able to reconcile their emotions and recover, whereas others developed maladaptive behaviors and experienced negative mental health outcomes (Bowler et al., 2016; Cone et al., 2015; Feder et al., 2016; Mao et al., 2018; Schwarzer et al., 2016). Other police officers displayed resilience and experienced PTG after their experiences (Leppma et al., 2018; Tedeschi et al., 2017; Violanti et al., 2018). Several factors contributed to maladaptive and adaptive behaviors, which included a combination of the type of critical incidents police officers experienced at the WTC, types of coping mechanisms used, perceived, and received support, and ongoing stress that is inherent in the job of being a police officer (Arbel et al., 2018; Klimley et al., 2018; McCanlies, Gu, et al., 2017; Sollie et al., 2017; Schwarzer et al., 2016). A need persists in understanding the types of coping mechanisms NYC police officers believe helped or hindered them in their mental health outcomes. Research that can record the retrospective experience of civil servants during the 9/11 terrorist attacks will add to the knowledge base and potentially inform mental health professionals in the area of crisis intervention. Increased understanding of crisis-intervention outcomes will help therapists provide effective interventions that are best

suited to support police officers and other rescue workers during and after terrorist attacks.

This study contributes to the literature by providing a better understanding of the lived experiences of NYC police officers who responded to the events at the WTC towers on 9/11 and in the days that followed. Few researchers have described the breadth and depth of coping mechanisms with police personnel who worked in highly stressful areas during and after the 9/11 terrorist attacks (Bromet et al., 2016; Diab et al., 2020; Lowell et al., 2018; Violanti et al., 2019). This study builds on the literature, as very few qualitative researchers have sought to understand the shared experiences and essence of being an NYC police officer during and after the 9/11 terrorist attack (Bills et al., 2009; Ekenga et al., 2011; Freedman, 2004).

The study may contribute to the development of effective interventions and support systems for NYC police officers and contribute to social change by uncovering the verbal accounts of how NYC police officers coped and managed in the aftermath of 9/11. Further, this study will promote positive social change in response to mental health service provisions in times of intense crisis and trauma. This study fills a gap in the literature by providing a deeper understanding of the lived experiences of NYC police officers who responded to the attacks on the WTC towers on 9/11 and what they perceive worked best to help them cope after a terrorist attack or what was least effective. Understanding the positive and negative coping practices officers used during the 9/11 terrorist attacks may be useful in fostering a strengths-based approach to treatment that encourages individuals to heal quickly and sustain healthy coping practices. Chapter 3

will include the methodology associated with this study, the research design, the way the researcher will interview participants, as well as the researcher's role in the study.

Chapter 3: Research Method

The purpose of this study was to further the understanding of the lived experiences of NYC police officers during and after the 9/11 terrorist attacks. NYC police officers were vulnerable to both physical and mental health risks following the events on 9/11. A deeper understanding was needed of their coping experiences and how they managed physically, behaviorally, and emotionally with the events. I used a phenomenological approach to gather the perspectives of NYC police officers who were working on 9/11 or at least one shift in the 6 months after that day. This chapter includes the research design and rationale for this study, discussion of my role as a researcher, an overview of the methodology, a discussion of issues of trustworthiness, and a summary.

Research Design and Rationale

I used a qualitative methodology with a phenomenological design (Englander, 2016; Mohajan, 2018). The phenomenon of interest was the lived experience (with an emphasis on coping experience) of a small sample of NYC police officers during and after the terrorist events of 9/11. Careful thought was given to the construction of the RQs to engage former NYC police officers in a discussion of their ability to cope and to uncover as much of their experience as possible. The participants were asked to reflect on their experiences and describe how they coped and continue to cope with the experiences of living through the terrorist events of 9/11 (Creswell & Poth, 2018; Willis et al., 2016). The RQs were

RQ1. What coping mechanisms do a small sample of NYC police officers perceive worked best during and after 9/11?

RQ2. What coping mechanisms do of a small group of NYC police officers perceive did not work well during and after 9/11?

Phenomenology is the study of mental events, including the meaning that individuals attribute to their lived experiences. This individual process involves conscious awareness (Englander, 2016; Mohajan, 2018). I asked participating NYC police officers to talk about their experiences and reflect on the meaning of those experiences (see Mohajan, 2018; Willis et al., 2016). A phenomenological approach is the best qualitative design to use for studies that seek to understand the essence, meaning, and structure of the lived experience from participants (Alase, 2017; Crowther et al., 2017; Englander et al., 2016; Mohajan, 2018). The phenomenological research design was appropriate for this study because few researchers (Bills et al., 2009; Ekenga et al., 2011; Freedman, 2004) have focused on NYC police officers who faced 9/11 or explored how NYC police officers coped on and after the events of 9/11. Learning about the lived experience of managing through the 9/11 terrorist attacks revealed coping techniques and practices that are useful in improving the mental well-being of police officers.

Husserl's (2012) phenomenological approach suspends all suppositions and relates to the consciousness of the experience. The approach involves directed awareness of consciousness and individual perception, memory, thought, and emotion (Englander et al., 2016; Mohajan, 2018). This study primarily focused on the meaning created by NYC police officers regarding their coping experiences and strategies used. Participating police officers described their perceptions of coping through the events they encountered during and after 9/11 by articulating their memories, thoughts, and emotions related to that time (Mohajan, 2018).

Phenomenological inquiry centers on the values attributed to the experiences from firsthand descriptions (Levitt et al., 2016). The phenomenon captured in this study is how NYC police officers coped with the circumstances of commercial airliners being used as weapons to level two NYC skyscrapers filled with people in offices, banks, and businesses. The primary focus of using a phenomenological research design in this study was to explore universal themes discussed by participants regarding how they coped and what assisted or hindered them with coping. The use of a phenomenological, qualitative design allowed participants to describe their lived coping experiences by consciously answering open-ended questions. I conducted the study during the COVID-19 pandemic and interviewed participants via an audio-recorded video call. The audio-recorded video call provide them an opportunity to focus their attention on the meaning they ascribed to their lived experience. The information provided by participants contributes to an understanding of the coping practices that NYC police officers used to cope with the stress of the events they experienced during and after 9/11.

Husserl (1970) extended phenomenology to include individual interpretation. Husserl's (1970) hermeneutic qualitative, phenomenological approach was appropriate for this qualitative study because it involves consciousness of movement where the individual is aware that a change in perception has taken place. Consciousness of movement assists individuals in the interpretation of an event allowing past experiences to come forward into the present moment. Husserl contended that events are understood by experience and the way that human consciousness perceives the "universal essence" of an occurrence. A hermeneutic approach facilitated an understanding of the lived experiences, effects, and interpretations of NYC police officers who survived 9/11. Each

participant provided descriptions of how this experience was individually transformed into meaning (see Levitt et al., 2016).

Qualitative inquiry is concerned with how people construct meaning from situations and how they make sense of their world by engaging in a meaning-making process (Mohajan, 2018; Willis et al., 2016). Qualitative inquiry allows for the interpretation of meaning ascribed to the experience as participants intentionally shift their attention and reflect on the meaning of the experience (Seidman, 2013). A phenomenological qualitative approach allows for the emergence of meaning, significance, and understanding of the experience of living through trauma (Creswell & Poth, 2018; Englander et al., 2016; Laurey & Easton, 2019; Moustakas, 1994). The use of a qualitative hermeneutic phenomenology allowed me to elicit participant descriptions of what it was like to be at and around the WTC during and after the 9/11 attacks.

The rationale for using a phenomenological approach was to make sense of the experiences and discover how NYC police officers transformed their experience into a conscious understanding. I studied and coded the themes that embodied these experiences. Quantitative methods are not appropriate to use when studying the wholeness of human experiences because although human experience may be reduced to quantifiable numbers, the richness of the whole experience is lost (Creswell & Poth, 2018; Sohn et al., 2017). Therefore, in this inquiry I used an inductive approach (see Bradshaw et al., 2017; Moustakas, 1994). An inductive approach is a bottom-up analysis that uses participant descriptions of an event through individual responses to give an understanding of the whole human experience. Further, an inductive approach allowed

the dynamics of coping and the possibility of resilience to be explored, while the focus remained on individual behavior.

Because few studies (Bills et al., 2009; Ekenga et al., 2011; Freedman, 2004) have been conducted with police officers on the meaning of their coping experience with 9/11, this study was exploratory. I conducted the study to explore the lived experiences rather than seek an explanation or a measurement of different constructs. Conscious understanding from a constructivist position and the use of intentionality enhanced the exploration of the phenomenon given that this qualitative study was conducted to obtain the first-person descriptions of the coping behavior of NYC police officers (see Sohn et al., 2017). According to Husserl (2012), intentionality is a correlation between the subject and the object. Rather than focusing on the known facts of the 9/11 terrorist event in NYC, the purpose of this study was to explore the meaning that NYC police officers assigned to their coping experiences.

Role of the Researcher

The role of the researcher in this study was to be the observer and instrument for collecting and describing the data presented by the participants (see Creswell & Poth, 2018; Englander et al., 2016). I constructed and presented participants with open-ended questions around a specific interest in understanding their perspectives and how they made sense of the experiences of 9/11. As the researcher, I was interested in gaining an understanding of the essence of how NYC police officers perceive their ability or inability to cope during and after 9/11. I hoped to uncover patterns and themes through descriptions provided during in-depth interviews with NYC police officers who directly experienced the events of 9/11.

Snowballing technique was used to obtain the sample. I requested individuals to refer people they know who worked with them in the NYC Police Department during and after 9/11. Participation was strictly on a volunteer basis. I informed all potential participants that no compensation of any form would be offered for their participation in the study. Participants were offered three separate opportunities throughout the study to decide whether to participate. Participants were able to opt out of the study when they received the flyer (see Appendix A), upon initial contact with me, and after the transcriptions were complete. To ensure that no coercion or incentives were involved, I did not direct participants as to how to answer the interview questions at any point. If participants had any questions regarding how to answer the interview questions, they were instructed to respond to the best of their ability. To ensure that no ethical violations were made, I ensured that I had no prior knowledge or involvement with the participant sample on a personal or professional level. Because I am a clinical psychology student who interviewed professional police officers, I assumed that no power differential existed.

My role as the researcher was to build rapport with the participants and ask them questions through a video call that was audio recorded in a manner that provided them with a safe and comfortable environment as they disclosed their personal accounts. In using a hermeneutic phenomenological approach for the study, I bracketed out any preexisting or preconceived thoughts that I may have held regarding the data presented and the research topic (see Creswell & Poth, 2018; Englander et al., 2016). Husserl (2012) referred to the bracketing out of preexisting assumptions as the epoché approach. As the researcher, I was a participant-observer and shifted my attention from what I knew

to what was being described (Englander, 2016). I recorded and transcribed participants' accounts word for word so that the meaning of the experience by participants was not lost in translation and any personal bias was contained. I derived meaning through the descriptions provided by participants and not from any personal understanding of my own to ensure that the phenomenon would be fully described by the participants (see Creswell & Poth, 2018; Levitt et al., 2016; Mohajan, 2018).

To identify with the participants, I reflected on my own coping practices when stressed. I recorded notes of my personal behavioral observations, reactions, and personal experiences throughout the study. To minimize any personal bias, notes on personal experience were recorded by writing in a journal about my thoughts, feelings, values, and behavior related to the events of 9/11. As the researcher, when I think of the events that took place on 9/11, I find I am sad and, at times, angry about the amount of destruction and loss of life on that day. Therefore, it was important to actively monitor my feelings and personal views concerning the events that were shared with me by the participants (see Alase, 2017; Creswell & Poth, 2018; Levitt et al., 2017; Mohajan, 2018).

After collecting all the data for the study, I used a journal for reflection on what the participants shared. The events of 9/11 were harmful to those involved as well as those who were observers, researchers have noted (Bowler et al., 2016; Bromet et al., 2016; Clouston et al., 2019; Jordan et al., 2018). As the researcher, I went into the hospital that day to have my first-born child who was 7 weeks early, and I had to detach myself emotionally from the events of that day so that I could focus my thoughts on bringing life into the world. As I watch footage of the events of that day, I always become emotional when I think of the destruction and the number of people who lost their lives due to the

terrorist attacks. Every effort was made to ensure emotional intelligence was utilized during the interview process and to not lead any of the interviewees in their responses. To do this, I allowed participants to speak freely after each question was asked, and I kept notes on any behavioral observations of the participants, while also noting whether any of my own biases were interfering with the process. Because I sought to treat participants with the utmost dignity and respect, I believe that I avoided committing any ethical violations regarding participant autonomy during the interview process.

Methodology

Participant Selection Logic

The participants were NYC police officers who were on duty on 9/11 or assisted in the days that followed. The criterion to participate was that each NYC police officer must have worked at least one shift during or after 9/11 to ensure that the officer experienced the effects of terrorism that took place on 9/11 in downtown Manhattan. I used purposeful snowball sampling to collect participants. Through my relationship with the officers' wives, I am tangentially acquainted with two NYC police officers who served on 9/11 who are retired. One wife is an acquaintance of mine from church, and the other is a mother who I met at the parent-teacher association at my children's school. Both women agreed to assist me in recruiting participants for this study. Each wife was requested to speak with her husband about my study and ask her husband to speak with other NYC police officers who fit the criteria for inclusion in the sample. The officers were asked to provide NYC police officers with a flyer (see Appendix A) that described the study and a phone number that was obtained strictly for the purpose of this research study so that participants could contact me. To extend my participant pool, I created a

post for a few public social media sites asking individuals in my friend group to recommend my study to other individuals they felt fit the study criteria.

The reason for choosing a snowballing sampling technique was because police officers are often reluctant to work with mental health professionals owing to the stigma that surrounds the use of mental health services (Lowell et al., 2018). Officers frequently fear that seeing a mental health professional is a first step to being removed from service. Therefore, police officers are considered a challenging population to reach and word of mouth is the best resource to find such persons who can provide detail-rich information and knowledge that will answer the RQs (Haugen et al., 2017; Schwarzer et al., 2016; Violanti et al., 2019). Individuals who were interested in participating in my study could contact me through the phone number or email on the flyer. Once individuals expressed interest in the study, a demographic questionnaire (see Appendix B) and a consent form were sent to them to review, complete, and forward back to me. Participants were asked a time and date of their preference for the video call that was audio recorded.

According to Alase (2017), Levitt et al. (2017), and Sohn et al. (2017), there is no set rule for the number of participants who should participate in a qualitative study. Alase (2017), Levitt et al. (2017), and Sohn et al. (2017) recommended 5–20 participants as sufficient for a phenomenological qualitative inquiry. In their study, Hennink et al (2017) concluded that code saturation was met in nine interviews and meaning saturation was reached in 16–24 interviews. I conducted interviews until both code and meaning saturation was achieved. Saturation is achieved when no new information can be gleaned from the additional investigation of participants (Hennink et al., 2017; Kindsiko & Poltamäe, 2019; Saunders et al., 2018; van Rijnsouwer, 2018; Vasileiou et al., 2018). If

saturation was reached after 10 interviews, no further interviews were to be conducted. However, if saturation was not reached after 12 interviews, snowball recruiting would continue until saturation was met.

Instrumentation

As the interviewer, I was an instrument for the study. I constructed the RQs, worked with the information presented, described what participants said, and analyzed the information into meaningful pieces (Alase, 2017; Seidman, 2013; Sohn et al., 2017). To comply with the CDC and local and state guidelines and requirements during the COVID-19 pandemic, I used a video call that was audio recorded through an application called Zoom (<https://zoom.us/>) to conduct the interviews. The interviews constituted the instrumentation to collect the data. All sessions were audio recorded to ensure the accuracy of information obtained from participants and for playback purposes as needed to ensure the transcriptions accurately reflect the words of each participant. A Radio Shack CTR-102 cassette recorder was used to record the interviews and participants were made fully aware they would be recorded before they consented to participate.

Semi-structured, open-ended interview questions were used (see Appendix C) to provide guidance and direction in the interview process and to ensure the RQs were answered. Each interview lasted for a minimum of 60 minutes to ensure participants were given an ample amount of time to express themselves, feel heard, and to ensure the phenomenon under investigation was targeted (Alase, 2017; Moustakas, 1994; Sohn et al., 2017). Participants were not led in any way in their answers to the RQs or pressured to answer questions they felt uncomfortable answering. Participants were asked questions and notes were taken on behavioral observations of the participants during the interview

process. Each interview recording was transcribed verbatim after the interview was complete. Data was recorded, transcribed, and stored on a computer during the research study. The computer is password protected to ensure the security of all information and to safeguard the anonymity of participants.

To establish the sufficiency of the data collection instrument to answer the RQs, special care was taken to ensure participants were treated ethically, and the RQs and interview questions elicited rich, thick descriptions to understand participant experiences. Ethical guidelines and scientific steps were taken to frame the questions in a way that NYC police officers could freely discuss their coping practices. To ensure reliability, validity, and respect, the RQs were organized by executing a series of procedures.

Researcher-Developed Instruments

The RQs were developed from a review of seminal research on coping with the 9/11 experience. Qualitative studies and dissertations were reviewed to assist in the development of the questions. NYC police officers have not been given a voice as to how well they managed during and after 9/11. Therefore, the RQs were constructed to draw out the perspectives of NYC police officer participants ability to cope during and after their 9/11 experience. The narrative data from the interview questions attempted to answer the RQs. Semi-structured, open-ended questions were developed to gather a complete understanding of NYC police officers' experiences and to fill the gap in the lack of research on their perspectives.

Participants were selected who had a common experience of working one shift on or after 9/11. The RQs were designed from a review of the literature and address the gap revealed. The researcher developed the interview questions, which were based on the

coping experiences expressed by rescue workers previously investigated in the literature. The research and interview questions were based on the theoretical framework of the TMSC offered by Lazarus and Folkman (1984) and constructed to specifically target the coping practices used for NYC police officers during and after 9/11. One-to-one interviews were used successfully in past studies of qualitative inquiry and were generalized to show external validity in other studies on coping ability. The researcher was careful to craft the RQs for this study based on what was already proven to be reliable and valid in the scientific literature to access coping skills. The use of interviews can establish a dialogue between participants and the researcher in a way that allows for an effective understanding of participants' lived experiences (Seidman, 2013). As participants reflected on the meaning of their experience, they gazed their attention to consider what it means to them to live and cope through 9/11.

Participants were asked to describe their experience with coping including the ways they coped and what worked best during and after 9/11. By asking participants how they describe their coping experience after 9/11, what they felt worked or did not work, and what they would do differently, a complete investigation emerged regarding how participants perceive they are currently coping. To ensure the consistency of participant responses, the interview questions were field- and expert-tested. The use of field and expert testers assisted in the consistency of participant responses and the internal validity of the questions. A retired NYC police detective who worked several shifts on 9/11 agreed to review the interview questions to ensure they were understandable and to see whether the questions would accurately draw out the data needed for the study. The interview questions were field-tested on two individuals to ensure they understood the

questions and to see if any additional verbal prompts were needed to draw out more information from participants. Upon completion of the interview, study participants member- checked their transcripts to ensure the study results are a valid representation of their lived experiences and accurately reflect their ability to cope.

Content validity is an estimate of how much a measure represents the construct being studied (Almanasreh et al., 2019; Bengtsson, 2016). Content validity was established by ensuring all participants were NYC police officers who worked a shift on or during 9/11 and by communicating with NYC police officers to capture and gain a deeper understanding of their perspectives. The interview questions were based on Lazarus and Folkman's TMSC and were developed so that NYC police officers could communicate their perspectives and gain a deeper understanding of their coping perspectives. The researcher bracketed out any preconceived bias and kept a journal for notes throughout the data collection and analysis processes. The researcher is educated in crisis and was interested in learning as much as possible from the study participants.

The research data were triangulated to establish the sufficiency of the data to answer the RQs. The researcher used member checking where participants verified a summary of their transcripts. The data collected for this study were compared to related studies reviewed in the literature for consistency, and field notes were reviewed for additional information. Adhering to the theoretical framework, comparing this study to other scientific research, triangulating the data, member checking, and field notes along with expert and field testing established the sufficiency of the data collection instrument.

Procedures for Recruitment, Participation, and Data Collection

Before conducting the interviews, I obtained Walden University Institutional Review Board (IRB) approval (IRB approval number 10-21-20-0186267). Participants were recruited through a snowball technique by being informed of the study through other NYC police officers. Interested participants contacted me with their interest in participating in the study.

Participants who contacted me because they were interested in participating in the study were emailed a demographics questionnaire and consent form. Participants who agreed to participate in the study were asked to indicate their consent by replying to my email with the words “I consent to participate in the study called New York City Police Officers’ Experiences of 9/11” and to email the demographics questionnaire back to me upon its completion. The consent form encouraged the participant to ask further questions about the study and the interview process before the interview. The researcher informed participants they were free to withdraw from the study at any time. On the day of the interview, the researcher reviewed aspects of informed consent with each participant. After the interview was completed and audio recordings transcribed, participants had an opportunity to review their transcripts to ensure they were an accurate representation of their thoughts and perceptions.

One interview was sufficient to allow me to build rapport with participants and gain their trust. The rationale for choosing one interview was because the RQs requested NYC police officers to reflect on their coping experiences during 9/11 and how they are currently coping. Participants had almost 20 years to reflect on the events of 9/11 and their experiences. Only one interview was needed as a result of participants having had so

many years to reflect on their experiences. One interview allowed the officers to describe their experiences and reflect on the meaning of their experience, as well as allow for the reconstruction of details and further reflection on the meaning of their experiences.

Finding meaning when faced with tragedy is considered a form of active, positive coping (Blackie et al., 2017; Feder et al., 2016; Sollie et al., 2017; Violanti et al., 2018). During the interview process, the researcher looked at the meaning each officer described about how the officer coped during and after the events of 9/11. Each interview was allotted a minimum of 60 minutes, during which time participants were asked semi-structured, open-ended questions. The researcher audio-recorded each session. At the end of the interview, participants were asked if they had anything further they would like to add. Participants were thanked for their time and provided an opportunity to ask questions. The researcher then transcribed recordings verbatim and emailed an encrypted copy of a summary of the transcript to each participant within 7 days. Participants acknowledged whether they felt they were accurately represented in the study. Participants were provided an opportunity by email to provide feedback, ask questions, and validate the information in the transcripts for accuracy. No changes were requested by participants to their transcripts. After nine interviews, no new information was established after coding the interviews, and saturation was assumed.

As participants exited the study, they may have felt triggered by the content of the interview. Each participant was given the telephone number of two therapists or referred to the WTCHP, if they participated in that program, for follow-up. I obtained a signed agreement from two therapists (see Appendices D and E) to provide one or two pro bono mental health sessions to any participant who experienced distress due to their

engagement in the study. The psychological service referrals included coverage in the New York area including NYC, Queens, Nassau, and Suffolk County on Long Island.

A resource page was emailed to the participants after they participated in the study (see Appendix F), so they would have someone to contact if they felt distressed after participation. Any participant who was already involved in the WTCHP was referred to that organization to seek psychological services if they found themselves distressed from participation in my study. The solicitation letter, approval letter, and referral resource for the participating therapists are included in Appendices D, E, and F. All documents related to the study will be kept in a locked safe for the duration of the study and 5 years post study as per Walden University IRB protocol.

Data Analysis Plan

Table 1 demonstrates the alignment of the interview questions to the specific RQs in this study.

Table 1*Alignment of Interview Questions to Research Questions*

Research question	Interview question
1. What coping mechanisms does a small sample of NYC police officers perceive worked best during and after 9/11?	2. Of the ways you coped, which, if any, coping mechanisms worked best during 9/11? Why do you think these worked well? Would you use them again? What, if anything, would you do differently in the future?
2. What coping mechanisms does a small sample of NYC police officers perceive did not work well during and after 9/11?	3. Of the ways you coped, which, if any, coping mechanisms did not work best during 9/11? Why do you think these did not work well? Would you use them again? What, if anything, would you do differently in the future?
	4. Of the ways you coped, which, if any, coping mechanisms worked best after 9/11? Why do you think these worked well? Would you use them again? What, if anything, would you do differently in the future?
	5. Of the ways you coped, which, if any, coping mechanisms did not work best after 9/11? Why do you think these did not work well? Would you use them again? What, if anything, would you do differently in the future?

Data were analyzed through an interpretative lens suggested by Heidegger (2008) where phenomenology is a science that looks at the meaning of being in existence referred to as Dasein. Hermeneutics uses an idiographic approach to understanding personal experience; experience is subjective and unique to the individual. Through the descriptions presented by NYC police officers, the meaning of their ability to cope will be derived and interpreted to understand the lived experience of living through the events of 9/11. Heidegger did not intend for his philosophical tenets to be used to develop a

method for research (Horrigan-Kelly et al., 2016). The addition of a more comprehensive qualitative analysis, as offered by Husserl (1970; 2012) is to ensure rigor in the data analysis process. Creswell and Poth (2018) offered several steps that provide a more comprehensive way of analyzing data. First, the raw data were managed and organized. Second, the data were organized and prepared for analysis by reading through all the data to gain a general sense of the information and to reflect on the meaning being described. Third, the data were read through to formulate meaning by clustering words and to code them into themes in a common language to all participants and to extract meaning. This step included taking segments of sentences and labeling them into categories. Data were coded from information that emerged during the analysis. NVivo 12 was used to input target keywords so that various patterns could be exposed. Fourth, the data were reviewed for developing themes and descriptions based on individual cases and across cases. Results were integrated to provide descriptions of the phenomenon. The fifth step incorporated how the themes were represented in the narratives, and a detailed discussion of themes, subthemes, and quotes was documented. During the final step, interpretations and meaning from the data were made to understand what was learned about participants' experiences (Creswell & Poth, 2018).

Discrepant cases are participant explanations for the RQs that do not fit into any of the patterns that are established by the majority of cases presented (Creswell & Poth, 2018). Discrepant cases are also considered to be deviant cases within the sample. Any case within the study that was an exception or different from the rest of the sample was documented, analyzed, and evaluated to see whether any additional information could be

obtained about the meaning of the experience. Discrepant cases were analyzed for other possible explanations and any findings were documented.

Issues of Trustworthiness

An essential aspect of any research design is trustworthiness; trustworthiness implies validity and creditability (Creswell & Poth, 2018; Levitt et al., 2017; Mohajan, 2018). Having trustworthiness, validity, and creditability made the study believable and repeatable to other researchers (Creswell & Poth, 2018; Levitt et al., 2017). Validity is achieved when measures utilized are appropriate for the concept being studied (Creswell & Poth, 2018). More than one method was used to collect data including interviews, field notes, and member checks. Therefore, the triangulation of the data ensured the validity and credibility of the data. The researcher is well-trained in the philosophical beliefs of qualitative inquiry and believes in the value of this research. Information contained in this study was cross-checked with archival research related to the key concepts to ensure content and construct validity. Additionally, the interview incorporated a structure that assisted with the validity of the research because it was presented in a controlled manner for each participant. Transcriptions of audio recordings were verbatim; transcripts were member-checked by participants to ensure internal consistency regarding accuracy of what was verbally said by participants.

The use of several participants who had similar experiences allowed for the connection of experiences among participants to be verified. Having multiple sources of data and having multiple participants improved the validity of the study (Mohajan, 2018). The researcher ensured participant accounts were precisely transcribed; participants were asked to review a summary of their transcripts for accuracy to ensure transcripts

accurately reflected the experiences of NYC police officers and their ability to cope during and after 9/11, which further solidified the validity and credibility of the study.

Reliability was ensured by collecting data rigorously and consistently. Another researcher would be able to conduct the same research study and achieve similar results under the same conditions and with the same participant sample (Creswell & Poth, 2018). To improve the reliability of this study, careful consideration was given to outlining and documenting all procedures performed in the study in a personal journal. A personal journal ensured each interview was conducted in the same way with each participant (Alase, 2017; Mohajan, 2018; Levitt et al., 2017).

External validity is the ability to transfer and apply the findings found to a larger population (Creswell & Poth, 2018). Since qualitative researchers are more concerned with the meaning of a phenomenon to the individual, they are less concerned with the concept of external validity and the transferability of the findings to larger populations (Creswell & Poth, 2018; Sohn et al., 2017). What can be transferred is the theory used in the study. The TMSC was used with other populations when researchers were interested in exploring an individual's ability to cope with stressful situations, as documented in Chapter 2 (Lazarus & Folkman, 1984).

Having dependability and confirmability in a study is necessary to verify the stability of the findings over time, and to ensure that concepts have been derived in a scientific manner that has been confirmed by others (Bansal et al., 2018; Levitt et al., 2017). The dependability of a research study is based on having an external audit where another researcher, unrelated to the research, reviews the information contained in the study including the data collected, data analysis process, results of the investigation, and

conclusion (Bansal et al., 2018; Creswell & Poth, 2018; Levitt et al., 2017). The confirmability of a study has to do with the degree to which others can corroborate the results; confirmability also includes an external auditing process and enhances the dependability and conformability in the research (Creswell & Poth, 2018; Mohajan, 2018). To ensure the dependability and confirmability of the study, the researcher checked and re-checked all information throughout the study and requested that participants review all information presented for accuracy.

Ethical Procedures

Approval to conduct the study from Walden University's IRB was requested before the collection of any data (IRB approval number 10-21-20-0186267). Every effort was made possible throughout the study to ensure all participants were treated with respect, dignity, justice, and beneficence (U.S. Department of Health & Human Services, 1979). All information provided to the researcher by participants was secured for confidentiality purposes in a locked safe for 5 years, to which only the researcher has the combination, as suggested by Seidman (2013). Data will be retained for 5 years per Walden University IRB protocol. No deception was used at any point during the research. I am up to date on my human research training, and my certificate number is 2844425.

Before the interview process, all participants were informed of the study's purpose and procedures. Participants were notified that at any point during the interview process or review of the summary of their transcripts they could make changes, not answer, end, or withdraw from the study. All participants were presented with an informed consent form. Participants were asked to review the consent form to ensure understanding and comprehension of the research process before giving consent to

participate in the study. Participants were provided an opportunity to ask questions. At the end of each interview, participants were again asked whether they had any questions or anything further to add. Participants were also provided with the contact information of the researcher to communicate if needed. Participants were free to withdraw from the study at any time and were fully informed of this fact. After participants completed their interview, they were emailed a referral page as a resource to contact a mental health professional for any residual feelings from participating in the study. For purposes of confidentiality, each participant was assigned a number upon obtaining consent, and all information related to that participant was identified with that number for confidentiality purposes. The name of participants, the assigned number, consent, and the demographics questionnaire were kept in a logbook that is secured in a locked safe to which only I have access. All data related to this study will be held for 5 years per Walden University IRB protocol, at which point all information will be shredded and destroyed by me. Any computer information is secured with a password that only I possess, and after completion of the study, digital files will be placed on a flash drive also secured in the locked safe. After 5 years, I will destroy all digital recordings, paper documents, and the flash drive.

Summary

This chapter presented the methodology for the study, including the research design, interview questions, definitions of the central phenomenon, identification of the research tradition, and the rationale for choosing the tradition. My role as the researcher is described, including the relationship with participants, my biases, and any ethical concerns. This chapter also contained a description of the population to be studied, the

justification for the sample, the criterion for participant selection, the number of participants, the procedure for participant identification, recruitment, and a description of the relationship between sample size and point of saturation. The chapter concluded with a discussion of issues of trustworthiness, credibility, transferability, dependability, confirmability, and reliability. Chapter 4 will include how data were collected and analyzed. Issues of trustworthiness will also be addressed. Chapter 4 will also include a results and summary section.

Chapter 4: Results

The purpose of this hermeneutic phenomenological study was to explore NYC police officers' understanding and descriptions of coping strategies used during and after 9/11. Understanding how NYC police officers coped while fearing for their own life and safety may lead to a better understanding of how coping strategies can lead to adaptive or maladaptive functioning, as well as resilient and vulnerable characteristics involved. Existing research has used mixed samples that have included some police, while this research includes only police officers. This study helps fill the literature gap by providing a deeper understanding of the lived experiences of a small sample of NYC police officers who responded to the attacks on the WTC towers on 9/11. Participants described what they felt worked best in coping with and after a terrorist attack. The two RQs were (a) What coping mechanisms do a small sample of NYC police officers perceive worked best during and after 9/11? and (b) What coping mechanisms do a small sample of NYC police officers perceive did not work well during and after 9/11? In this chapter, I review participants' demographics, the setting, the data collection process, and data analysis. The chapter also includes evidence of trustworthiness, the results, and a summary section.

Setting

I collected data during the COVID-19 pandemic. Participant interviews were changed from an in-person interview format to Zoom conferencing to stay within local and state regulations. Participants selected a convenient time for the interview, and I scheduled the call. On the day of the scheduled interview, participants received an invitation email with a link to click to participate in a Zoom video conference call at the scheduled time.

Demographics

The study sample included nine NYC police officers. All participants were White, retired, between the ages of 49 and 65, and employed by the NYPD on 9/11. The education level of participants ranged from an associate degree to some college. Six participants continued to work after they retired from the NYPD and, at the time of the study, were retired from the NYPD and in various jobs that included special insurance investigator, detective, public housing, and deputy sheriff. One completed postsecondary education and was employed as a nurse at the time of the study. All participants were married to the same person they were married to on 9/11, except for one who was divorced and another who was divorced and remarried. Years employed by the NYPD ranged from 19 to 30 years, and participants' ranks ranged from police officer to lieutenant.

Participants' age on 9/11 ranged from 25 to 46, and the time they worked in the recovery and cleanup effort of 9/11 ranged from 2 weeks to 10 months. All participants had health insurance and were enrolled in the WTCHP. I assigned each participant a number depending on when they entered the study. All personal information was omitted to ensure confidentiality for each participant.

Data Collection

I made no changes to any documents based on the review of the expert tester. The interview questions were tested with two field testers, and two additional verbal prompts were added to the interview questions with IRB approval. The additional verbal prompts included "Can you tell me more?" and "What was that like for you?" The addition of these two questions assisted in drawing out participant answers.

Walden University's IRB approved the data collection procedures on October 21, 2020 (10-21-20-0186267). I constructed the interview questions using a cognitive-behavioral theory for coping based on Lazarus and Folkman's (1984) TMSC. Lazarus and Folkman looked at challenges with death and threat to life and how individuals find ways to cope through the interactions they have with their environment through a process of cycling through primary and secondary appraisals. Calhoun and Tedeschi's (2004) PTG model was also used to construct the interview questions centering on understanding the growth that can be experienced after a traumatic event. The interview questions were designed to draw out active and productive coping when faced with negative life experiences and in the reconstruction of the participant's worldviews. Both these models support my analysis of the interview questions and the framework of the analysis.

Interviews took place consecutively over 3 months within a 1-year time frame. Prior to the study's data collection, I field-tested the interview questions with one field expert and two field testers to determine whether the interview questions were adequate to address the RQs and to ensure clarity. No additional questions were added to the interview after the test administration with the field expert. However, the two verbal prompts previously noted were added after the interviews with field testers to draw out additional information from participants.

The interview questions encouraged participants to reflect on the activities they engaged in during and after 9/11. During the interview, participants answered questions that required them to discuss the cognitive appraisals they made and their perceptions of their ability to cope during those periods. RQ1 targeted the understanding of positive coping mechanisms experienced during and after a terrorist attack that may foster or

promote resilience and PTG. RQ2 focused on the distress of the situation and participant perceptions of what did not work well in their ability to cope during and after 9/11.

I interviewed a total of nine male NYC police officers for this study and collected data using semi-structured, open-ended questions. Using this format allowed each participant to use their own words to describe their understanding, experience, and interpretation of the phenomenon of living through a terrorist attack. Each participant provided me with a date to conduct a Zoom conference interview, which I audio-recorded with the participant's consent. All interviews were conducted in the same manner through Zoom. One variation that occurred during data collection was in the way participants chose to utilize technology. Seven participants chose to use a laptop computer for the interview, while two participants used their cell phones.

As Zoom conferencing was used to conduct the interviews, each interview took place in a room of the participant's choosing while I was in my home office. The interviews varied in time with the shortest being 24 minutes and the longest being 49 minutes in duration. Data were recorded with a Radio Shack CTR-121 cassette recorder with participant approval. During several of the interviews, minor distractions were noted, such as someone walking in the room or a phone ringing. There was technical difficulty that included sound problems with the audio equipment on two separate occasions that were remedied immediately. On two other occasions, participants requested for one of the interview questions to be repeated. However, I noted the distractions presented were minimal and unlikely to influence participant responses. Also, I am unaware of any personal issues that may have influenced participants during their

interviews. On two occasions, I assisted participants in filling out their demographic questionnaire as these participants were unable to scan documents into their computer.

One of the most challenging circumstances encountered during data collection was dealing with the COVID-19 pandemic. One potential participant was unable to be interviewed because he contracted COVID, and another participant, after he confirmed his transcript, was hospitalized with COVID and was on a respirator on the day of writing this chapter, so no further correspondence with him was possible. Some of the participants required assistance from me to sign-in on the computer for their Zoom interview. Lastly, there were two occasions during the interview where technical difficulties were experienced during the interview as discussed earlier. These issues were immediately rectified, and the interview continued as scheduled. No other unusual circumstances were encountered in the data collection process.

Prior to asking the interview questions, I reviewed the consent form with each participant and had them acknowledge their understanding that they would be audio-recorded with a cassette recorder. Observational notes were taken during each interview. I transcribed all the interviews, and within a week, I emailed the transcript to each participant. Participants were asked to review their transcript for accuracy and email me whether or not the transcript was a good representation of their responses to the interview questions. Participants were also informed that they were free, at that point, to make any changes or add anything further to their transcript and that if they had edits, to email those to me. All participants agreed to their transcript in the original form, and no changes were requested.

I took detailed notes about what happened during and after each interview. I noted the environment and setting, participant body language, affect, mood, and intonation while discussing subjective material. Personal reflections of mine were also noted during each interview. Participants were asked a total of eight questions that included

- How would you describe your experiences of coping during 9/11?
- Of the ways you coped, which, if any, do you perceive to have worked best during 9/11? Would you use them again?
- Of the ways you coped, which, if any, do you perceive did not work well during 9/11? What, if anything, would you do differently in the future?
- How would you describe your experiences of coping after 9/11?
- Which of the ways you coped, if any, did not work well after 9/11? What, if anything, would you do differently in the future?
- Which of the ways you coped, if any, worked best after 9/11? Why do you think this worked well for you?
- Is there anything that I did not ask that you feel I should have?
- Is there anything additional you would like to add?

Upon completion of the interview, I explained to each participant that they would be provided with a referral list for two therapists who covered Suffolk County, Nassau County, and NYC who they could call at any time after the interview for a pro bono evaluation session if needed. Each participant stated that they were part of the WTCHP; I also advised them to seek counsel from within that program. Lastly, participants were provided with several hotline numbers to call if they needed immediate contact with

someone. A few of the participants mentioned that they were currently in counseling and that they could call their therapist at any time.

Data Analysis

In this study, I looked at the interaction between the subjective experience and objective environment through the perspective of NYC police officers who experienced 9/11. The individualist perspective of police officers was embedded in the data collected during each participant interview and transcription of that data. I used an idiographic approach to understand the unique coping experiences of participants during and after 9/11. Participant perspectives were interpreted to understand the lived experience of a small sample of police officers, focusing on their how they believed they coped during and after 9/11. NVivo, a QSR International computer-assisted qualitative analysis software program, was used for the content analysis of each interview transcript.

To ensure rigor and provide a comprehensive analysis of the data presented, I followed Creswell and Poth's (2018) data analysis steps and Saldaña's (2015) first and second cycling methods for coding data. Both methods were used in the analysis of the data collected for this study and provide trustworthiness to the study. Initially, I organized the raw data and prepared it for analysis. I then transcribed the data and listened to the interviews a second time to compare with the original transcription for accuracy purposes. The raw data were then uploaded into NVivo for further review. Each transcript was coded by taking participant answers to interview questions and sorting them into categories that divided the RQs. This provided me with an understanding of the data's organization and several opportunities to be exposed to the material. A review of the data allowed me to understand the events of 9/11 and what it was like to live through

the days that followed in the cleanup efforts. I reflected on the meaning portrayed by each participant by separating out my personal experiences using a journal.

I reviewed the data for themes and patterns that emerged. Data were coded by taking segments of each sentence within the transcript and clustering words together to form category codes. Codes were then placed into meaningful units called themes. NVivo was used to assist in organizing the codes and placing them in categories. The themes that emerged from the data were compared to individual cases and across case data. I then reviewed the data again, looking at the results and integrating the results so that a description of the phenomenon's experience could be described (see Creswell & Poth, 2018). A second review of the coded data was incorporated to look for themes related to the coping mechanisms that worked best or did not work well during and after 9/11. Positive and negative coping mechanisms were then analyzed and related to Lazarus and Folkman's (1984) TSMC using primary and secondary appraisals. Pattern codes, similarities, and outliers were examined to draw additional information about the phenomenon being studied.

I documented and evaluated discrepant cases where participants' answers to the interview questions did not fit into the other cases' patterns. I looked for any additional information that could be obtained from looking at these outlier cases. Upon analysis and evaluation, there were four instances of participant outliers that included having prolonged exposure, keeping artifacts, having a sibling on the NYPD during and after 9/11, and having no support at home. One participant was present before the planes hit, when the planes hit, and after the planes hit. Another discrepant case was Participant 2, who played the bugle at the funerals of all the police officers and fire department

personnel who perished during 9/11. This prolonged exposure to dealing with the deceased's families and the constant playing of Taps made his experience unique and different compared to the other participants. Dealing with families while they grieved the loss of their family member, hearing the eulogies and the personal lifestyle of those who perished, and constantly playing Taps increased the negative exposure he experienced with the events of 9/11. During his interview, this participant became emotional and admitted that he should have sought mental health counseling following his involvement in 9/11.

Some participants mentioned or showed me artifacts related to 9/11 or the site where they worked. For example, Participant 5 showed me several newspapers that he collected in 2001 that publicized the events of 9/11, while Participant 2 mentioned the importance of some pictures he took on 9/11. Yet another participant said he took a piece of cement from the pile to keep as a memento. Keeping something from that time was important to these officers.

A few of the participants had family members either on the NYPD or NYFD and they reported social support from them was most beneficial. Participant 8 said that his brother, who was already vested in the NYPD 10 years at the time of 9/11, provided him with the best support. He stated that he spoke with his brother daily, and they shared experiences of 9/11. Participant 8 asserted that talking to his brother, who was having similar experiences as him, was the most beneficial in his coping both during and after 9/11, including into the present day. Although he did not realize it at the time, this connection helped him feel supported daily as he spoke to his brother every day. Participant 4 mentioned that he relied heavily on his family and friends, and he said he

had several family members who worked for the NYC police and fire department.

However, it is unknown if one of the family members was a sibling or how frequently he spoke with these family members during 9/11.

Participant 3 was the only participant who had no family support at home during 9/11 but mentioned that he spoke with his coworkers daily, seeking information and finding comfort because they were having similar experiences. Lastly, Participant 9 had exposures to the events of 9/11 that were unique as he was present during several different periods. He was present in downtown Manhattan and witnessed when the plane hit the first tower, and he was in the World Trade Center One lobby before it collapsed and witnessed individuals jumping from the building. Lastly, he worked on the pile and morgue for several weeks after 9/11 in the recovery efforts. No other NYC police officer interviewed for this study was present during all three of those periods in time.

Evidence of Trustworthiness

Trustworthiness is an essential aspect of any research design because it implies that the techniques and designs used in the study are valid and credible. Validity and credibility lead to the study being believable and repeatable by other researchers (Creswell & Poth, 2018; Levitt et al., 2017; Mohajan, 2018). I ensured that participant accounts were accurately transcribed. To safeguard the content and construct validity, information revealed in this study was cross-checked with archival research that related to critical concepts in the appraisal process outlined by Lazarus and Folkman regarding positive and negative coping. As outlined in 2004 by Calhoun and Tedeschi, PTG was also included as a theme in the data. Comparisons were made between what worked best during 9/11 and what worked best after 9/11. Comparisons were also made between what

was least effective during and after 9/11. Themes were similar to those previously reported in the literature adding to the transferability of the results. Therefore, measures utilized were deemed appropriate for studying coping and valid in the current research study (Creswell & Poth, 2018).

The data were triangulated to ensure validity and credibility by correlating the interviews, fieldnotes, and member checks. Interviews and field notes were checked for any additional information gleaned that pertained to the study's findings. Participants were asked to review their transcripts for accuracy and reflected their experiences and ability to cope during and after 9/11 adding to the dependability of the data. Having these member checks further improved the validity and credibility of the study.

To ensure validity, information was presented to the participants in a controlled manner and created the structure for each interview. Controlling what was said, the questions that were asked, and my professional presentation of the RQs ensured the accuracy of what was measured and added to the dependability and confirmability of the results. Validity was further improved by having multiple participants and multiple sources of data (Mohajan, 2018).

Lastly, I kept a journal of thoughts and feelings during participant interviews. This step was taken to assure that any personal bias did not influence the data collected. The personal journal helped keep my experiences out of the data. All personal beliefs and biases during each interview were noted. This was done to ensure that they did not interfere with the credibility of the study.

Results

The information obtained and the findings of the current study only apply to NYC police officers who experienced the terrorist attacks of 9/11. Therefore, results from this study are not generalizable to other populations. The RQs were used to organize the analysis and explain the lived experience of living through 9/11 by NYC police officers.

The RQs were as follows:

RQ1. What coping mechanisms do a small sample of NYC police officers perceive worked best during and after 9/11?

RQ2. What coping mechanisms do a small sample of NYC police officers perceive did not work well during and after 9/11?

Due to the inherently distressing nature of the events of 9/11, the interviews included questions that were likely to elicit an emotional response. This section provides an overview of how participants responded to the questions and what emerged during the interviews. Moreover, the way participants responded to the questions made it clear that the interview was important to them. Participants appeared motivated to provide the best possible answers to the questions that were asked of them. During the interviews, each participant took their time to consider questions and thoughtfully offered a response. Many of the participants were observed looking up during this contemplation period, carefully thinking about their answers before responding. In a few instances, participants became choked up and tearful while discussing their answers. During these occasions, I provided all participants time to gain their composure and provide a response. Most participant responses were similar and consistent when compared to each other.

However, a few outliers were previously noted and will be further addressed in the discussion below.

The following section summarizes themes discussed by NYC police officers regarding their ability to cope during and after the events of 9/11. NYC police officers were specifically asked what they perceived worked best or was least effective in their ability to cope both during and after 9/11. Five overall categories were identified: problem-focused coping, problem-emotion-focused coping, emotion-focused coping, avoidance, and no issue (see Table 2). Participant responses were categorized based on their responses to the interview questions.

Table 2

Participants' Responses to Most/Least Effective Coping During/After 9/11

Description	Overall # & %	MEC During # & %	MEC After # & %	LEC During # & %	LEC After # & %
Problem Focused Coping					
Focus on work	9(100%)	6(67%)	2(22%)	3(33%)	
Talk with others	9(100%)	5(56%)	2(22%)	3(33%)	
Sought help	7(78%)	3(33%)	6(67%)	2(22%)	2(22%)
Focus on others	5(56%)	5(56%)	2(22%)	2(22%)	2(22%)
Experience	5(56%)	4(44%)	2(22%)		
Busy/Not Staying Busy	4(44%)	2(22%)	3(33%)	2(22%)	1(11%)
Exercise	3(33%)		3(33%)		
Stigma	3(33%)			1(11%)	3(33%)
Self Sooth	1(11%)		1(11%)		
Emotion/Problem Focused					
Faith	6(67%)	4(44%)	4(44%)		
Drink	6(67%)	2(22%)	2(22%)	1(11%)	2(22%)
Disorganized Environment	6(67%)	2(22%)		5(56%)	
Long Hours	5(55%)		2(22%)	4(44%)	2(22%)

Description	Overall # & %	MEC During # & %	MEC After # & %	LEC During # & %	LEC After # & %
Dealing with Families	4(44%)			2(22%)	5(56%)
Deal with Body Parts	4(44%)			2(22%)	2(22%)
Hypervigilance	3(33%)		1(11%)	2(22%)	2(22%)
Lack of Programs	2(22%)				2(22%)
Write	1(11%)	1(11%)	1(11%)	1(11%)	
Emotion-Focused Coping					
Health fears	6(67%)	1(11%)		2(22%)	4(44%)
Anger	5(56%)	1(11%)		4(44%)	3(33%)
No support	4(44%)			2(22%)	2(22%)
Anxiety	3(33%)			2(22%)	2(22%)
Cry	3(33%)	1(11%)		1(11%)	1(11%)
Gratitude	3(33%)	1(11%)	1(11%)		
Frustration	3(33%)			1(11%)	2(22%)
Inability to Control Emotions	3(33%)				3(33%)
Flashbacks	2(22%)			1(11%)	1(11%)
Humor	2(22%)	1(11%)	1(11%)		
Panic	2(22%)			1(11%)	
Disappointment	2(22%)			2(22%)	
Resentment	1(11%)				1(11%)
Distrust of Others	1(11%)				1(11%)
Depression	1(11%)				1(11%)
Read	1(11%)		1(11%)		
Long Term Exposure	1(11%)				1(11%)
No Issue	7(78%)	4(44%)	4(44%)	4(44%)	4(44%)
Avoidance	6(67%)	4(44%)	5(56%)	3(33%)	3(33%)

Note. MEC = Most effective coping, LEC = Least effective coping, # = Number of participants affected, % = Percentage of participants affected

When discussing 9/11, all the participants spoke of the surreal nature of the environment where they worked and the zeitgeist of the time. One participant described downtown NYC as a “war zone.” While other participants referred to it as “the largest crime scene ever,” “working at a construction site or a dump,” or it “looked like Beirut.” One police officer referred to individuals walking away from downtown NYC as looking like a scene from “the dawn of the dead” as he approached the WTC. He said people were covered in dust and their clothes tattered as they walked up the FDR drive to get out of the city. He verbalized that these individuals looked like “walking zombies.”

The following passages describe the different themes revealed from the responses given by participants to the interview questions. The descriptions below are five themes: problem-focused coping, emotion/problem-focused coping, emotion-focused coping, no issue, and avoidance. These themes will be described in detail, and these will be followed by the perception of NYC police officers of the most effective and least effective strategies used during and after 9/11.

Coping Mechanisms

Emotion- and problem-focused coping were both utilized by NYC police officers at different times depending on the context of their experience and at times they were used simultaneously. Problem-focused coping aims to resolve the stressful event or alter the source of stress through problem-solving strategies (Lazarus & Folkman, 1984). Problem-focused coping can include taking control of the situation or any attempt to remove the source that is causing the stress. Seeking information and/or providing assistance in handling the situation, removing oneself from the stressful situation, or seeking social support are all forms of problem-focused coping (Lazarus & Folkman,

1984). Problem-focused coping has been associated with long-term positive coping in the literature (Arble & Arnetz, 2017; Bowler et al., 2016; Dasaro et al., 2017; Feder et al., 2016; McCarthy & Lawrence, 2016; Patterson, 2016; Regehr et al., 2019; Schwarzer et al., 2016).

Emotion-focused coping is a cognitive process directed at lessening emotional stress and can include several positive and negative coping strategies. This type of coping can produce an immediate response and can have short and long-term effects on the individual. Emotion-focused coping can include avoidance, suppressing emotion, distancing, minimizing, distraction, selective attention, wrestling between positive values and the negative event, and expressing emotions such as releasing pent-up anger or sadness, acting out, or crying (Lazarus & Folkman, 1984). The use of mindfulness and relaxation methods, such as breathing techniques, is also associated with emotion-focused coping because these coping mechanisms were aimed at regulating emotional states (Lazarus & Folkman, 1984). Therefore, emotion-focused coping can be viewed as a positive or negative coping mechanism depending on what individuals are directing their cognitive energy toward. In addition, emotion-focused coping techniques can lead toward future negative or positive coping behavior.

At times both strategies were used simultaneously. The use of one or both strategies depended on where the NYC police officer was in relation to his environment, the appraisal process, and the resources available to the participant as these dictated the coping strategy that was utilized. However, because emotion-focused and problem-focused coping are not mutually exclusive, it was difficult to tease out when participants were using problem or emotion-focused coping, or both. For example, seeking out

information is a problem-focused coping technique, but police officers also found that it provided them emotional support when talking with fellow officers. These participants said it was emotionally comforting to know others were having similar experiences.

Another example was the theme of faith, which is normally seen as an emotion-focused coping technique because it allows people to attend to concepts like hope and other religious beliefs selectively, but it can also be viewed as a problem-focused coping strategy when it is used to alter the source of stress when environmental conditions must be endured. As NYC police officers reflected on their ability to cope both during and after 9/11, emotion-focused and problem-focused coping were used. Depending on the appraisal's that NYC police officers made, their environment at the time, and the resources available to them, both problem and emotion-focused coping strategies were used, and sometimes simultaneously. This category described themes that consider problem-focused coping, emotion/problem-focused coping, and emotion-focused coping as they applied to participant responses. This category also includes items that could be considered neutral but still considered a theme because they were spoken about frequently by participants. For example, a discussion about the lack of available programs for NYC police officers was placed in this category.

Coping Response: No Issue

Initially, most of the NYC police officers in the sample felt they could cope during 9/11 without needing professional assistance. Upon making an initial appraisal (primary) of their situation and considering the danger surrounding them in their environment, these men reported coping well, most with no problem. Upon making secondary appraisals of their situation, these NYC police officers continued to feel they

required no professional assistance in their ability to cope. Therefore, the title “*No Issue*” was given its own category. Participant responders who felt they were able to cope with no assistance were coded to this category. Participants who responded not needing assistance were noted as having “No issue” (see Table 3).

Coping Response: Avoidance

Avoidance is usually viewed as an emotion-focused strategy, but it was looked at separately because the participant sample so frequently endorsed it. Most of the participants in the sample did not realize they were using some form of avoidance. However, they appear to have utilized avoidance behavior during and after 9/11. Avoidance included the changes in police officers’ behavior that enable them to avoid thinking or feeling about 9/11. Some of the activity’s participants avoided including any engagement with anything 9/11 related. For example, not talking about 9/11, avoiding reminders, avoiding certain songs, not attending anniversaries, and avoiding the television on anniversaries. These activities continue to be reported and avoided by participants years later. Some participants also mentioned avoiding the day and taking off work on the anniversary every year.

Most Effective Coping Strategies

Table 3 represents NYC police officers’ responses to the most effective coping mechanisms used during and after 9/11.

Table 3*Participants' Responses to Most Effective Coping During/After 9/11*

Description	Overall # & %	MEC During # & %	MEC After # & %
Problem Focused Coping			
Focus on work	9(100%)	6(67%)	2(22%)
Talk with others	9(100%)	5(56%)	2(22%)
Sought help	7(78%)	3(33%)	6(67%)
Focus on others	5(56%)	5(56%)	2(22%)
Experience	5(56%)	4(44%)	2(22%)
Busy/Not Staying Busy	4(44%)	2(22%)	3(33%)
Exercise	3(33%)		3(33%)
Self Sooth	1(11%)		1(11%)
Emotion/Problem Focused			
Faith	6(67%)	4(44%)	4(44%)
Drink	6(67%)	2(22%)	2(22%)
Long Hours	5(55%)		2(22%)
Write	1(11%)	1(11%)	1(11%)
Emotion Focused Coping			
Health Fears	6(67%)	1(11%)	
Anger	5(56%)	1(11%)	
Cry	3(33%)	1(11%)	
Gratitude	3(33%)	1(11%)	1(11%)
Humor	2(22%)	1(11%)	1(11%)
Read	1(11%)		1(11%)
No Issue	7(78%)	4(44%)	4(44%)
Avoidance	6(67%)	4(44%)	5(56%)

Note. MEC = Most effective coping, # = Number of participants affected, % = Percentage of participants affected

Problem-Focused Coping Strategies

Focusing on Work. All NYC police officers in the sample (100%, $n = 9$) said that at some point, focusing on work assisted them in their ability to cope during and after 9/11. Many referred to their focus on work as being on auto pilot. They said they had a job to do, and they were there to do it. Focus on work was not only considered their job but their mission. The most frequently discussed theme by 67% ($n = 6$) of the participant sample reported focus on work as the most effective coping practice during 9/11.

Participant 2 reported that he lost track of time by focusing on his work as he canvased the area around the WTC. Participant 3 reported staying busy during that time, and after 2 weeks at Ground Zero, he was sent to the Fresh Kills landfills for 8 months, and that he worked 4 days a week for 12-hour days. Participant 6 said there was so much going on and that he went into survival mode and blocked things out. His mindset was, “let’s get down there and do some work.” He said he worked at the Staten Island landfill and that he and his partner were very busy, and “being busy is what helped us cope, the only way I can say is how we coped with it, by naturally being involved, being assigned to duties and just working.” When asked what worked best in his ability to cope, Participant 7 said five times during his interview that he was just doing his job and that he was not coping in any way. He said, “we were reverting back to what we were there to do, just doing our job.” When he was asked why he felt this worked well, he responded, “I think if you focus on the mission and the duty, you just plug along.” Participant 8 reported that he clearly remembers the mentality of everyone during that time. He said he was doing what was needed to be done and just doing what he was supposed to do. He felt there was a mission in front of him when he stated, “there was a job in front of you that needed to get

done, and that was it.” He went further to say, “my coping at that point was just work, so I really didn’t have an outlet.” Participant 9 reported that working on 9/11 was horrible. He said he did not have time to reflect on what was going on and was in work mode and just doing a job he was trained to do. He portrayed that day as he would any other day but realized that he was experiencing something historic at the same time. When he was asked why he felt this worked best, he responded

You would have to because you still must concentrate on your daily job and what you’re doing and what you are responding to. You kind of tuck it away (feelings) and go on focusing on your daily job and what you are doing. Otherwise, you get hurt.

After 9/11, 22% ($n = 2$) of the participants reported that focusing on the job assisted them in their ability to cope after 9/11. Participant 7 spoke about the duty and responsibility that police officers and firemen had when he said, “anybody police, firemen, they just do what they have to do at the time. Maybe they think about it afterwards.” Participant 8 maintained he was doing so much that he did not have time to rest, think, or reflect much about what was going on at that time. He said, “It was more of just a response reaction, this is what I have to do, so it was something that was done.”

Talking With Others. Talking with others was another most frequently reported coping mechanism reported by participants that was most beneficial during and after 9/11. Every participant in the sample (100%, $n = 9$) reported that speaking with others during 9/11 was the most important thing they did to cope. Participants spoke specifically about coping with their experiences by talking about what was going on with coworkers and how talking peer-to-peer was their best resource. Many felt speaking with co-workers

provided them with the greatest support because of the shared feelings and experiences. Although Participant 7 did not endorse talking with others as beneficial initially, he did describe later in the interview that not discussing his feelings was not a good way to cope. When Participant 7 was asked what he perceived to have not worked well during 9/11, he responded, “Maybe I should have been discussing what was going on with me with the guys.”

Fifty-six percent of the sample ($n = 5$) felt speaking with fellow officers was the best resource because they felt that talking to someone who had similar experiences made them feel the most supported and understood. Participant 1 said that he always tells his guys the best thing to do is talk about what is going on, and he said that his team did during 9/11. Participant 3 stated that he had many friends within the department who had the same experiences he did. He said that talking among themselves as they were doing their job of recovering people's remains was therapeutic. Contrary to the other police officers who had support at home, Participant 3 did not. He reported that his wife refused to listen to him about anything related to 9/11 when he arrived home from his shift during that time. He said he utilized his coworkers to talk things over and that he gained support from them. He stated,

Because I was talking to not just a small group, I was talking to a large group of police officers. I was probably talking to over 30 people on different occasions within the department who shared similar experiences as me, and we talked about it while we were working.

Participant 3 further expressed gratitude to his partners he spoke with during and after 9/11 and found it helpful to know that they had similar feelings regarding their experiences. Finally, when discussing talking to fellow workers, Participant 8 said:

Again, it was someone that [sic] could relate to what I was doing. You couldn't really go to like family or friends; you could, but they just wouldn't understand it. No matter how much you tried to describe it to them, they just wouldn't get the magnitude of what you had seen.

Participant 4 felt he owed his ability to cope during 9/11 to his co-workers, family, and friends. He said that he is not the type of person to hold things in and that some of his family and friends worked for NYC either as police officers' or firemen and having family within the department was helpful. Further, he felt that he has a great group of friends and would have no problem reaching out for help if he needed it. He stated, "I know that if they ever saw anything wrong with me, they would absolutely say 'What is going on with you?'" He went further to say,

I credit my family and friends and the people I work with. I work with a great group of people. . . . And you talked about it, you talked about it with people you were working with, and if somebody seemed like they were bothered by it, you talked. For the most part, [in] the unit I was in at the time, we all got along great, and we all, everybody spoke to each other. If someone [wa]s feeling down, it's "Hey you, what's going on with you? You talk about it.

Contrary to the other participants in the study, Participant 5 was young and single when the WTC was attacked, and he said his parents lived up the street from him. After work, he would have dinner with his mother and father, and they would talk about his

day. He felt his parents were concerned about his emotional well-being during 9/11 and that their concern helped him process what he was experiencing. When talking about this time with his parents, he stated, “I guess one of the forms of therapy for me was just talking about it.”

Many participants spoke about how they would talk to their wives when returning home from working long shifts. Participant 2 said he spoke to his co-workers and wife to process his feelings but said that he did not go into detail with his wife as he did with his co-workers. He stated,

I guess probably the best thing was my wife was very understanding. I had a lot of friends that were down there. I found that when I was with other guys that experienced it and we could talk freely. I think that's the best therapy anybody can possibly get. One on one is good but being there with other guys that you can talk, and vent, and share, and you know, cry together. I mean, those were the one's. . . . I know that as I talked to my wife, it allowed things to come out that were suppressed and not a lot of things, but you know I didn't go into a lot of detail, but there were things I was able to get out.

Participant 7 and Participant 9 did not directly endorse talking to others as being beneficial during 9/11. However, Participant 7 expressed that not talking about his feelings did not work well for him during 9/11. While Participant 9 considered talking to others about his experiences as a detriment because he suffered anxiety and PTSD. He reported that talking about 9/11 gave him flashbacks and anxiety.

After 9/11, two of the nine participants (22%) reported talking to co-workers, friends, family, or a therapist as being helpful to cope after 9/11. However, a few of the

participants specified that talking to their wives when they returned home from work was beneficial. Some police officers reported that even though retired they continue to speak with coworkers they worked with on the NYPD today.

Participant 1 said that he spoke to his coworkers and that “we still do to this day,” He kept good communications with the guys he worked with, which aids him today. Participant 2 also said talking with guys he worked with assists him today and that he has a neighbor down the street that he is very close with and that they share things and talk, “which helps a lot.” Participant 4 reported he was never the type of person to hold things inside. He said he would talk to his family and friends, some of whom were within the department, and did not feel he had any issues managing after 9/11. He said, “If someone asked me about it, I’d talk about it, tell them what I was feeling.”

When Participant 4 was asked why he thought this worked well for him, he reflected on those police officers who do not have anyone to talk to and the police officers since 9/11 who have committed suicide. He said:

I don’t know; everybody’s different; that’s a given. Again, some people have strong family around them, and great friends and support systems, and some don’t, and those are the ones that [sic] maybe are by themselves a lot more, not surrounded by other people, and they have no one to speak to, and that can just build up inside them and who knows the next thing you know . . . my job, unfortunately, there are quite a few people who commit suicide, and I am sure you are aware of that. I think we were averaging at one time about 15 or 16 a year, which is horrible, and that is just my agency, that is not even across the nation. So, stress is real, it is there on the job, but I always thought I was good at handling

stress. My wife is always telling me, “Nothing ever bothers you; what’s a matter with you?” I just don’t let things bother me; I don’t let things get to me.

Participant 5 was employed 2-3 years in the police department and was young when 9/11 happened. He said that he had his parents who appeared concerned about his well-being and talked with them when he was off duty. He reported

I think just talking to my parents. I didn’t do anything in a group session; I didn’t see any psychiatrist or any mental health people. It was just sort of like dinner talk. Cause my parents lived right up the street from me, and my father was very concerned about my welfare. He was very . . . he (his father) didn’t want me to go on patrol; he wanted me to work in the station.

Participant 6 said that today he continues to keep in touch with friends who were there and continues to talk about his experiences. “I do it now.” He feels this practice was beneficial to his well-being after 9/11. Speaking with co-workers and the camaraderie he shared with them provided him with someone who could relate to his experiences, and he found this helpful in his ability to cope.

Participant 8 also reflected on the support he received from his older brother, who was vested in the NYPD for 10 years. He said that it was not intentional, but they spoke daily about their experiences, and he feels sharing their experiences and having that time with his brother brought them closer as siblings today.

Seeking Help. Although some police officers spoke about the NYPD providing them some sort of in-service to deal with the effects of 9/11 or to speak to a counselor during 9/11, many police officers did not seek mental health assistance until they retired from the NYPD. All participants (100%, $n = 9$) have since retired from the NYPD and

felt they could speak freely about their experiences. Seventy-eight percent of the participants ($n = 7$) reported seeking treatment after they were retired to deal with the effects of 9/11. However, many did not seek treatment until years later. NYC police officers mentioned the stigma associated with mental health and the consequences of seeking treatment as the cause for not seeking treatment while employed. Participant 2 reported that in 2010-2011 he was diagnosed with PTSD and retired from the police force after 21 years and sought therapy. He stated, “it took me a long time; it was probably 2012, 2013 when I started to grasp what was going on inside my head.”

Thirty-three percent ($n = 3$) said they engaged in support-related activities offered by the NYPD because it was mandatory, but only one police officer felt it was beneficial. The other two participants felt that it was not enough, and one participant felt it was a way for the NYPD to put a “band-aid” on the situation.

After 9/11, sixty-seven percent ($n = 6$) reported that they sought mental health treatment to deal with their experiences from 9/11, and they found this helpful. Most of the police officers sought treatment after they retired because there were concerns about job security if they were to report an issue while employed. Participant 2 reported that he went to four years of therapy after 9/11 to work things out. Participant 3 reported seeking treatment seven years after 9/11 and working through his suppressed emotions and memories and that this assisted him in his coping today. Participant 5, when asked what he would do differently in the future, reported that he would reach out and talk to a therapist. Participant 6 reported that he sought assistance from a psychiatrist who put him on some medication and that for the past 3 years, he has been in therapy with a psychologist. Today he reports he still has anxiety attacks but has been using several

measures to calm his anxiety, such as breathing techniques and talking to himself.

Participant 8 stated he sought therapy when his wife noticed that something was not right with him after working in the rescue and recovery efforts. Finally, participant 9 reported that after 9/11, he did not feel he was doing well but felt there was nothing more to do at this point because he was doing everything he can. Participant 9 stated, “I don't think that I can do anything differently, I go to several counselors, and I am on depression medication, I am on anxiety medication, I don't think I can do anything differently. I think I have tried everything.” All six participants reported that they felt seeking therapy has assisted them in their ability to cope today.

Focusing on Others. Overall, Fifty-six percent of the sample ($n = 5$) reported that focusing on the well-being of others during 9/11 assisted them in their coping. Participant 1 oversaw a group of guys and said before the towers fell, he took a guy out from the precinct into the field who was just returning from shoulder surgery. He said he was more concerned with keeping everyone on his team safe. Participant 2, a second-year sergeant, said, “We all got together and made sure everybody was ok.” Participant 5 spoke about how his wife and children were in Italy when NYC was attacked on 9/11, and he was very concerned about them and their well-being.

Participant 6 was also concerned with his wife, who he just dropped off at the train station. She was headed into NYC on a train that would let her off at a station under the WTC. As he tried contacting her that morning, his first thought was that he had just married, and his wife was dead. However, he felt relieved when he was finally able to communicate with her. Participant 9 said that focusing on his family when he was home helped him deal with 9/11 mentally.

After 9/11, 22% of the sample ($n = 2$) continued to feel that focusing on others assisted them in their ability to cope after 9/11. Participant 1 relayed that most police officers feel it is their mission to assist others when he said, “cops are just that way; we go into that job to help people.” Participant 6 said that after 9/11, he was very involved with his family and involved with swim and baseball with his children. He said police officers miss out on a lot with family because of the job, but after 9/11, he wanted to be home with his family more. He said,

I missed half my daughter’s life growing up. Being retired, I was at least able to raise my boys and be there for them. I would make it a point to go to all their swim meets, talk to people, and do things like that. Because I knew I also enjoyed it, but I also knew it was something that would help me.

Relying on Training and Experience. Overall, Fifty-five percent of the sample ($n = 5$) reported that their training and experience assisted them in coping during or after 9/11. Training and experiences were reported by 44% ($n = 4$) of the sample in assisting them in their ability to cope during 9/11. Participant 1 said he was a seasoned cop and very familiar with Manhattan, saying, “I was already a police officer for 20 years, so you know I already had seen a lot, but nothing like this.” Participant 2 said he was involved in some serious situations like Washington Heights and Crown Heights and had been to so many crime scenes and handled many horror situations over the years, saying, “and some of them were pretty bad.” Participant 6 reported that during 9/11, he went into flight or fight mode, saying, “it was definitely fight, not flight.” Lastly, Participant 6 talked about working in rough parts of East NY, like East Brooklyn and the Bronx, and how he was

always in compromising situations while working in those areas. He said, “you're always in situations where your life is in danger; you just do what you have to do.”

Twenty-two percent of the sample ($n = 22\%$) said that after 9/11, their experience and the experience of others assisted them in their coping. For example, participant 1 said he was seasoned as a police officer, and it was the guys who did not have experience on the job who were the ones that are having difficulty. Participant 4 said many of his family worked for the police and fire department, referencing that he had them and their experience to refer to for support.

Staying Busy. Four of the nine participants (44%) talked about how they perceived staying busy assisted them in coping during and after 9/11 and that this provided them with focus and a distraction. During 9/11, twenty-two percent of the participants ($n = 2$) reported that staying busy assisted them in their coping. During 9/11, Participant 1 reported that he oversaw several guys and had a concern for their safety. He said,

I was more concerned about keeping those guys safe and together, and you know I didn't want anybody getting hurt or wandering off where I didn't know where they were. So, I think that kept me kind of occupied because I'm responsible for these other guys.

Participant 6 reported that not only did he stay busy at work during 9/11, but that he also stayed busy when he was at home. He reported that staying busy provided a distraction that assisted him to function. He stated, “On the weekends, what had happened was that we just purchased our first home, I still live here, I was doing a lot of work on the house by myself, or my dad would help me, and that definitely helped me.”

After 9/11, 33% of the police sample reported that staying busy was helpful. Participant 2 reported that after 9/11, he was still employed with the NYPD and had small children. He was involved in his children's extracurricular activities and coached his son's baseball team on days off. His activities kept him so busy that he did not have time to fully digest 9/11 because his mind was occupied with so many other things. Participant 6 reported that he had been doing many things that keep his mind distracted from 9/11, like bike riding, joining a baseball team, and riding his motorcycle, which he called "wind therapy." Participant 8 reported that he was 25 years old when 9/11 happened and that he met his wife and they had children, and that life progress rapidly, keeping his mind busy.

Exercising. None of the participants reported physical exercise was beneficial during 9/11. However, 33% ($n = 3\%$) of the sample reported that exercise was a good coping practice after 9/11. Participant 5 reported that he played softball and sports after 9/11, which helped him cope. Participant 6 reported that exercise and eating right helped him find a balance in his life. Participant 8 reported, "one of my big coping things was I started getting into fitness. I started getting into whether it was just running or lifting weights, and I found that to be for me at least extremely, extremely helpful."

Self-Soothing. One participant reported that after 9/11, he learned how to take care of himself when he was experiencing a panic attack. Participant 6 reported that he learned techniques even before seeing a psychologist who later assisted him in his coping process. Self-talk and breathing techniques were utilized to self-soothe his anxiety and PTSD symptoms. He said, "just keep telling yourself this is going to go away." He referred to this as talking himself off the ledge by saying, "it's going to go away, it's

going to pass.” He also said he went for motorcycle runs with a friend frequently, which he called “wind therapy” and that this was beneficial in his ability to cope.

Emotion- and Problem-Focused Coping Strategies

Religion and Faith. Several NYC police officers (67%, $n = 6$) engaged in faith and prayer practices during and after 9/11. Four of the nine participants (44%) reported that their faith was an asset in assisting them in their ability to cope during 9/11. Participant 2 stated early in the interview that he was a Christian and that his faith was strong. He regularly attended church and said that his pastor would pray with him on several occasions, including 9/11 and after. He reported, “I was blessed. I’m a Christian. So, I did a lot of praying that was a very strong backstop for me.” When asked specifically what assisted him most in his ability to cope during 9/11, he said, “probably the praying.” When Participant 5 was asked what worked best during 9/11, he thanked God that he didn’t lose any family members and reported that he attended mass regularly around that time. Participant 6 also referenced God when he talked about sorting through the material at the Staten Island landfill when he stated, “thank God it wasn’t a kid,” referencing a bone that he found. Participant 7 reported that he prayed daily, as he did on 9/11. However, he could not remember what he prayed for that day specifically.

Forty-four percent ($n = 4$) of the police sample reported that their faith assisted them in coping after 9/11. Looking back, Participant 2 said, “I want to thank God that I am sort of on the recovery path here.” While still employed, Participant 2 said he wore his faith on his sleeve, and after 9/11, he was given permission to conduct a prayer session for 20 minutes during the morning break in his station house. He said,

A couple of years later, after 9/11 and I was able to start with the permission of my commanding officer during our morning break, a morning prayer session for 20 minutes in the station house. None of the cops ever came, but all the civilians did, and they were mostly minorities. And so we would pray for the day, the offices, [the] safety of the department in general, any requests that any of the women had, it was mostly Black women or Hispanic women, but as time went on, cops would know that we were meeting, and it was odd because they would always seem to come in before we were to meet and one guy, you know, a guy would walk by and say my mother is sick can you pray for her and then he would go out. I was like, yeah, no problem. You know, and this was another coping mechanism that I should have mentioned, if you want to note that, but that was probably itand I was given permission to do that for four years until I got promoted.

Participant 3 said he had a strong faith, and that God is his savior. When asked what worked best after 9/11, he responded, “Jesus, my religion, and my faith is what helped me.” Participant 6 also expressed gratitude to God for his health because he was exposed to downtown NYC's toxins saying, “thank God I don't have cancer.” Lastly, Participant 8 referenced God when talking about the support he received from his wife, and he made statements like “God I will never forget” and “but I wish to God.”

Drinking. Six of the nine participants (67%, $n = 6$) reported that they drank during and after 9/11 to cope. Twenty-two percent ($n = 2$) reported going out with co-workers while off duty during 9/11 for a few drinks. One said it was unintentional, but they would talk about their experiences, and this assist them in coping during 9/11. For

example, participant 1 stated, “We would go out after work and go to a bar or somewhere and just talk about it.” Participant 6 said, “Some of us would agree one of the best things is having a couple of beers and talking about it.”

After 9/11, two participants reported that drinking assisted them in their ability to cope. Participant 5 said, “I know I drank a little bit more alcohol; it mellowed me out,” and Participant 6 said he gets together with one of his neighbors weekly and has a few beers. However, he also said later in the interview, “a little wine doesn’t hurt,” and questioned maybe his alcohol use was too frequent and that he was unsure if maybe it was a problem.

Working Long Hours. Working long hours during and after 9/11 was reported by 56% of the sample ($n = 5$). Many participants reported that they worked long hours with little time off. Some felt staying busy and focusing on work was helpful during 9/11. Although, many police officers felt exhausted, overworked, and tired. Twenty-two percent ($n = 2$) reported that taking time off from work assisted them in their ability to cope after 9/11. Participant 5 said that what helped him cope was getting 2 days off from work in a row because he worked so many months with little time off and having a second day off allowed him to rest and restore his body. Participant 5 said he did not get two days off in a row within 5 months. He stated,

Because we were working, September 11th happened, and we did not go back into 8-hour operations until like January. January is when I think I got my second day off in a row, five months later. So, we were working 6 days a week, and it was supposed to be a 12-hour shift, but by the time you got relieved, everything

was face-to-face relief, it was a 14-hour workday, I would have definitely wanted my two-days off from work, just to digress [sic] a little bit.

Participant 6 said that he traveled and took mini vacations whenever he could to regroup and continue to function after 9/11. Having a day off provided him with time to focus on other things other than his 9/11 involvement and work-related activities.

Participant 6 said:

I like to go away a lot. Whenever I could, I'd go off to the Poconos, or my friend has a house in the Hampton's. So, traveling was one of them, taking vacations.

You should always take one whenever you can and always keep busy just to keep you happy.

Writing. During 9/11, one participant explained that he was a sergeant and read old logbooks about historic events in NYC. When 9/11 happened, he wanted to document what was happening, and he would write in his logbooks things that were taking place.

Participant 2 stated,

I was a sergeant at the time, and I was able to record things in certain department documents that police officers probably wouldn't be able to do so, and I almost got in trouble for doing it at the time. But I really didn't care. I felt it was something as big as the bombing of Pearl Harbor and in my lifetime anyway, so I recorded it as such. And as a supervisor, I'm allowed to write certain things in certain logs, and I felt that was a sort of event for me.

Emotion-Focused Coping

Safety/Health Fears. Health fears were the most common emotion-focused theme discussed by many (67%, $n = 6$) of the participants in the sample. However, one

participant (11%, $n = 1$) knew early in his efforts during the rescue and recovery that his work could have long-term negative effects. When Participant 9 was asked what he felt worked best, he reported that he had health fears but coped with that day the same way he did every other day. He initially felt that he had coped well with his experience during 9/11 and did not have any problems. However, a few years later, he realized he started having physical and mental symptoms. Participant 9 said,

I coped with it as another day at work. I coped with it as I was living in history. I coped with that. I knew that one day I would be sick from it, but every day I knew I still had to do my job. That's the best way I can tell you.

Anger. A little more than half the participant sample (56%, $n = 5$) reported that they felt angry during and after 9/11. However, only 11% ($n = 1$) reported immediately feeling angry on 9/11. Participant 5 said when he realized what had taken place and felt, "It was very stressful, just stress and a lot of anger. I had a lot of anger and rage."

Cry. Overall, 33% ($n = 3$) of the sample mentioned being tearful or crying during and after 9/11. However, only 11% ($n = 1$) of the participants reported they expressed their emotions during 9/11 and cried. When asked what coping skills assisted him in his coping during 9/11, Participant 2 said on two occasions during his interview that he cried a lot during that time, saying, "I am not going to lie, I did a lot of crying." Participant 2 indicated that he allowed his emotions to flow but later indicated that it became a problem when he could not control his emotions.

Gratitude. Thirty-three percent ($n = 3$) of the participant sample expressed feelings of gratitude during and after 9/11. Participant 2 spoke about feeling grateful both during and after 9/11. He thanked God twice during his interview. After 9/11, he

expressed being grateful for keeping a gratitude journal and writing things down daily. He said he was thankful to his therapist for suggesting keeping the journal. He said, “I am grateful for not looking so much at the negative but looking more at the positive.”

Humor. When asked what worked best or was least effective in their coping during and after 9/11, 22% ($n = 2$) reported the use of humor assisted them in their coping. Eleven percent ($n=1$) reported that humor was effective in their coping during 9/11 and 11% ($n=1$) reported that humor was effective in assisting them cope after 9/11. Participant 1 spoke about the use of humor during 9/11 as a coping mechanism frequently used by police officers. Participant 1 said that “police officers have an odd sense of humor” because of their experiences and that the use of humor as a coping mechanism is often beneficial. He said,

You know cops have a kind of a weird way when they're around each other, talking and relating, you know, oh my God, did you see the brains. You know, almost joke about it, but it really was a coping mechanism sometimes.

Participant 4 also discussed the use of humor after 9/11 when he was with other police officers. He said, “If you know police officers, we have a sense of comic relief. We find comedy in pretty much everything. So, we continuously make each other laugh. I guess it is a distraction method that we use. Later in the interview, he spoke again about humor being beneficial after 9/11, stating that police officers use humor to keep each other’s spirits up by finding comedy in things and laughing about some of the scariest situations through which they have been. He said, “It’s a relief, a release.”

Read. When asked which of the ways you coped, if any, worked best after 9/11, one participant (11%) mentioned he started to read books and felt that the information he

read assisted him in his ability to cope after 9/11. Participant 6 spoke fondly about one book “The Art of War” by Steven Pressfield that assisted him saying, “It was a great book that taught me some techniques like what to do when you are frozen and that I’m not alone.” He referred to reading as something that kept his mind occupied and off things related to 9/11.

No Issue

Seven of the nine participants (78%) reported that they felt they had no issue coping during and after 9/11. Many police officers reported that they functioned on autopilot because they had a job to do. Forty-four percent of the participant sample ($n = 4$) reported that they felt they had no issue coping during 9/11. These men all reported for work regardless of not know what was going on and then being faced with having to work in unsecured areas. There were also rumors of secondary explosive devices being placed throughout NYC. These NYC police officers went to work regardless of feeling their life was in danger. Participant 1 stated he was seasoned as a police officer and didn’t have any emotional problems. He said, “I honestly haven’t had any emotional problem or anything like that, you know when this happened.” Participant 4 said he felt he never needed to reach out and talk to someone, and when Participant 6 was asked how he coped during 9/11, he responded, “pretty well.” Participant 7 said, “I just plugged along and did what I had to do.” Participant 8 said that there were many levels of coping in trying to deal with what was going on that day. He said, “To put me back in the 25-year-old self that was in the middle of this, I don’t know if I would have done anything different back then. If you were to tell me, I can go back knowing what I know now. I don’t know if I would do anything different.” He went further to say, “I clearly remember the mentality

of this is what we have to do, this is the mission it needs to be done. It's amazing to me, looking back how when you are in the middle of it, you just react, and you just do."

Participant 9 reported that he coped with it as a work experience and did his job, and initially, he had no issues. When he was asked what he would do different in the future, his response was "nothing."

After 9/11, 44% ($n = 4$) reported that they did not feel they had any issues coping. Participant 4 reported that he did not let things get to him and that he found that he never really needed to reach out and speak to anyone professionally about his experiences. He confirmed that stress is real on the job but feels he was always good at handling it. He reported that his focus was on living his life and not letting it get to him mentally. Participant 4 went further to explain how two people can have the same experience but how the experience can have a different effect on each person when he said,

Everybody is different, and everyone handles stress and certain situations in their own way. You and I could be standing side by side, and something can happen right in front of us traumatic and your it can take you your knees can buckle and take you out, and I just stand there saying, wow, that's kind of crazy and maybe go over and help them or do whatever but everybody's different. So far as coping, some people may need some help; some might not. As for myself, I don't believe I ever needed help. I had [a] great family, I still have [a] great family, and my circle of friends and I know that if they ever saw anything wrong with me, they would say what is going on with you, and I have no problems accepting help either. So, if I found myself in that situation and someone was offering me help, I would have no problem taking it.

Participant 5 reported that he did not need any medication, do any group therapy, or seek any mental health assistance. He felt he handled his experiences of 9/11 well enough to not need any additional help in his ability to cope. Participant 6 reported that he coped well until August 2003, when NYC experienced a blackout. Participant 6 reported that when that happened, he went into a complete panic attack. His description of his experience was that NYC were under attack as if the disaster was happening again. However, when he found out that it was just a black out, he felt a great sense of relief. Lastly, after 9/11, Participant 7 reported that he didn't feel he had any issues.

Avoidance

Sixty-seven percent ($n = 6$) reported that they used some form of avoidance to cope during or after 9/11. During 9/11, 44% ($n = 4$) talked about the use of avoidance. For example, participant 2 said he went to work on 9/11, but he was supposed to be on vacation. He said that right after 9/11 and got physically sick, and the police department was not denying anyone vacation. So, he took a vacation instead of going out sick just to get away and escape for a little while. While Participant 6 described avoiding his feelings, he said he went into survival mode and just blocked things out. Being assigned duties, involved, and "just working" kept him busy, and this assisted him in his coping. He said that he did not realize it at the time because he really felt fine, but he would block things out when he worked at the morgue. When asked if there was anything additional that he would like to add, Participant 8 said, "9/11 was tough, but when we go back to the time it happened, it was not tough, at least not in the there and now, in the moment. Because in the moment you were just doing what you were supposed to do." Participant 9 described not having time to reflect on what transpired on 9/11, saying, "Well at that time

it just seemed like a normal disaster, even though it was catastrophic, that's even not the proper word because it was way more than that. It was every day I had to concentrate [on] what I was doing for that day, so I didn't have time to reflect on everything."

After 9/11, more police officers (56%, $n = 5$) reported avoidance as an effective coping mechanism. Participant 4 said that after 9/11 happened, he didn't let it get to him and that "it wasn't something that I really thought about." Participant 6, when asked what worked best for him, he responded, "avoiding," saying, "I kind of put the message out there that I am avoiding this, I am staying away from stuff that reminds me of that day." Participant 7 spoke about police and firefighters just do what they "have to do at the time" inferring they avoid feeling anything. Participant 8 spoke about how he avoids the anniversary of 9/11 because it is very hard on him, and he does not know why. When asked why it worked well for him, he responded, "I don't really do like the ceremonies, I don't watch the news that day, I don't watch the names. I try to distance myself as much as I can." When asked which of the ways he coped, if any, did he perceive worked best, Participant 9 also said that he also avoided things related to 9/11, including talking about it, watching the TV, or listening to the radio. When he was asked why he felt this works for him, he said, "Because where I was when it happened, what I witness[ed] when it happened and the entire events. So, if people ask me questions or I see things on TV, it automatically gives me flashbacks, automatically brings on the depression."

Least Effective Coping Strategies

Table 4 represents NYC police officers' responses of the least effective coping mechanisms used during and after 9/11.

Table 4*Participants' Responses to Least Effect Coping During/After 9/11*

Description	Overall # & %	LEC During # & %	LEC After # & %
Problem Focused Coping			
Focus on work	9(100%)	3(33%)	
Talk with others	9(100%)	3(33%)	
Sought help	7(78%)	2(22%)	2(22%)
Focus on others	5(56%)	2(22%)	
Busy/Not Staying Busy	4(44%)	2(22%)	1(11%)
Stigma	3(33%)	1(11%)	3(33%)
Emotion/Problem-Focused			
Drink	6(67%)	1(11%)	2(22%)
Disorganized Environment	6(67%)	6(67%)	
Long Hours	5(56%)	2(22%)	2(22%)
Dealing with Families	4(22%)	2(22%)	4(44%)
Deal with Body Parts	4(44%)	2(22%)	2(22%)
Hypervigilance	3(33%)	2(22%)	2(22%)
Lack of Programs	2(22%)	2(22%)	
Emotion-Focused Coping			
Health fears	6(67%)	2(22%)	4(44%)
Anger	5(56%)	4(44%)	3(33%)
No support	4(44%)	2(22%)	2(22%)
Anxiety	3(33%)	2(22%)	2(22%)
Cry	3(33%)	1(11%)	
Frustration	3(33%)	1(11%)	2(22%)
Inability to Control Emotions	3(33%)		3(33%)
Flashbacks	2(22%)	1(11%)	1(11%)
Panic	2(22%)	1(11%)	

Description	Overall # & %	LEC During # & %	LEC After # & %
Disappointment	2(22%)	2(22%)	
Resentment	1(11%)		1(11%)
Distrust of Others	1(11%)		1(11%)
Depression	1(11%)	4(44%)	4(44%)
Long Term Exposure	1(11%)		1(11%)
No Issue	7(78%)	4(44%)	4(44%)
Avoidance	6(67%)	3(33%)	5(56%)

Note. LEC = Least effecting coping, # = Number of participants affected, % = Percentage of participants affected

Problem-Focused Coping

Focusing on Work. According to the participant reports, thirty-three percent ($n = 3$) did not feel they were coping in any way in the immediate aftermath of 9/11 but that they were just doing their job. Participant 1 reported that he not only worked when he was scheduled but that he was going down to Ground Zero on his own time because he had to be there. He recalled,

It took them a long time to get their act together. For the first 2 weeks down there, it was totally, like I said, I was going down there, and my boss didn't know where I was. I was going down on my own time. Then I forget what day of the week it was. So that Sat/ Sunday, I was off, but I said like there was no way I am going to stay away.

Participant 7 stated, "I just did my job, basically just doing what I was told. After we responded, they got rosters together for everybody. We were just doing what we had

to do,” Participant 8 described being in the moment, not fully understanding what was going on and doing whatever was asked of him.

Talking to Others. When asked what coping skills were least effective during 9/11, 33% ($n = 3$) of the participants spoke about how they did not talk to others.

Participant 7 responded, “I don’t know if I have an answer for you, other than I did what I had to do. I mean, maybe not discussing my feelings.” Participant 8 spoke about how he did not like to talk about it and felt shutting people out was not beneficial for him. He felt if he did not talk about his feelings or experience that they would go away. He also felt that if he spoke to people, they would not understand him. He said there were things he saw that he did not want to talk about because he found he could not sleep when he talked about them. Later, in the interview, he said, “I learned as time went on, I had to open up more. I had to get it out; I had to relay how I felt.”

Seeking Help. Seeking mental health assistance while employed is difficult for police officers because their livelihood could be jeopardized. Three participants in the sample spoke about the stigma related to mental health within the police department that prevented police officers from speaking of their difficulties. However, all participants in the sample have since retired from the NYPD and felt they could talk freely now without retribution. A few of the participants (22%, $n = 2$) reported not seeking help was not good for them. Participant 3 said, “What I would have done differently is I would have sought help without letting the department know.” Participant 9 did not initially seek help during or after 9/11 but developed issues and is currently on medication and seeing a therapist. He mentioned that he feels there is not much more that he can do.

After 9/11, 22% ($n = 2$) reported that not seeking help made things difficult. These two participants referred to knowing they needed help after 9/11 but did not obtain any. For example, participant 2 said, “I probably would have sought out mental health a little earlier, but you know I was really busy.” Participant 8 said, “I wish to God that I had someone to speak to at that point on a professional level to where I could work out some of my emotions because it wasn’t good.”

Focusing on Others. Police officers by trade assist and help others. During 9/11, many spoke of the people looking for their family members and how they felt helpless in assisting them. When asked what did not work well during 9/11, Participant 4 talked about focusing on his family when he was not working and how that assisted him in his coping. He said, “I had young children at the time, and I wasn’t going to show them any fear. Listen, this happened, and we were going to continue on. You know we are going to live our lives” Participant 6 talked about how he was anxious and felt he had to get downtown NYC to help other people.

Being Busy/Not Staying Busy. When asked what did not work well during 9/11, participants spoke about how not staying busy gave them too much free time, which was not good for them mentally. Twenty-two percent ($n = 2$) reported downtime issues. Participant 6 responded, “Sitting around, boredom, compliancy. I cannot express to you enough that if you weren’t keeping busy, your mind would start to wonder. Maybe it’s a cop thing, but I think after years of therapy, it’s also [a] psychological thing. Definitely being stagnant, not keeping busy was not a good way to cope.” Participant 8 spoke about his commute to work being difficult and said, “I guess when you are in the car, you have more time to contemplate life.”

Stigma. Several participants (33%, $n = 3$) spoke about the stigma within the police department regarding mental health as being least effective in their ability to cope both during and after 9/11. Being labeled with a mental health issue could cost a police officer their job, so the cost of benefits outweighed seeking help for these men. Participant 3 said, “the fear of the department finding out was stronger than getting help.” Many spoke about having families to support and mortgages to pay. Stigma was referenced by one participant (11%) during 9/11 as being least effective. When Participant 1 was asked of the ways he copes, which, if any, did he perceive did not work well during 9/11, he initially said he did not know if he would seek treatment, depending on how badly something affected him. He responded,

I mean, there is that stigma. I don't know! As much as they say we don't. You know we try not to talk about it. For the guys that seek it out, you're certainly not going to go back and tell the guys in your squad that, oh, I had to go and speak to psychiatrists, I'm having problems.

After 9/11, 33% ($n = 3$) of the sample spoke about stigma being the least effective in their ability to cope after 9/11. Participant 1 again shared about the stigma saying,

this whole thing with the psychiatrist and talking to psychiatrists and, you know, seeking help with psychiatrists; it's almost a systemic with police work. It's kind of this macho thing that cops have; they don't want to talk to psychiatrists. Even when you have to like if you've been involved in a shooting, you still have to go down and speak with somebody. As I get older, I probably would, thinking back on it. It's probably trying to protect your own image, or how people look at you, as a weakness. It's probably kind of a foolish thing to do. But as I get older, I

think I come to the realization that if something really bothered me that bad, that's probably definitely the way to go, talking to somebody.

At the end of the interview, Participant 3 was asked if there is anything more, he would like to add, and he said,

Going back to the earlier questions that the fear of appraisal from the department was so strong. You know we had mortgages; we made our overtime and were doing our job, none of us wanted to be labeled as having issues. I do have friends in the department; they got psyched out from 9/11. I have two friends that [sic] have sought professional help in the beginning, and they ended up not completing their career[s]. They were having issues from their experiences from 9/11, and they let the department know they were having issues and they were eventually psyched off the job; they were penalized.

When Participant 8 was asked what he would do in the future, he talked about the macho image and persona that police have and responded,

One of the things that comes with that is you can't show weakness; you can't go talk to somebody; you have to man up; suck it up. So, I would definitely say that I had that inside of me that I would be [the] lessor of a man if I sought help. I wouldn't be as good of a cop if I sought help; no one else was doing it; why should I do it. That is something that I look back on now as ridiculous; it is the craziest thing in the world. I wish there was [sic] more (programs), they do have a lot of programs now, but back then, they didn't just because nobody knew. I do feel if there was more of a resource connection, I would have reached out earlier, definitely.

Participant 8 went further to say later in the interview that he felt he could speak freely because he was retired said,

Along the lines of the mental aspect of it, I don't think anyone truly realizes how bad that day messed a lot of people up, and I am definitely one of them. I am retired now, so I can say things freely. Cops are afraid, too, because of the psychological part of it. You don't want to, you're afraid they are going to take your guns away, they're going to take your career away from you, and again this goes back to what I said, I had a home, I had a wife, my children. How do I go into work and say, "Hey, I'm not doing ok, I'm not alright" and to the point, to be very frank, I couldn't do that because I knew, so did a lot of guys, what was going to happen, they're going take your guns away from you, they are going to send you for a psychological evaluation, and there is a chance, you may lose your job, and they can tell you that you cannot work anymore.

Emotion- and Problem-Focused Coping

Drink. One of the themes mentioned as being least effective by the sample (67%, $n = 6$) was alcohol consumption during and after 9/11. During 9/11, participant 9 reported, "I probably drank a little too much," After 9/11, 22% ($n = 2$) spoke about the drinking behavior of others. Participant 4 did not state that he used drinking to cope, but he mentioned that he knew guys who "turned to the bottle." Participant 8 reported that he used drinking to cope and that after 9/11, he started to have a problem and that his wife noticed a change in him,

Ok, so again one of the things that, and this was subtle, but it became clear, it started to become an issue, and this was still fairly early on. One of the ways I

was trying to cope, and this goes to not talking about anything and keeping everything inside, drinking started becoming an issue, and it was weird because it's not like what you see in the movies. It's not like you start [to] have these images in your head, and you start drinking to forget about them; that's not really what it is. The more you start burying things, the more you try to find a way to keep that high, to keep that persona, it started to become a thing, and I started to notice, there was always a threshold, one beer would lead to two, and two would lead to three, and then the more the alcohol would take over, then the more your head starts to wonder, the more thoughts start to come in, and that leads to the anger starting to come out.

Disorganized Environment. According to the participant responses, the first two weeks were chaotic. Several participants spoke about the lack of communication within the department on 9/11 and fearing for their lives. Initially, they had to navigate their environment with little communication between departments. Some participants spoke about working long hours in an environment that was emotionally charged. Many police officers did not know what their work assignments would be daily, and many reported that it took weeks for some sense of organization to be established. Some participants worked on the rubble where the towers had fallen in the rescue and recovery, and they called it "The Pile." Some worked at the morgue or Staten Island landfill sorting through body parts and personal items. These men spoke about their job in rescue, and later the recovery to bring closure to the families of the deceased.

Many referenced losing track of time and just doing their job. When asked what coping skills were least effective during and after 9/11, more than half of the participants

(67%, $n = 6$) talked about the work environment being a hindrance. Sixty seven percent of the sample mention the disorganized environment was least effective during 9/11.

Participant 1 talked about downtown NYC as being a disaster when he said,

So, we couldn't believe that we were in that area. I mean, it was just, it looked like, I don't know. The only way I always described it, it was like Bay route; there's this dirt and dust everywhere; it was just a pile of destruction.

Participant 1 also spoke about how there was no organization in work assignments during 9/11 when he said,

You take 50 guys and go over there and 100 guys and go over there....block traffic and these roads. The contingency plans were for that day and a week after especially, the week after, and I would say it took about 2 weeks to really get organized with who was down there and who is doing what and what street should be closed off and opened and all the construction to come in, the clearing to be done. It took them a long time to get their act together. But for the first 2 weeks down there, it was totally, like I said, I was going down there, and my boss didn't know where I was.

During 9/11, Participant 2 spoke about how they were on high alert, and there were concerns about Gracie Mansion, and they were watching that no grenade launchers went over the East River. He went further to say that he stopped in at his precinct briefly that day, and a lieutenant grabbed him and assigned him to a group of guys that were 8 years his senior. He said, "I was a two-year minted sergeant, and these guys were sergeants for 10 years, so that shows you where the thought process was above me."

Participant 2 mentioned as the days progressed, he was assigned to security to ensure that there was no looting going on, and when he went to his post there was nothing there, "it was all gone, it was a little scary for Manhattan." Vehicles were destroyed, including police cars and fire trucks. He mentioned the dust on the ground was an inch thick, and pieces of paper were flying everywhere. Participant 2 also mentioned the lack of communication as not only was cell phone service down, but there was confusion about assignments. He went further to say that there was no rhyme or reason why rescue workers were picking through the debris. At one point, he said that he was a realist and knew that no one was coming out of any of the buildings alive. He said that he could see and smell steel burning and had never witnessed that before. He said that he recovered parts of a jet engine and personal artifacts like shoes as he canvassed the area. A scary moment he recalled was when he was canvassing the area and walking around. He said,

I'm walking around, and I went to go see if I can walk into the pile, and I wound up on a beam, and I'm like, this is a mess. You know, because it was a straight 30-foot drop, and I walked back out. Looking up, and I [have] never seen steel burn before.

The following day he described how there were concerns that other buildings in the area would collapse and that he felt constant fear when as he worked in that area,

So, we're into the next day now into 9/12, and at this point, they had a horn that they would blow that day in fear of the Millennium, or the Deutsche Bank or any other buildings that were going to collapse. And you were supposed to flee. But yeah, they didn't really tell you where to flee to, so I'm like, all right, and like two o'clock, 2:30 I recall a huge caterpillar payload, you know the one with the four

wheels on it is unloaded, and it goes to move this huge beam, and he goes in and, I'm watching this, and he goes, and he drags it, and the whole ground is vibrating and the horn blows and in the back of my mind I don't want to say I know, but I'm pretty sure it was a payloader moving the beam that sparked this ...and everybody's running, I'm running ... where to go, somebody saying go under the tow truck. And I'm not going under anything; I could get crushed under there anyway. I'm going to go with my gut, and we ran about a block, a block and a half, during that period of time. I tripped because the dust was so thick closer to the trade center, and you couldn't really see the curbs or anything. Well, I took a header. I got covered with the dust head to toe. But at the time, everybody was pretty much covered with dust, but I took [sic] a bath in it, unfortunately, and we got up and slowly walked back, and [the] all-clear was sounded, and I was like, Dang, man, that payloader, it sparked this whole thing.

Participant 3 said that he worked narcotics undercover and “the NYPD did not know what to do with us during that time because we were not doing any enforcing.” On 9/11, Participant 6 recalls feeling angry because they were trying to figure out what was going on at the time, and they were waiting for orders from above to come down. He said, “there was a lot of anger because we felt useless.” Participant 7 said that he was with five guys stationed downtown at Church and Vesey Street and that they were just standing in the dust, not knowing what to do. He said, “We were just standing there waiting for someone to tell us what to do. Everyone, even the higher-ups were in over our heads. Nobody had any answers.” Participant 8 described his days immediately following 9/11, saying,

Again, if I was to explain it better, it was more like working, coming home, showering, eating, trying to get your stuff put back together, and then just not knowing what the next day was going to bring, because we never knew day to day if we were to go or we weren't going to go. There were certain days that I would get to work, and I would be working in the precinct, and then there were days I would get in there, and you wouldn't even have to put a uniform on at that moment just throw on a pair of jeans and a collared shirt, we had the NYPD polo shirt, and they would just say put the polo shirt on and go down, you were getting on a bus at that point to go down to Ground Zero.

Long Hours. Fifty-five percent ($n = 5$) of the sample reported working long hours during and after 9/11. Twenty-two percent ($n = 2$) reported that working long hours was detrimental to their health. Participant 2 reported losing track of time and not returning home for three days on 9/11 and the days that followed. Participant 3 reported that he worked two weeks at ground zero and eight months at the Fresh Kill landfill. He said he worked 4 days a week, 12-hour days. Participant 5 spoke about being worked to the bone and how some guys complained that they were not spending enough time with their families. He said they were working 16 hours days, six days a week. He said,

At the get-go, we worked every day, and you went to work, you did what you had to do, you had your assignment. You came back; you changed, you went home, you got your 4-hours of sleep. You ate something and came back.”

He also mentioned that some police officers committed suicide, and he attributed it to being so overworked and exhausted. He said,

You kept working all these hours; you would get tired, you got fatigued. I don't know how much you know. I know a couple of people committed suicide. I know a couple of cops killed themselves, a couple of firemen killed themselves. I know a police officer, it was on the news, he was driving a van, I'm not talking about me specifically, these are other cases that I am well aware of there was an incident in the Bronx, where this police officer was driving a police van, and he was driving all these people back to their command, and they hit somebody, and the guy hit a pedestrian and killed him, and he stopped. It was in the paper, and I remember the union reps talking about it, and the duty captain did his investigation, and the cop said I am exhausted; I'd been working 16-18 hours a day for 2 months, and you're asking me what caused this, I am fatigued, I'm exhausted, I should not have been driving this van.

Participant 6 described working at the morgue for long hours carrying around the dead's body parts. He said,

Working at the morgue was terrible; it was horrible, 12-hour shifts for about a month or so. For the first 6 hours, they let you kind of stand by and the remaining 6 you dressed, you dressed up in doctors garb, suits, or like tie vac suits with gloves and a mask and you sat there like an assembly line, like next, and you get up, and they hand you, like the first thing they handed me was a foot and I remember it had purple nail polish on it and I was like oh God, ok where do we go from here.

Not having the proper gear to do the work they were doing was a concern of Participant 6 when he verbalized working at the landfill. He said,

We were sent to the landfill, and they had these tremendous sifters that were extremely loud, bang, bang, bang, and they gave us no headphones and the masks they gave us were not working because they tested them and you were breathing in like this dust, there was no protection, there was no, I hate to say, I don't want to be selfish, but there was no concern for the cops on the landfill. They were just like you have you tie vac suit on, mask, go to work, and you know what we were soldiers, and we did it, and I would do it all over again.

Participant 8 described working long hours as a routine when he said,

Again, if I was to explain it better, it was more like working, coming home, showering, eating, trying to get your stuff put back together, and then just not knowing what the next day was going to bring, because we never knew day-to-day where we would go. But one of the coping things when it came to that there wasn't a lot of time for like a social life or like a getaway, you just didn't have time for it because you were working constantly.

After 9/11, participant 5 said that he felt things got better for him in January because he got a second day off and got more rest. However, participant 6 also described working long hours in the immediate aftermath and cleanup operations. He said, "During the days that followed, we were just very busy, doing 12-hour shifts, and then coming home and sleeping and getting up and going back, constantly busy."

Dealing With Families. Forty-four percent ($n = 4$) of the participant sample talked about how difficult it was to encounter and work with the deceased's family

members. Police officers had to deal with families during and after 9/11 in various ways. Initially, when the towers fell, many family members came to NYC to find their loved ones. Many police officers reported feeling frustrated when they listened to family members because they wanted to help them but could not do so. In the days that followed 9/11, Participant 1 said,

And you could imagine all the family members coming down, and you know that their loved ones are missing down there. We had our NYPD jackets on, and they had barriers set up, and they let us pass, but there were these family members right there at the barriers. And they were grabbing you and showing you pictures of their loved ones and pleading with us, please, you're going in there. Can you find this person? We know he's in there somewhere. He went to work in the buildings, in the World Trade Center, can you find them, and you didn't know what to say to these people. And that was kind of difficult but thinking . . . probably looking back was dealing with all the family members that were coming down there, just really nice, decent people and they were really at wit's end of what to do with their loved ones who were in the buildings and like I said, in the beginning, we were hoping that we were going to find . . . a cavern or basement where maybe there'd be 100 people huddled, which like I said, never happened.

Participant 6 recalled a story of a police officer's son who was found in the rubble who was also a police officer and how he approached his father at Ground Zero to say his condolences. He said that he would never forget the look on his face. He said,

And his brothers were firemen and all cops, and his dad was like...just the look...I'll never forget it. That was a tough day, and we escorted his body, so it

was like an honor at the same time. The family had closure, but his dad's face will never leave my mind.

After 9/11, a little less than half the sample (44%, n = 4) reported difficulty dealing with the deceased's family members and attending all the funerals. Participant 1 said, "the whole thing with seeing the family members, you know missing their loved ones, I think coming back it bothered me." Participant 2 talked about how hard attending the funerals of police and firemen really affected him, "I wound up at the funerals playing Taps, and I am like dang these poor families. This is still very hard on me, these poor families." Later in the interview, he was searching for the meaning of his life when he said,

So, you had your families going in, and I just started to listen to some of the eulogies and things like that. And I'd pick up the cards and look at their ages. I don't know....what am I doing, and so that was a big mental thing on me that probably affected me more so than the actual event. This is where I think that a lot of men and women don't understand was the aftermath of the funerals. I mean, don't get me wrong, we lost 43 police officers and 343 firemen. And I don't know how many Port Authority police offices and other representatives at the FBI and other agencies were down there. I was listening to some of the eulogies, and I'm just like some of them. I hope they never say that [at] my funeral. I mean, it was like he's a good guy; we went out drinking on a boat. There has got to be something more to my life than that, I hope. You know I mean, so it sorts of put things in perspective in my own mind's eye about how people look at me and how I would want to be remembered, but it also saddened me to think and surprised

me that.... I have a close relationship with the Lord, which was a very strong backstop for me. And I'm like, I'm thinking these poor families, you know, I mean, I have a hope, and I have a foundation that I can build my life upon and these families what's their hope? I mean, the things being said startled me, if that makes any sense. So that probably upset me the most during my time at the police department.

Participant 5 also spoke about the funerals being difficult to bear. He said,

I'll tell you another thing that messed me up. We started working the funerals. We started doing the cop funerals and the firemen funerals. But when you started working the funerals, once again, anger...I guess one of the forms of therapy for me was just talking about it, but I remember the funerals, and you saw the widow, then you see the kids with no parent, that's when it really punches you in the face, and you see the father is gone, dead...anger comes into play again.

Participant 6 spoke about how he and his father did one of the anniversaries together a year or two after 9/11, and how they said they would do it every year. He said they never did it again after that day because he felt it was too much emotionally on his father.

Dealing With Body Parts. Overall, 44% of the sample ($n = 4$) talked about working with the body parts on the job as being difficult and disturbing. Twenty-two percent ($n = 2$) reported that sorting body parts made it difficult for them to cope during the 9/11 cleanup operations. Participant 6 spoke about working at the morgue sorting and carrying body parts around all day for 12-hour days, and this went on for over a month or

so. He said, "But everyone was doing it." He spoke about how he found some personal information about a corpse he handled and how he felt attached to her. He said,

So, it was like a chain, and you would go to like a if it was a head, it went to dental because they would check the teeth. If it was a foot, you went to x-ray to x-ray the bones and the foot I had to take to, I don't remember what it was called because they had to carve a piece of skin out to get the DNA, pathology maybe, I forget. The foot was like gray; it looked like, did you ever see the movie Arachnophobia when the spider sucks the blood out, it looked like all the blood was taken out. I'm like, how are they going to get blood and they cut the skin, they cut the tissue, and it was red underneath, so I had to learn that. There was one torso that I carried with a head, a rib cage, and a spinal cord and took it to x-ray and embedded in her collar bone was a chain and it said XXXX was her name, and that was good news because we got a name. Her bra was still on and checked her bra size, and it was 32B, and she had blond hair, so it was like I felt attached to this woman because I was responsible for her, and I followed her all through the CAT scan, x-rays, all the stuff we had to go through, and they just put her on a metal cart, and I was like where [are] you taking her?

Participant 8 said,

The day of was chaotic. The days after became a little bit better, the first week after, dealing with the pile and being on the buckets and moving debris around, there were a couple of rescues that were done while I was there. I never took part in a rescue myself. So, what would happen is you would hear people; there was [sic] different lines and different piles everywhere. They would be people

working different sections, so you would hear either a bell or you would just see the commotion. You would know at that point either that they found something or heard something so everything would just stop, and that is when the reality of it, kind of in the beginning when it started to set in. Looking at what we were doing and that slowly changed into, then it became you knew when something bad happened because there would be a different reaction. I distinctly remember the first time this happening when we were down there, they recovered one of the firemen, the way they do it, it wasn't a full um, what they recovered, I don't have the right terminologya full body, it was parts, but they were able to identify from the uniform or something like that. I distinctly, and I am getting goosebumps as I say this. I distinctly remember that part; everything stopped, everything. It did not matter if you were getting a drink of water or operating a hi-low; the entire process stopped. It was done, and again I think this was the coping part of it. I just think this is where the reality of 9/11 punched me in the face. You just saw them bring down the stretcher and put the flag over the stretcher, they tried to do it with as much dignity and pride as they could, but I remember standing there, and that was when I think again, in my 25-year-old mind, that's when the reality of 9/11 really sunk in of the magnitude of what had happened. That's when it really hit me. That is probably one of my most distinctive thoughts from that time, at that point in time, at least anyway

After 9/11, 22% ($n = 2$) reported dealing with dead bodies hindered their ability to cope with 9/11. Participant 2 spoke about his experience working after 9/11, saying,

So, we recovered some things. I can think of one like this patch, and it looks like grape jam was on the side of it; some civilian or another, or out of department agency person recovered it. I'm not sure if they had dogs or not, and they go, what do we do with this and I'm looking at him like, and I know right away what I'm looking at. And I'm not sure what the other guy that recovered it thought, so I called on the radio and said I recovered something, and they brought over an ambulance, they put it in the back that gave it an escort, they put a flag over it, the whole deal.

After 9/11, Participant 6 said about 3 years ago, he googled the victims of 9/11 looking for the family of the corpse XXXX he handled during 9/11 to try and bring the family some closure, but he was unsuccessful. He said,

About 3 years ago, I googled victims of 9/11, looking for a XXXX, and I was able to contact a family member who I thought was hers and my phone rings, it was a woman, and I forget her name, and she said hi XXXX thank you so much, but her remains were never found, but thank you so much for doing what you did. I wanted to say, I didn't know how this phone call would go, but I just wanted to say I was the last one to be with your loved one, and I made sure she went off peacefully, but unfortunately, I couldn't tell her that because they never found her, so it was a different XXXX.

Participant 6 spoke about finding a small bone. He said,

So, the sifter comes down, and it's about 2 feet wide, loud machine, all these rocks, and all the stuff from 9/11 was coming down, and I saw a bone, and I grabbed it, it was a tiny, tiny bone and I said, "oh my God, this has got to be a

baby.” Even then, we still did not know if there were children involved, children that [sic] perished, and we knew that there were pre-schools in the buildings. So, I took it to the trailer, and a woman there was an anthropologist, and I said I think I found a child’s bone and she took it and just threw it, and I was in shock, and I just looked at her, and she said, “I’m sorry,” she goes, “It’s an animal bone.” So, I said, how would that be, was there like a petting zoo, like maybe a working dog. So, she said . . . the restaurants, that’s a chicken bone, she said all the restaurants, Windows of the World, you know there was a lot of restaurants. I was like, “Thank God it wasn’t a kid.” But it was really weird because she knew right away from looking at it that it was an animal bone, and it blew me for a loop because I was all happy because maybe I have a bone that can help identify a kid, and no, it was a total relief at the same time it wasn’t a child, and it was a piece of chicken bone from one of the restaurants. So that was an interesting moment that I spent down at the landfill, to say the least.

Hypervigilance. Police officers are trained in the academy to be hypervigilant when in situations. Thirty-three percent of the overall sample reported that hypervigilance was not effective in coping during and after 9/11. However, during 9/11, some participants (22%, $n = 2$) reported being hypervigilant. For example, participant 2 spoke about rumors of Anthrax were floating around and how there was a fear that the slurry wall would collapse, and downtown NYC would be flooded. On 9/11, Participant 7 spoke about how a plane was flying overhead and how they thought another plane was coming in. He said he was relieved to find out that it was just a military jet circling the area.

After 9/11, 33% ($n = 3$) of the participant pool continued to report engaging in hypervigilance behavior. Participant 5 reported that because of his experiences during 9/11, he is now overly hypervigilant after 9/11. Participant 5 reported that he currently lives near an airport. He said that it doesn't matter where he is but every time he hears a plane, he looks at it and has concerns that there will be another attack. This feeling of hypervigilance started after 9/11 and continues till today. Participant 6 spoke about always anticipating something else happening and how anything related to terrorism sets off his anxiety. Participant 7 reported that police officers are naturally paranoid people and felt he was paranoid most of his career. He said, "You always sit with your back to the wall in a restaurant, and you always think somebody's got an angle, and you don't trust people."

Need for Additional Programs. Although not recorded as a theme, 22% ($n = 2$) of the participants said there was a need for additional programs after 9/11. On 9/11, all NYC Police Officers were called to respond to work. Many did not know what to expect upon their arrival. These police officers reported to duty regardless of being off duty or on vacation to assist in managing the crises in NYC. Some worked in unsecured areas where the ground below their feet was unstable, and some knew immediately upon seeing the amount of destruction and rubble downtown NYC that there would be no survivors. Some personally knew people that perished that day, while others worked with the families of the deceased. All worked long hours for an extended period; some were unsure if they would even make it home that evening because they worked several days in a row. Many have since lost co-workers because of physical illnesses related to their work in the cleanup efforts during and after 9/11. Most of the sample suffers today from

some form of mental or physical ailments, and a little less than half the sample said they fear for their health and getting sick in the future. Participant 6 spoke about how there is assistance today for physical ailments through the WTCHP, but there is not much available for police officers with mental health issues. He spoke about how there are still so many that suffer today when he said,

It's amazing. I pick it up. I pick it up in people's faces. I see it on the faces, faces of guys in trouble, having a bad day, and say, "Hey, what's going on?" I cry. I can't get out of bed. I see it all the time. Cop after cop after cop.

Participant 8 said he knows of many NYC police officers who suffer from mental health issues alone because they refuse to see a doctor in fear they will be told they have cancer. He said,

There were guys, divorces, and again this all tied in, and I want to make a distinction between everyday life and the 9/11 part of it. People that [sic] lost loved ones, the immediate aftermath, you look at James Zadroga, guys that started dying of cancer and things like that. I know guys right now, part of their coping mechanism, these are people I know very well that will not go to a doctor, period. They will not go see one; it does not matter unless something is broken, different story. But, just going for a regular doctor visit...I can speak verbatim to this; you know what they sayIf I go to a doctor, they are going to tell me I have cancer. So, part of their coping mechanism is they are not dealing with it; they are not going to go, period. Three guys I know right now will flat out tell you they are never going to go to a doctor, period.

Participant 8 felt if programs were made available to him after 9/11, he would have reached out for assistance much earlier. He said,

I wish that there was more, they do have a lot of programs now, but back then, they didn't just because nobody knew. I do feel if there was more of a resource connection, I would have reached out earlier, definitely.

Later in the interview, Participant 8 was talking about police officers who give up and commit suicide. He said,

How many guys turn to drinking, turn to violence, or how many guys just gave up because there was no help, there was nothing, there was no way for them to express to anybody how they felt, or what they were going through, or what they experienced, what they had seen. So, I wish there were more programs that helped cops, again firemen as well. I wish there were more programs available that would have helped us afterwards. That even applies to when the cancer stuff started happening and the screening stuff started happening. You know, when you go for the screening, they don't really ask you; physically, they ask you if you're doing ok, they do a lot of blood work, and they make sure that you are physically ok. But I couldn't tell you the last time when someone actually looked at me and said, "Hey, are you doing, alright?" I'll add to that a little further, and this goes to everybody having different experiences; my brother he's, and like I said, I talk to him all the time, I'm very close to my brother, and even now, he has anxiety over it. I can't tell you how bad he is. He must take medication, and it doesn't happen all the time, but he was working in Manhattan, he saw the plane hit the building firsthand. He has a hard time flying now; he has a hard time if he sees one. I don't

think that necessarily just applies to police, but that can apply to anybody; there was no help afterwards. They (the NYPD) expected us to do a lot down there, and we did and when the bell rang, we all went. I just don't think there was enough done afterwards to help guys that didn't know how to process what happened to them

Writing. When asked what was least effective during 9/11, Participant 2 reported that he wrote notes about what was going on in department logs and that by doing this, he got himself into some trouble. He mentioned that the police department thought he was losing his mind and they were going to send him for a psychological evaluation. He said,

Probably the writing in the department logs seemed to get me in a lot of hot water. They were going to send me to psych services. They thought I was out of my mind, and I was like, you know, if you don't like it, I don't know what to tell you. I mean, I have the desk. I made the entries, and they couldn't really do anything. I know the reason I did it. I was over in some old precincts when I was a police officer and, I'm a history buff ...and I would go down, and I would look for police blotters from like World War 2, World War 1, and the Pearl Harbor attack, and I could see how things were recorded for prosperity. I mean, it was amazing. These were men that, you know, mourned the dead. I'm talking the 10s, the 20s and, I'm not sure if they found anything for the Kennedy assassination. But these are things that I would go into the record room and look for them. It was an old musty room. I think it was the old morgue in my precinct, but I'd take them out and bring them into the break room with me, and I put it back. So, I thought I was doing the right thing, but I probably would not record the things I recorded before.

Emotion-Focused Coping

Health Fears/Fear for Life. On 9/11, phone lines were down, and there was a lack of communication between police officers and their departments. Not fully understanding what was going on made police officers fear for their life. Those that worked at Ground Zero worked in areas where the Twin Towers and other buildings had already fallen where the ground beneath their feet was unstable. There were also rumors that other bombs could be placed in and around Manhattan and a need to be on high alert. Twenty-two percent ($n = 2$) of the police sample talked about fear for their lives as least effective during 9/11. Participant 2 said when all police officers were called in, and he was getting ready to go into the city, he suffered a panic attack. He went to his physician and received some medication that helped him move forward that day and he headed into NYC. He also said that he was a sergeant, and when he got to work that day, he oversaw a team of other officers. He recalled a conversation that he had with a fellow officer saying,

I just stood there, you know, and I was like, listen XXXX. I go. I don't know if you want to put the cops out there. I don't know if it's safe and most of the cops hung back. I think we all understood the seriousness of just personally trying to get to where these people were digging.

The following day (9/12/01), Participant 2 said he was canvassing the area, and the horn blew, and he had to run for his life. He said the dust downtown NYC by the WTC was so thick that he could not see the curbs, and he tripped, landing in a pile of dust. He mentioned that in late 2010 early 2011, he developed PTSD and retired early with 21 plus years on the job. Participant 9 also reported that he feared working that day

because he felt it could cause him some physical and mental issues but felt there was a job that needed to be done.

After 9/11, fear for safety changed to fear for their health. Forty-four percent ($n = 4$) of the sample reported that having health fears has not helped them in their ability to cope. Participant 2 said that it took about a year for his head to clear, and that is when he felt he was breaking down mentally. He said in 2002, he was diagnosed with Active Airway Distress Syndrome. He said he had pain in his chest and difficulty breathing. He said he felt like he was having a heart attack and that he is always concerned that any ache or pain is cancer. Participant 6 reported that after 9/11, he always feared that he would have to suit up and may not make it home that evening. He said today he physically suffers from GERD and chronic sinusitis. He said his health is monitored by the WTCHP and said, "I was diagnosed with that, and it was presumed to be from 9/11 because I did not have it before." He went further to say that he has since had surgery on his nose and that he takes medication for his stomach. Participant 7 reported that he was breathing in the dust from Ground Zero and that he always has health concerns that he will get sick with something. One of his main concerns now is staying healthy. He said that he lost many friends he worked with in the Bronx who got sick and died after 9/11. He said,

There were 275 guys from the precinct in the Bronx that I worked in that died.

There was a guy XXXX; when I was in the Marine reserves, he was a Marine reservist who went into the police department that I knew, and aside from that, it was just hearing about guys dying. XXXX died of cancer a few months later, and then another, this young kid that I use to work with in the Bronx who was a

sergeant and became a lieutenant and he ended up dying of brain cancer about a year later. I stay on retired NYPD chatrooms, and people are always posting stories about guys who are dying from some weird cancer that were [sic] down there. That is the stuff that just affects me now.

Participant 8 reported that he knows many police officers that refuse to seek help because they are fearful that they will be told they have cancer. He said today he is very aware of his mortality, and he feels vulnerable. He said,

It scares the XXXX out of me. Because I am terrified that I am going to wake up tomorrow and I am going to do a screening, and they are going to tell me that I have cancer. I cannot even describe to you how terrified of that I am. I can't even give you the right adjective for that description, terrified that is going to happen to me. So, I don't know if that qualifies as a coping part of it. I became more aware of it, a friend of mine died of cancer a couple of years ago, and that hits home. You're like it could happen to anybody. Listen, anyone can get cancer at any time, but you have a high majority of cops and firemen; there were workers down there too that are in their 40's now that are dying of cancer. That's not normal. That's terrifying.

Anger. Forty-four percent ($n = 4$) of the police sample reported that they experienced anger during 9/11 and how this did not assist them in their coping.

Participant 4 reported that he was angry, "we all were angry," but that he did not hold these feelings in, and his life continued. Participant 5 said he felt anger immediately toward the people that perpetrated this and that he wanted the president to bomb Afghanistan. Participant 6 spoke about being angry during 9/11 because he and his team

were waiting for orders and felt useless. Participant 7 said that during 9/11, he expressed his anger but being angry did not help his situation.

After 9/11, thirty-three percent ($n = 3$) spoke of anger being least effective in their ability to cope. Participant 5 said after 9/11, he was still angry. He said,

After 9/11, I still had a lot of anger in my system, a lot of anger. I felt the US should have bombed Afghanistan, should have killed as many of those Taliban, Al Qaeda XXXX, and also Saudi Arabia because the hijackers were Saudi, 11 were Saudis.

Participant 5 also spoke about his love for NY, saying, “I love NY more than ever. So, if you want one word, it was anger. I was pissed off at the whole Muslim community. I wanted to annihilate them.” He went further to say that the anger came back when he started attending the police and firemen funerals, and he would see the widow and children without their father. He relayed that he was never clinically prescribed anything, but he got involved in sports and drank a little more than he probably should. Participant 7 was asked how he would describe his coping after 9/11, and he remarked that he really did not cope; he was angry and felt he remained angry until it worked itself out. When Participant 8 was asked the same question, he too said that he was angry. He started acting out in different ways, and he could not understand what was going on. At first, he just thought it was stress and that it took about a year or two before he realized he had an issue.

No Support. Twenty-two percent ($n = 2$) of the sample reported that having no support was least effective during and after 9/11. Participant 3 spoke initially about having no support at home and being unable to discuss anything related to 9/11 with his

wife. When asked what did not work well for him, he responded, “What did not work well for me was not having a supportive wife that I could discuss my experiences with.” Participant 6 spoke about how he talks to friends who suffer from mental health issues, and they always say the worst thing is being alone.

While discussing what was least effective in his ability to cope, Participant 4 talked about how some people have great support and family around them and how some do not. He felt those were the ones who spend too much time alone and have no one to speak to when it was needed. He felt that they are alone more, and it builds up inside of them. He discussed further the high rates of suicide in the police department. He said,

My job, unfortunately, there are quite a few people who commit suicide, and I am sure you are aware of that. I think we were averaging at one time about 15 or 16 a year, which is horrible, and that is just my agency that is not even across the nation.

Participant 8 spoke about how there was no emotional support for police officers after 9/11 who could not deal with their experiences. He said this along with no one to express themselves to after 9/11 “they just gave up.”

Anxiety. When asked which of the ways you coped was least effective during and after 9/11, 33% (n = 3) reported experiences with anxiety. Anxiety was mentioned by 22% (n = 2) as being least effective during 9/11. Participant 6 said that he and his team were anxious on 9/11 to get down to Ground Zero and help people and fellow officers. Participant 9 reported that he was depressed a lot and is currently taking anxiety medication.

After 9/11, 22 % ($n = 2$) continued to talk about anxiety as being least effective after 9/11. After 9/11, Participant 6 said he was anxiously anticipating what would happen next. He said his anxiety is one of the most uncomfortable things to experience and would not wish it on anybody. He said,

If you speak to anyone who has ever had anxiety, they always feel they are going to die. I knew I wasn't going to die, so that is almost comical at this point because I've been through it so many times I don't need to say "I'm not going to die" I know I'm not going to..., I knew that 10 anxiety attacks ago. But I would read and talk myself off the ledge, "it's going to go away, it's going to pass."

In 2017, Participant 6 said he had a relapse with his anxiety. He said,

I was a participant in the WTCHP, and I still am, and I went there. I filled out a questionnaire, the psychological aspect of it, and the doctor came out and said we have to have a little talk. So, she sat down with me, and I was able to explain my answers, and she said, do you still have your firearm? and I say yes. She asked if I felt like hurting you [sic] self....no. Do you want to hurt anyone else....no? I'm not suicidal or anything. A lot of the questions I answered were anxiety driven. Like irritable at times, I hear a loud voice. I jump, but these developed later in life. So, they certified me with PTSD. My doctor, my psychologist, has me on file as not a danger to anyone, but I have anxiety disorder and PTSD.

Participant 8 spoke about his brother, who was working down at the WTC and witnessed the plane hit the tower. He said his brother suffers from severe anxiety and is on medication and cannot fly today because of his anxiety and experiences.

Express Emotion (Cry). Overall, 33% ($n = 3$) reported that feeling their emotions and crying did not help during 9/11. Eleven percent ($n = 1$) said they expressed their emotion. Participant 2 said that he did a lot of crying, and it became problematic for him because he had difficulty controlling his emotions during 9/11 and that he could not watch the television without crying during that time. Participant 2 added to his question 1 response, saying he expressed his emotions when the feeling came up and that this later became problematic in his ability to control his emotions. “I also did some crying, of course.” Later in the interview, he noted the improvement he has made in this area after 9/11 by stating, “I’m telling right now I would be crying.”

When asked which of the ways he coped, if any, were least effective after 9/11, Participant 9 reported that he currently suffers from anxiety, depression, and PTSD and experiences horrible flashbacks. He responded to the question by saying, “Nowadays it is different, I cry, go to counseling, I probably drink too much, I’m probably depressed a lot.” Later in the interview, he relayed a sense of hopelessness, saying that he feels he has done everything possible to help himself cope. However, continues to suffer from many mental health side effects for his service during and after 9/11.

Frustration. During 9/11, Participant 6 (11%, $n = 1$) spoke about the confusion that day and the lack of communication. His frustration stemmed from his immediate experience of not having orders and wanted to get to downtown Manhattan to help and assist. He said,

My precinct is literally two blocks from Battery Tunnel, but it was blocked off with traffic. So, we couldn’t get there, and we were told we were not going, so we were very frustrated. Frustrated that we were told to standby.

After 9/11, 22% ($n = 2$) reported that their frustration interfered with their ability to cope. For example, participant 1 talked about the frustration he felt working in downtown NYC and not assisting the families looking for their loved ones. He recalled feeling, “here you had these people that you really wanted to help, and you really couldn’t.” Participant 8 reported after 9/11, he did not know what was wrong with him, saying, “I was angry and frustrated, and for the longest time I couldn’t understand why certain things were coming out in certain ways with me.”

Inability to Control Emotions. After 9/11, Thirty-three percent ($n = 3$) of the NYC police officer sample discussed being emotional at times when thinking back on 9/11. When asked what was least effective after 9/11, Participant 2 said, After 9/11, I might have spoken about it in passing with people that weren't familiar with it, but it usually led to, you know, usually led to me not being able to control my emotions, which I couldn't understand why at that time. Participant 8 talked about getting emotional when he thinks of the things he did during and after 9/11, now saying, “I get emotional; it was hard.” Later in the interview, he responded that he did not realize he was having an issue at first. It was not until well after the recovery and cleanup that he realized he was having issues coping. He said knowing what he knows now; he would have done things differently.

He said,

In the aftermath, when things start to happen that you start to put two and two together, and that is when things are not right. I hope I am making sense when I say that because it was after, it wasn’t during it was after that you start realizing

that something is off. I am not supposed to be like this....and again, it goes back to what I said; looking back, it took me a while to get there.

During the interview, while Participant 9 was discussing his post on 9/11, he became tearful. He said his post was working the FDR Drive, and he was driving downtown NYC by the South Street Seaport heliport when he witnessed one of the terrorist planes hit the WTC towers. He said that he was present before, during, and after 9/11. His experiences were unique in comparison to the other participants in this study. He said, "I was in the lobby at one time, I witness the people jumping off the...(long pause and becomes tearful). So, my flashbacks are a little different, out of everyone I know."

Flashbacks. Overall, 22% ($n = 2$) of the sample reported having flashbacks. Eleven percent ($n = 1$) of the sample reported that they found these memories to be least effective in their coping during and after 9/11. For example, during 9/11, Participant 9 spoke about having flashbacks of what he saw and experienced that day. "It was horrific," he said. At the end of the interview, Participant 5 was asked if there was anything further to say, he spoke about the flashbacks he continues to have today. He said that his flashbacks are so bad that he usually takes off work on the anniversary day each year. He reported today he is hypervigilant when he hears a plane flying low because it still triggers his anxiety, and the flashbacks return. He said, "I look at that and always watched the plane, always watch the aircrafts [sic]."

Panic. During and after 9/11, 22% ($n = 2$) of the sample verbalized experiencing panic attacks. Panic was reported by 11% ($n = 1$) as being least effective during 9/11. Participant 2 recalled the morning of 9/11 when he experienced his first panic attack. He

was not scheduled to work that day and was dropping his children at school when he started hearing the reports of the terrorist activity in NYC and the Pentagon. He said, “my heart was beating like 130 beats a minute, and I am like I cannot believe this.” Then he said a call came through for all NYC police officers to report to duty. He said he felt like he was having a heart attack and went to his doctor down the street to be checked out before heading into NYC. He said,

So, I went in, and my pulse was through the roof, and they gave me a couple of anti-anxiety pills, and I was surprised because they had them in the office. They gave me about 2 days’ worth of anti-anxiety pills. So, I took one right away, and [I] am not going to lie, as I was driving in, everything started to calm down and digest in my head a little bit.

Disappointment. When asked to describe his experience of coping, Participant 1 reported that he worked the bucket brigade at Ground Zero and spoke of the disappointment that he and his fellow officers felt when they realized there were no survivors were to be found. He said,

You know, we were removing material, trying to find; the first couple days, we were trying to find survivors. You know, we knew that there were thousands of people missing, and you were kind of hoping the first couple of days that you know you'd find a cavern or something with a bunch of people in it trying to escape and get out, which that never happened. And that was kind of disappointing, but then at some point, a couple [of] weeks later, it turned into a recovery type thing where that was our experience.

At the end of the interview, Participant 7's wife spoke about her husband, stating that she recalls that he was freaked out that day trying to get word to her and wishing for something more. She said, "You (her husband) wished there were real survivors, and you kept saying there is nobody alive down there, there is nobody under the rubble."

Resentment. Participant 1 was the only participant to discuss feeling resentment regarding a decision he made on that day. He was in charge of a team of other officers and had a police officer returning from an injury in his group. He said based on the confusion with work assignments and having this guy with him; he held back his team. He said he felt resentment when he said, "If I have any resentment is that if he wasn't theremaybe he saved my life."

Distrust in Others. One of the least effective coping mechanisms was the distrust felt toward others. Participant 7 went into detail about the distrust he felt toward all Muslims after 9/11 and how he was angry. He said,

After 9/11, I do remember being very distrustful of certain people, specifically of Muslims, and that lasted a long time. In terms of coping, I didn't really cope with it other than to be angry. But as time moved on and as I moved on in life, I actually work with a lot of Muslims now, doctors/nurses, mostly doctors, and they are great people. It was just a matter of realizing that there are bad people in every group and that group of people were very bad. So, I didn't suffer a lot with PTSD, but I did suffer a lot of distrust after 9/11, and that would be it. I think the most lasting thing, actually ...I never really thought about it; the most lasting thing that stayed with me after 9/11 was my mistrust of Muslims. It took time and to learn to understand other people, not generalizing saying that they're all bad.

When Participant 7 was asked what he would do differently in the future, he responded with, "I would probably not generalize so much and learn to accept people are generally good." When he was asked why he thought this worked well, he said,

Mental health just took time. I did not actively pursue anything, whatever issues I had after 9/11, which were basically anger toward the Muslims and towards people I thought were out to destroy this country; it just took time. I didn't actively do anything other than when I did start working as a nurse, meeting people that were Muslim and working with them on a daily basis and getting to know them as people that showed me that there good, there are good people. This was shortly after 9/11, maybe the next year, and it was my cousin who always tries to be a little controversial, and we invited him over, he was a PA in the city, and he just loves to be controversial. He said can I bring a friend for dinner, and we said, of course, bring a friend; it may have been Christmas that year. It was Christmas Eve 2001, so he walks in the door with a Muslim; he was a very nice kid, he was a nice guy. He was very friendly, gracious, and grateful. But my thinking at the time was that he was just one person, right? Despite the anger I had toward those people, I still did my job. If I had to deal with them, I would still deal with them professionally. I don't want you to get the picture that I am an out and out racist; it was basically a lack of trust. Like I said in the military, that's what they do when they go out on a mission, anybody police, firemen, they just do what they have to do at the time, maybe they think about it afterwards.

No Issue

During the interviews, 78% ($n = 7$) of the sample reported at some point not having any issues coping before or after 9/11. However, 44% ($n = 4$) reported that they had no issues after 9/11 in their ability to cope. Participant 1 said although assistance was provided, he never felt like he needed any additional assistance in his ability to cope during 9/11. He said, “You know the job was very good, the NYPD being so big they were offering counseling. I didn't take it. I didn't take up speaking to anybody professionally. I didn't feel like I had to.” He went further to say that the WTCHP is monitoring him and that they ask him a barrage of questions every year. Even though he saw horrific things, he never felt he needed assistance to cope with his experiences.

When asked if he would do anything different, Participant 4 spoke about how he did not think anything did not work for him. He just went about his daily life, and there was nothing. He did recall feeling angry and responded, “I was angry at what happened, but I didn't hold those feelings in.” Participant 9 stated that he felt the ways he coped worked well for him, and he would not do anything different, stating, “I feel the way I coped with it is the right way. Immediately after, I just said I have a job to do. I went to work every day. I focused on work. I focused on family.”

Thirty-three percent of the sample ($n = 3$) reported having no issue coping after 9/11. After 9/11, several participants reported that they felt they coped well. They were able to maintain their life utilizing the coping mechanisms and resources they had available to them. For example, Participant 1, when asked of the ways he coped, which, if any, did he perceive not to work well, said, “I don't know if I tried a lot of other ways. I didn't seek any kind of professional help.”

When asked the same question, Participant 4 responded, “I don’t think there was [sic] anything that didn’t work.” Participant 7 said, “I don’t know if I have an answer for you. I don’t know what I did other than what I had to do.” However, he also added, “I would probably do nothing differently honestly.” Participant 9 also felt that he did not have any ways of coping that did not work well.

Avoidance

Avoidance was mentioned by 67% ($n = 6$) of the overall sample. However, when looking at least effective coping during 9/11, 33% ($n = 3$) reported avoiding reminders, watching TV, and talking about what they engaged in or saw. Physical reminders were reported as emotional triggers. A couple of participants reported they avoided all reminders of 9/11 initially and that this worked for them. However, after 9/11, some reported this was not so much the case. Participant 6 reported the worst was being alone or if you see something on the TV. He said, “Any reminders of 9/11 didn’t help.” Participant 8 said he clearly remembers not wanting to talk about it, and people would always ask him questions. He said,

I would bury all that inside of me because I did not want to let it out. I was afraid of it; I didn’t like it. It bothered me. The more I talked about it, the more I couldn’t sleep. I just tried to keep everything inside. That was one of the ways I coped.

Participant 9 spoke about avoiding the TV during 9/11 because there were constant reminders all the time. In addition, he reported that he would see things that reminded him on the back of people’s cars and even hear certain songs on the radio that were played during that time.

After 9/11, 33% ($n = 3$) of the participant sample reported that they continued to use avoidance as a coping mechanism after 9/11, and some had the realization that it did not work well for them. Participant 2 that he avoided all things related to 9/11 until he retired and sought therapy. He said,

The biggest one was avoiding anything that had pictures or documentaries or anything involving the Trade Towers. I avoid all that until after I retired, and then my therapist sort of arm-wrestled me into looking more seriously at the situation and digesting it. I mean, I couldn't look at the television and, without crying, and I never really spoke about it to anybody.

Participant 6 spoke about having difficulty watching the TV when he said, "I still to this day, 19 years later, cannot watch anything." Participant 8 said that he knows guys personally who will never go to the doctor today because they fear they will be told that they have cancer. He said, "so part of their coping is not dealing with it. They are not going to go, period!" Lastly, Participant 9 said that he continues to use avoidance and currently takes medication and sees a therapist. He said, "Nowadays, it is different."

Summary

On 9/11, NYC police officers in the participant sample engaged in more problem-focused coping. Many NYC police officers reported they initially acted on autopilot and focused on their work and what they were told to do. All participants (100%, $n = 9$) reported that focus on work and talking to others was the most effective in their ability to cope with their experiences. The second most problem-focused theme discussed by 78% ($n = 7$) of the participant sample was seeking mental health assistance. Previous work experience and focusing on others were mentioned by 56% ($n = 5$) of the sample. Staying

busy was reported by 44% ($n = 4$) percent of the sample, and exercise and stigma were reported by 33% ($n = 3$) participants. Finally, self-soothing was reported by 11% ($n = 1$) of the participant sample.

Within the area of emotion-/ problem-focused coping, Faith, drinking, and working in a disorganized environment was reported most frequently by 67% ($n = 6$) of the sample. Long hours were mentioned by 55% ($n = 5$) of the time, and 44% ($n = 4$) of responders reported dealing with families and body parts. The last few themes cited were hypervigilance (33%, $n = 3$), lack of programs (22%, $n = 2$), and writing (11%, $n = 1$).

Safety and health fears were cited as being the most frequently mentioned emotion-focused coping technique. Being angry or feeling angry (56%, $n = 5$) was the second most frequently endorsed theme by the participants. Having no support (44%, $n = 4$) was the least effective way to cope. Feeling anxiety, crying, feeling gratitude, frustration, or inability to control emotions was mentioned by 33% ($n = 3$) of the sample. Flashbacks, the use of humor, feeling panic, and disappointment were listed by 22% ($n = 2$) of the participants. Eleven percent of the participants engaged in feeling resentment, distrust of others, and depression, while others mentioned reading and long-term exposure to the events of 9/11. Finally, having no issue (78%, $n = 7$) and the use of avoidance (67%, $n = 6$) were frequently mentioned by the NYC police sample.

During 9/11, 67% ($n = 6$) of the sample reported focusing on work as the most effective mechanism. This was followed by talking to others (56%, $n = 5$) and focusing on other people (56%, $n = 5$). Police officers specifically spoke about talking to co-workers as their most effective resource because they felt other officers had similar experiences and they felt understood. Speaking with family, specifically, their wife, was

second-best in the ability to cope during 9/11. Utilizing previous experience (44%, $n = 4$), and having faith (44%, $n = 4$), was reported to be most effective coping practice during 9/11. Staying busy (22%, $n = 2$) and drinking (22%, $n = 2$) was reported as being effective ways to cope during 9/11. One participant mentioned that during 9/11, he knew it was possible that he would get sick from the work he was doing, but every day he knew he had to do his job. Finally, feeling angry, crying, feeling gratitude, and using humor were mentioned as being effective in their ability to cope during 9/11. Forty-four percent of the participants reported having no issue coping during 9/11, and 44% ($n = 4$) said the use of avoidance was beneficial initially.

The most effective coping practice after 9/11 that was mentioned by more than half the sample (67%, $n = 6$) was seeking professional help. Having faith or engaging in faith practices (44%, $n = 4$) was the second most mentioned theme by participants. Staying busy (33%, $n = 3$) and exercise (33%, $n = 3$) were reported to assist the participants in their coping after 9/11. Focus on work and others, talking with others, drinking, getting a second day off, taking vacation were some of the most effective coping practices that participants (22%, $n=2$) felt were effective. Self-soothe (11%, $n = 1$), being hypervigilant (11%, $n = 1$), journaling (11%, $n = 1$), having gratitude (11%, $n = 1$), and the use of humor (11%, $n = 1$) were all mentioned by police officers as being beneficial in their ability to cope after 9/11. Police officers also reported having no issue (44%, $n = 4$) and the use of avoidance (56%, $n = 5$) as the most effective coping practices after 9/11. Long hours (22%, $n=2$) and feeling anger (11%, $n=1$) were also mentioned but long hours was viewed as assisting the police officers in staying busy and

focused, while feeling angry was an unconscious process that was retrospectively recalled as being present during that time.

Fifty-six percent ($n = 5$) of the participant sample mentioned working in a disorganized environment as being least effective during 9/11. Working long hours (44%, $n = 4$) and feeling anger (44%, $n = 4$) was spoken of by NYC police officers in the sample as being the least effective in their ability to cope during 9/11. Focusing on work (33%, $n = 3$) and talking with others (33%, $n = 3$) was reported by participants. Twenty-two percent of the participant sample reported that seeking help, focus on others, not staying busy, dealing with families of the deceased, handling body parts, hypervigilance, safety fears, having no support, anxiety, and disappointment were all mentioned as being least effective during 9/11 by 22% ($n = 2$) of the participant sample. Eleven percent ($n = 1$) reported the stigma related to seeking mental health, writing, crying, frustration, flashbacks, and panic were all ineffective in the sample's ability to cope during 9/11. Forty-four percent ($n = 4$) of the sample believed they had no issues coping after 9/11 and therefore had nothing to report in this category. Avoidance was used by 33% ($n = 3$) of the sample after 9/11 and reported as ineffective in assisting in their coping.

The most frequently spoken about, least effective theme after 9/11 dealt with interacting with deceased's family members (56%, $n = 5$). Stigma, anger, and inability to control emotions were spoken about by 33% ($n = 3$) of the participant sample as being least effective after 9/11. Not seeking help, not focusing on others, drinking, dealing with a family member of the deceased, handling body parts, being hypervigilant, having a lack of programs available, having fears regarding health, having no support, being anxious, and feeling frustrated was reported as being least effective after 9/11 by 22% ($n = 2$) of

the participants. Not staying busy, crying, flashbacks, distrust of others, depression, and having long-term exposure were spoken about by 11% of the participant sample as being least effective after 9/11. Forty-four percent of the sample reported experiencing no issue coping after 9/11, and 33% of the sample reported the use of avoidance was not beneficial in their ability to cope after 9/11.

Chapter 5 will discuss the interpretation of the finding and comparing these with what has been found in the existing literature. The findings from this study will also be analyzed and interpreted in the context of the conceptual framework. The limitations, recommendations, implications, and conclusions of the study are also discussed in Chapter 5.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this qualitative, hermeneutic, phenomenological study was to explore NYC police officers' understanding of the coping strategies they used during and after the terrorist attack on 9/11. The terrorist attack on the WTC towers provided a unique opportunity to understand the coping practices of a small group of NYC police officers during a time of crisis. No other research study focused solely on the coping ability of police officers during and after 9/11. I conducted this study to fill the gap in the literature by providing a deeper understanding of the lived experiences of a small sample of NYC police officers who responded to the attacks on the WTC towers on 9/11. This study looked at what police officers felt was the most effective and least effective in their ability to cope during and after 9/11. My intention in using a phenomenological study design was to understand how NYC police officers described their experiences of coping during a chaotic and uncertain time specific to the aftermath of a terrorist attack.

I begin this chapter by offering an interpretation of the findings from the research that was conducted. Data from the study contributes to the scholarly literature by adding NYC police officers' perspectives of coping during and after a terrorist attack. I explored the lived experiences of a small group of NYC police officers, focusing on the coping practices participants described as most helpful during and after 9/11. I also looked at what coping practices participants felt were least effective in their ability to cope during and after 9/11. The RQs were as follows:

RQ1: What coping mechanisms do a small sample of NYC police officers perceive worked best during and after 9/11?

RQ2: What coping mechanisms do a small sample of NYC police officers perceive did not work well during and after 9/11?

In this chapter, I explain the study's key findings and compare the findings to the literature review in Chapter 2. In addition, I provide an interpretation of the findings, discussion of the limitations to the study, recommendations for clinical implications, and a conclusion.

Overview of the Findings

During and after 9/11, police officers utilized prior knowledge, work experience, personal beliefs, values, and motivation to evaluate the level of risk involved and what they could do to cope with their situation. The central tenets of the TMSC by Lazarus and Folkman (1984) is that stress results from the interaction between the person and their environment. The ability of police officers to cope with their stressful situations was dependent on the appraisal process and available resources. How an individual appraises their situation determines how they cope. This is a continuous process where appraisals can become reappraisals that can change over time. The appraisals made by police officers included individual perceptions, interpretations, and their reactions to what they were experiencing and how much they felt they could influence changing their situation. If police officers appraised their situation as changeable, they believed that they could do something to change their surroundings and engaged in problem-focused coping. Changing the environment became a motivating force on 9/11 and the days that followed. However, after the cleanup and recovery efforts were over, participants reappraised their situation. Some realized they were having issues emotionally and needed assistance to process their experiences.

Participants reported using problem-focused coping techniques such as focusing on work and others, talking to coworkers, drawing from their previous experience, exercising, and engaging in faith practices as the most effective coping mechanisms during and after 9/11. Participants felt emotion-focused coping was least effective during and after 9/11. The most frequently discussed theme and the most effective coping mechanism utilized during 9/11 was the attention participants placed on work-related tasks; this was followed by talking to coworkers about their experiences. Attention to work-related tasks kept participants busy as they prioritized focusing their attention on changing the environment where they posted daily. When they spoke with coworkers, participants found it helpful to know someone with similar experiences and feelings. Having this connection with another police officer helped normalize their experience and what they were feeling.

Seeking mental health assistance was another theme reported by the participants in this study. Overall, 78% of the sample sought mental health assistance at some point; however, only 22% sought mental health assistance shortly after 9/11, and 67% sought help long after 9/11 was over. In addition, having faith practices, such as praying and attending mass, and going for a drink with fellow officers after long shifts, were also reported to be effective in assisting police officers in their ability to cope during and after 9/11. For example, having faith allowed police officers to focus on something positive during a difficult time. In addition, going out for a few drinks with fellow officers after long shifts provided participants a forum to talk to one another and process their day; often, this was perceived as being unintentional. Lastly, having gratitude and humor was also considered effective.

A major theme frequently discussed by participants was the disorganization around their worksites and the areas where they worked. Participating police officers initially feared for their safety and felt this hindered their ability to cope during 9/11. The disorganization around the worksite, working long hours under dangerous conditions, and feeling angry were reported to be least effective in NYC police officers' ability to cope during 9/11.

Another theme related to this study related to the perception of not having an issue with coping. Seventy-eight percent ($n = 7$) of participants stated that they felt they had no issue coping during and after 9/11. However, many of these police officers utilized at least one positive coping technique, such as talking to others, focusing on work, seeking mental health assistance, focusing on others, and relying on prior experience. Lastly, 67% ($n = 6$) of the participant sample referenced the use of avoidance during and after 9/11. Forty-four percent ($n = 4$) perceived avoidance as helpful coping during 9/11, while 56% ($n = 5$) of the sample perceived avoidance as most effective in their ability to cope after 9/11. A smaller percentage, 33% ($n = 3$), perceived avoidance to be least effective during and after 9/11. Different forms of avoidance included avoiding thinking or talking about the disaster or avoiding feelings related to it. After 9/11, some participants continue to use avoidance by steering clear of activities or situations because they are reminders of the disaster.

One of the most frequently reported themes that was the least effective in assisting participants in their ability to cope was dealing with the families of the deceased. Many participants felt ineffective at their job when they could not help family members of the deceased find their loved ones, and many spoke about feeling sympathy

for the families they encountered. One participant stated, “they were good decent people.” Although dealing with families during and after 9/11 was repeatedly cited as least effective, several of the participants reframed this experience by focusing on the positive. For example, a few of the participants who worked at Fish Kill Landfill or on “The Pile” found focusing on work-related tasks was effective because they felt they were on a mission to sort through debris in hopes of finding something that might bring closure to these families.

After several reviews of the data, three main categories emerged in the findings of the research. Specifically, the themes mentioned by participating NYC police officers during their interview brought forth three main categories: positive versus negative coping, organization and operational stress, and the use of short-term versus long-term coping strategies. In the following sections, I discuss these categories in detail and how they relate to previous literature.

Positive Versus Negative Coping

Positive coping includes elements that promote sustainable health and continued performance. Negative coping mechanisms increase stress and interfere with individual functioning by affording individuals only temporary relief from their experiences and emotions. In the literature, problem-focused (task-orientated) coping is viewed as a positive coping mechanism that produces positive outcomes, while emotion-focused coping is associated as a negative coping mechanism and negative outcomes (Clifton et al., 2018; Patterson, 2016). Police officers use problem-focused coping when they view their situation as changeable and feel an internal locus of control (Patterson, 2016). The perception of control during the stress-appraisal process is essential for healthy coping

and required when assessing the relationship between the work environment and coping abilities of police officers who deal with critical incidents (Brough et al., 2018; Clifton et al., 2018; Greinacher et al., 2019; Park, 2017). Both positive and negative coping behaviors are present in the New York Police Department (Arble & Arnetz, 2017; Dasaro et al., 2017; Regehr et al., 2019). However, in the face of 9/11, most NYC police officers in the current study bounced back, displaying their resiliency.

The participant sample perceived more positive problem-focused coping compared to negative emotion-focused coping as being helpful. Police officers are problem solvers by trade. As such, it is common for them to look for solutions to problems. Initially, participants reported that they did not think about their ability to cope and did what they were assigned. The participants focused on changing and improving their environment and assisting others in any way possible. Some of the positive coping techniques that participants initially found beneficial were later reported as being less effective as time passed. Specifically, focusing on work, talking with others, and focusing on others were the most frequently spoken about positive coping techniques during 9/11. However, after the 9/11 cleanup and recovery operations were complete, NYC police officers were left to deal with their unwanted emotions and reported these techniques as being less effective. Some participants realized that they were having issues and needed to process their emotions related to their experiences. These participants cognitively reappraised their situation and focused on how they were doing physically and mentally. After 9/11, police officers engaged again in positive coping practices, but their focus was on more self-care-related activities to assist them in coping emotionally, such as seeking mental health assistance and engaging in faith practices.

Occupational and Operational Stress

Occupation and operational stress have been noted in the literature as being a hindrance to police officers (Brough et al., 2018; Feder et al., 2016; Violanti et al., 2017). Some of the most frequently discussed themes talked about by participants included occupational exposures and operational stress. Brough et al. (2018) referred to additional stress beyond what police officers normally experience as extraorganizational stress. The occupational exposure and organization stress that NYC police officers experienced can be considered extraorganizational because police performed duties above and beyond what they normally experience (Feder et al., 2016). NYC police officers worked long hours in a disorganized work environment and felt a lack of support from their department. Some dealt with grieving families, and many attended the funerals of others. Others sorted debris, looking for body parts and personal belongings of the deceased. Dasaro et al. (2017) mentioned that working with grieving families and sorting debris while looking for body parts and personal items were different tasks that NYC police officers performed compared to their day-to-day activities. Police were also exposed to negative sensory information, as reported by Feder et al. (2016), such as foul odors and handling the dead, and these exposures went on for many months. These findings coincide with previous research in that prolonged exposure to handling body parts and addressing grieving families created challenges for NYC police officers that negatively influenced their ability to cope (Dasaro et al., 2017; Violanti et al., 2017).

Focusing on work-related tasks was initially reported as being the most effective coping practice during 9/11. Participants felt it was their mission to go to work and assist in the rescue and recovery efforts. They reported staying busy and focusing on work-

related tasks, which kept their minds occupied. Initially, many reported that they were too busy to think about how they were coping and simply did what they were told to do. Some learned to desensitize their emotions as they sorted through debris to find body parts. For many weeks, they did their job in hopes of assisting families of the deceased in finding some closure. As long-term exposure to negative environmental influences continued for months after 9/11, the use of these problem-focused strategies, although still engaged, were less frequently reported as being effective after 9/11. Some police officers in the sample were exposed to negative environmental exposures such as sorting through debris for body parts and encountering horrific smells and sights; they noted performing these tasks for months after 9/11 with little downtime. Long-term exposure to this negative environment eventually wore these men down emotionally. Ongoing exposures to negative sensory information influenced long-term psychological harm to some of this study's NYC police participant sample, as was also noted in the studies conducted by Feder et al. (2016) and Schwarzer et al. (2016).

A major obstacle after 9/11 that participants reported was their ability to cope with the disorganized nature of the environment and the work conditions. Initially, participants said there was a lack of communication between departments, and many were held back, which made them frustrated and anxious to get to downtown NYC to do their job and assist others. Other police officers reported feeling their life was in danger while working in unsecured areas and having the ground beneath their feet be unstable. For example, one police officer reported that the dust on the ground was so thick that when the bell to run was set off indicating danger, he ran and tripped over a curb and face-planted in the dust and rubble. The environment played a major role in how these

police officers coped during and after 9/11 and was vastly different from what they normally experienced as police officers.

Several participants perceived that they felt unsupported by the police department during the cleanup and recovery efforts. They reported that they did what they were told to do and that there was a general feeling among police officers during that time that complaining about their situation would not be tolerated. A few mentioned mental health support being scarcely offered. One participant spoke about being offered a one-day in-service that he felt was helpful, but it “wasn’t enough,” while another stated it was “the department putting a band-aid on the situation.” Another participant reported that he was not offered any mental health services from the department until a year post-9/11. Proper access to resources was needed, but the NYPD provided few, according to participants.

Short-Term Versus Long-Term Coping

One major finding was in the use of short-term and long-term coping strategies. Most of the research on coping contends that some effective short-term coping strategies can lead to ineffective long-term coping (Brooks et al., 2016; Regehr et al., 2019). This discrepancy was the case in the current study when looking at problem-focused coping. Police officers initially spoke about utilizing strategies such as focusing on work, talking to others, focusing on others, and previous experience as being the most effective coping techniques during 9/11. However, after 9/11, fewer participants perceived and indicated that these strategies were helpful. The environment played a major role in influencing problem-focused coping mechanisms police officers engaged in, causing these techniques to become less effective after 9/11. After 9/11 cleanup and recovery efforts were completed, participants reappraised their situation and shifted their attention from

focusing on others to focus on themselves. Once participants returned to a normal work schedule, they re-evaluated what was important to them, and they became more focused on self-care practices. Although focusing on others continued to be mentioned as an effective coping practice after 9/11, it was also reported as being less effective.

In contrast, participants mentioned emotion-focused coping techniques they perceived as effective during 9/11, such as gratitude and humor, continued to be important years later. This finding is important because it displays how problem-focused coping is influenced by locus of control as contended by Lazarus and Folkman (1984) in the TMSC. Participants' use of gratitude and humor also emphasizes how emotion-focused coping is useful in regulating emotional states. If police officers continued to focus more on work and other people after their environment had changed, they would have taken less action to preserve their own health. Without self-care practices, individuals eventually break down physically and mentally, and these consequences can be longstanding (Denik-Florea et al., 2020).

Another theme reported from this study related to the work environment and the operational and occupational demands. Stressors experienced influenced the positive and negative short-term and long-term consequences of coping. As contended by Lazarus and Folkman (1984), the transaction between the person, their environment, and the outcome influence how stress is managed and how an individual cope. In addition, the types of organizational exposure and the operational stress experienced were different from what they normally experienced in their day-to-day operations and influenced participants' ability to cope negatively. Lastly, as Chopko, Palmieri, et al. (2018) mentioned, the emotional distancing, compartmentalization of feelings, and the use of avoidance to focus

on work-related tasks assisted participants in the sample to cope in the short term.

However, long-term exposure to negative environmental influences caused these police officers stress, and stress left untreated caused these men long-term mental health issues.

Overall, the study results revealed three categories that influenced participants' ability to cope: positive versus negative coping, organization and operational stress, and short-term versus long-term coping practices. Participants reported more positive coping techniques during and after 9/11 as helpful. After 9/11 cleanup and recovery operations had ceased, NYC police officers were left to deal with their emotions. Some of the positive coping techniques utilized that were perceived as helpful included focus on work, talking with co-workers, and focusing on others, but these became less effective after 9/11. Participants re-adjusted their cognitive appraisals after 9/11 to focus on self-care techniques to improve their mental health. The organization and operational stress that participants were exposed to were perceived to hinder their ability to cope. Lastly, the compartmentalizing of feelings and focus on work were perceived to be beneficial during 9/11. However, long-term exposure to negative environmental influences made these coping mechanisms less effective after 9/11. Participants once again reappraised their situation and engaged in problem-focused coping. However, participants focused more on themselves and their emotions after 9/11 by seeking therapy to managing their emotional states and achieve long-term positive mental health.

The following section is the interpretation of the findings and is based on the results of the study. The findings will be analyzed and interpreted in the context of the theoretical framework offered by Lazarus and Folkman's TMSC and the appraisal process participants made at various times. First, the internal and external demands

placed upon participants and the perceived personal and social resources to deal with them are discussed. The findings will then be compared to knowledge in coping by comparing the results to the peer-reviewed literature described in Chapter 2.

Interpretation of the Findings

Participants cycled through a primary appraisal process during 9/11 and a secondary appraisal process as they coped with the unfolding of events on 9/11 and in the following days. This cycling process was continuous, and participants adjusted their cognitive appraisals as needed to achieve a sense of balance and equilibrium in their life. This research study confirms the findings from Lazarus and Folkman's (1984) TMSC that an individual's ability to cope engages a triadic reciprocal exchange between the individual, their environment, and the behavior they engage in and how this is constantly changing. The coping mechanisms' effectiveness depended on the type of stress, individual disposition, circumstance, and resources available. During the triadic reciprocal exchange, participants appraised their situation and looked at how much they could influence their environment and reduce the level of stress that must be endured.

As participants appraised their situation, they looked at their available resources and problem-solved what they could do to cope effectively. This finding is inconsistent in the literature, as reported by McCarthy and Lawrence (2016), who found that police recruits engaged in more avoidance coping and less task-orientated coping at the end of their training. In the current study, problem-focused coping was engaged, and 78% ($n = 7$) of the participant sample reported at some point having no issue coping either during or after 9/11. Participants perceived their situation as changeable, and they engaged in

problem-focused coping mechanisms to eliminate their source of stress within their environment.

Problem-focused coping was adaptive during and after 9/11 and produced positive outcomes. After 9/11, participants continued to make attempts at changing their relationship with their situation. For some, attempts were made to diminish the emotional burden they felt when left with their emotions. The use of avoidance was initially used during 9/11 and was perceived to be effective by 44% ($n = 4$) of the sample, while 56% ($n = 5$) reported avoidance as being effective after 9/11. Thirty-three percent of the sample ($n = 3$) reported avoidance was least effective during and after 9/11. Cognitive avoidance allowed police officers to pause their emotions and gave them time to process the stress they were experiencing (Chopko, Palmieri, et al., 2018).

In contrast to most participants, one participant immediately experienced an anxiety attack when he received his call to duty on 9/11. It was his day off, and he immediately acknowledged he was having an issue and went to see his doctor and received anxiety medication before heading into NYC. His initial appraisal of the day was that he was having an issue that needed immediate attention before he went to work. At the same time, another NYC police officer appraised his situation differently because he was within a few blocks away from the WTC towers and responded immediately. He was exposed to the public chaos in downtown NYC and observed individuals jumping to their deaths. He further mentioned that he worked downtown for months following the attack on NYC. His cognitive appraisal was different from the rest of the participant sample as he felt his life was in jeopardy. He reported that he did his job, knowing there would most likely be repercussions from his experience. He reported he sees a mental

health counselor today and continues to avoid all things related to 9/11 to cope. Trauma frequency and severity played a significant role in the lack of PTG this participant experienced, as was also found in Chopko, Palmieri, et al. (2018). His exposure and experiences set him apart from the rest of the sample, and he reported that he continues to suffer from PTSD, anxiety, and depression.

After participants appraised the situation as not being a threat to their own life, many compartmentalized their feelings and did what they were told to do. They described this experience as acting on “autopilot.” As reported in the literature by Chopko, Palmieri, et al. (2018), compartmentalizing and avoiding their feelings was an effective short-term coping mechanism that assisted participants in focusing on job-related tasks. All participants reported no preparation for the devastation of seeing both Trade Center towers in rubble on the ground and the amount of death and destruction they witnessed. Several participants mentioned they had the immediate awareness of knowing that there would be few, if any, survivors. However, none of them ever reported this appraisal to anyone else as they continued to search for survivors.

After making a primary appraisal, participants reappraised their situation and engaged in problem-focused coping. Participants determined what could be done and how they could help others. Participants reported talking with others to be the best coping mechanism during and after 9/11. They reported unintentionally processing their feelings with co-workers and perceived talking peer-to-peer as the best and most supportive coping mechanism during and after 9/11. Being able to speak with someone who had similar experiences and feelings assisted them in their ability to cope. Speaking with a family member was the second most discussed area of social support. However, some

participants said they did not speak in as much detail with their spouses as they did co-workers because they didn't want to expose them to the devastation and felt they would not understand. Some of the police sample reported that they were aware that mental health assistance was made available to them, while others were disappointed in the NYPD for not making more services available. Several participants said they would never seek services within the department for fear of the repercussions of doing so and job insecurity.

The findings in this study coincide with previous research on coping with police officers (Chopko, Palmieri, et al., 2018; Jordan et al., 2018, Lowel et al., 2018). Participants were resilient during and after 9/11. Although, many continue to have mental health consequences from the work they performed. Some of the long-term consequences of working on and during 9/11 include PTSD, depression, and anxiety (Bowler et al., 2016). Research has shown that over time the PTSD rates in general often decline. However, this was not the case with participants in this sample. Participants who worked on 9/11 and during the weeks that followed spoke about the delayed onset of mental health-related issues that included PTSD, anxiety, and depression. For most, it was not until the 9/11 rescue and recovery operation ceased that many of the participants started to realize they were having issues, and some did not seek help until after they had retired.

Using the TMSC and looking at the triadic reciprocal exchange between the participant, their environment, and their actions, police officers in this sample appraised their situation at various times by engaging available resources and effective problem-focusing coping mechanisms. Initially, this was an unconscious process for many participants, but it became clear after 9/11 when a few realized they were having trouble

functioning emotionally and that there was an issue that needed attending. Upon this new understanding, participants adjusted their appraisal (reappraisal) and focused their attention on problem-solving solutions to improve their mental health. As a result, at the time of their interviews, all participants in this sample were members of the World Trade Health Registry, displaying their continued need today to locate resources and their willingness to accept treatment to improve their well-being.

Most of the growth seen in this participant sample was around their maturity in learning about their mental health needs and implementing more effective problem-focused coping skills. This growth displayed a change in priorities and some of the PTG that can be experienced after trauma. During the initial cognitive appraisal process, participants feared for their life and that of others. Once the initial threat to life was over, their focus changed to managing the environment. After 9/11, participants once again evaluated their situation for meaning and significance and started to look at the consequences of their actions, including any of the mental and physical effects they were experiencing. For some, this appraisal was immediate, and for others, it happened years after their involvement. However, participants continue to problem-solve solutions to improve their condition.

As Lazarus and Folkman (1984) have mentioned, the negative coping practices that participants engaged in were related to their attitudes and feelings about their environment, and these were directly related to their participation in specific activities. The feeling that they could make a difference assisted participants in their persistence at job-related activities regardless of negative exposure to traumatic environmental influences. Prior research is consistent in identifying traumatic stimuli for rescue workers

includes dealing with human remains, the personal risk involved, olfactory stimuli, and handling personal items (Feder et al., 2016), and this NYC police officer sample also recognized these.

Participants engaged in a triadic reciprocal exchange that involved their environment and their coping behavior. After an initial appraisal was made for safety, participants cycled through and continue to cycle through ongoing cognitive reappraisals to assess if they had the resources to cope with the situation (Lazarus & Folkman, 1984). As these reappraisals were made, participants perceived more problem-focused coping mechanisms to be effective in their coping. More than half the sample perceived themselves to have no issue coping but utilized some form of problem-focused coping that was adaptive to their environment. Speaking with co-workers about their experiences was perceived to be the most effective coping mechanism. Avoidance and compartmentalization of their feelings were perceived to be effective during 9/11 as they allowed participants to focus on work, as Chopko, Palmieri, et al. (2018) mentioned. However, after 9/11, when they returned to a normal work schedule, participants were left with their emotions and again re-adjusted their appraisals as their environment changed. For example, during 9/11, avoidance was perceived to be beneficial. However, after 9/11, many participants found avoidance to be least effective as they were overwhelmed with their emotions and sought some form of counsel or treatment to reconcile their feelings. More than half the sample was diagnosed with anxiety, depression, or PTSD, and some participants reported having all three. However, after the rescue and cleanup operations ceased, participants were willing to accept treatment and improve their overall well-being.

The 9/11 terrorist attacks on NYC amplified a need to assist NYC police officers in their ability to cope. Some participants perceived that they were coping well and reported PTG in having a greater appreciation for life and more interpersonal relationships (Feder et al., 2016). In contrast, others continue to suffer from mental health issues. After almost 20 years, post-9/11, police officers continue to need assistance in coping with their experiences.

The following sections will discuss the limitation of the current study and recommendations for future treatment and practice. This will be followed by the implications drawn from the research, including the potential effect for social change, theoretical implications, and recommendations for practice. The final section will offer conclusions that capture the key essence of the study

Limitation of the Study

There were some limitations present in this study. I intended to interview 10-12 participants for my study. However, after seven interviews, repetition in the results began to appear, but two more interviews were scheduled. I conducted these additional interviews to ensure that data saturation had been reached, for a total of nine interviews. Although saturation was assumed, the participant sample remained small. Using a different sampling method may have yielded different results.

I also intended to interview male and female participants. However, no female individuals inquired about participating through snowball sampling for this study. It may be female and male officers associate with same-sex co-workers, and therefore the sampling technique skewed the gender of the sample. Therefore, gender differences that may be seen in coping strategies between men and women could not be determined.

Another potential limitation that may be present in the current study is NYC police officers who did not cope well and resigned or retired from the NYPD did not have an opportunity to be included in the sample.

The selection of my participant sample may be another potential limitation to the study. I utilized snowball sampling, relying on participants to recommend additional co-workers and friends to participate in the study. Therefore, to participate in the study, participants were required to work for the NYC police department on 9/11. Many of these participants are now in their 50's and 60's. Therefore, the study's results are limited to police officers who worked in the 9/11 rescue and recovery efforts and cannot be generalized to other populations.

Given that this study was conducted almost 20 years post-9/11, participants were asked to recall how they coped during 9/11. Thus, the retrospective recall may contain some bias regarding the participant's memory and ability to recall how they responded during and after 9/11. However, participants have had ample time to reconstruct their world views and perceive their situation differently now than they did then. Also, the majority of the sample were young when 9/11 happened and had less exposure to complex trauma.

Recommendations

The following recommendations are offered based on the finding of the research. Some of the recommendations made are for those who work in the mental health profession with police officers. Others are recommendations for future researchers interested in researching the coping practices of police officers. These recommendations

are offered as an action plan to enhance police officers' well-being and future research using police officers as sample participants.

Recommendations for Practice

When working with police officers, some practice recommendations would be to increase professional understanding of how individuals can be empowered and guided to resilience and PTG in the aftermath of trauma. Teaching police officers about the short- and long-term consequences of traumatic events and educating them in strength-based approaches would increase their understanding of managing stress while maintaining healthy coping mechanisms. Reinforcing the use of problem-focused coping techniques and emotion-focused coping techniques could produce more of a balance between the two coping strategies along with long-term, positive, sustainable results in police officers' ability to cope with trauma and critical incidence. Therapists would benefit from reviewing innovative, culturally appropriate trauma treatment techniques when working with police officers. The police department is a culture all its own. Police officers are taught early in the academy to compartmentalize their feelings to continue to function at their job. However, when police officers have emotional difficulty dealing with things they experienced, they usually stay silent in fear of occupational repercussions like losing their job. Therefore, the programs offered by the police department are rarely used by their employees and the ones who don't "circle the drain" (P. Castelli, personal communication, October 29, 2020). Another recommendation from this work is that academy training programs could incorporate instruction to teach recruits to develop skills in managing trauma and inform them of the importance of self-care practices. Teaching police officers how to develop positive reappraisals by thinking about stimuli

differently may be beneficial. This set of skills is important because it places the locus of control back in the hands of the police officer and provides a foundation for transforming negative behaviors into positive ones where PTG can be achieved.

Another recommendation that the study findings highlight is teaching new police officer recruits that initial compartmentalization of feelings works to assist them in their coping and performance during crises. However, it should be reinforced that feelings surrounding the event will continue to surface until they are processed. Debriefings and focus groups provided to police officers after critical incidents could remind and reinforce the best coping practices that would benefit police officers, and these benefits could extend further to their family and in their interactions with the public. Because emergency and rescue workers have reported similar experiences in the literature (Clouston et al., 2019; Dasaro et al., 2017; Diab et al., 2019; Feder et al., 2016), some of the findings from this study may apply when treating other responder groups.

Recommendations for Future Research

Two areas are recommended for further investigation using a police sample, and one theoretical consideration is offered. First, one area of further investigation would be to clarify what it means to cope “during” and “after” 9/11, as this was not clearly specified in the interview questions. The second recommendation is to use a different sampling method other than snowballing technique to obtain a sample. Finally, the theoretical consideration that is being made is regarding Lazarus and Folkman’s (1984) TMSC. Changes made in these three areas may have produced different responses from participants, provided gender differences in coping strategies on the ability to cope during and after 9/11, and may have changed how themes in the data were categorized.

One recommendation to be made from the results of this study relates to the specific wording about the periods of “during” and “after” when asking interview questions. The use of this language in the current study was not specific enough to make responses consistent among responders. For example, when asked how participants coped during 9/11, participants referenced 9/11 and the days and months that followed 9/11 while they worked during the rescue and recovery operations. When asked about the best coping practices after 9/11, some participants again referenced the period after 9/11 during the cleanup and recovery operations and the weeks that followed. Other participants referred to the period “after” as being in the present moment. Asking participants specific periods such as “during the rescue and recovery effort” or “coping today” might have yielded different responses from the participant sample, thus producing a different result. It is recommended that future research make distinguishing statements that are specific to the periods being investigated.

The second recommendation based on the study results would be to use a different sampling technique other than snowball sampling, as this may not be sufficient to yield any differences in male and female perspectives. Using different sampling techniques might be more effective in gathering participants with male and female gender identities and amplifying any gender difference that exist in coping. This study utilized the snowballing sampling technique where participants were asked at the end of their interview to provide a name or recommend my study to someone whom they felt would fit the study criteria. Snowball sampling yielded an all-male participant pool. Future research in this area may benefit from a random sampling technique that would include female participant experiences.

Theoretical consideration is needed when using Lazarus and Folkman's (1984) TMSC as it appears that problem-focused and emotion-focused coping are broad classifications. Individual thoughts, feelings, and behaviors do not fit neatly into such clear categories. Some of the strategies utilized by participants in the sample reflected the use of both problem-focused and emotion-focused coping. In some cases, they were used simultaneously. For example, when seeking information about what was going on, participants talked with other police officers. They found discussing things with a co-worker (problem-focused) normalized not only their situation but provided them with comfort toward any negative feelings (emotion-focused) they may have been experiencing. Participants in the current study utilized few positive emotion-focused coping techniques and frequently used avoidance. Future research should focus on assisting police officers in finding the balance between using problem-focused coping techniques to solve issues within their environment and emotion-focused coping techniques to balance out their emotions, so they are better prepared to handle crisis situations when encountered. When working with police samples, teasing out avoidance as its own coping style would also be beneficial because it was used frequently by the participant sample in this study.

The recommendations offered above are encouraged to improve upon the research and are based on the findings from the study. Further, the recommendations encourage teaching police officers how to achieve positive emotional states, teach positive coping skills, and produce PTG. Finally, the research recommendations are useful to future researchers who plan to conduct similar research on participant coping practices during and after 9/11.

The implications from this study are discussed in the next section and were arrived at based on this study's results. These implications describe the potential effect for positive social change at the individual, family, organizational, and societal levels. A description will also be offered on the methodological, theoretical, and empirical levels as appropriate. Finally, the last section provides recommendations made for practice, as appropriate.

Implications

Methodological

One methodological implication for future research is being clear about the timing of when and how police officers were coping. The wording in the current study about the periods of "during" and "after" when asking the interview questions was not specific to make responses consistent among responders. For example, when participants were asked how they coped immediately after, participants referenced the day after, while others referenced how they are coping today. The implication of this finding is that specific time periods should use accurate wording in the interview questions to target the time period in question so there are no discrepancies in participant responses.

Theoretical

Another implication of the findings associated with engaging in therapeutic processes is when police officers are taught effective ways to cope with crises at the individual level resiliency and PTG can be fostered. Effective long-term coping can be achieved regardless of the types of traumas experienced. Positive social changes can be promoted and achieved at the individual level. These benefits can be further extended to enhance relationships police officers have with family members and others. The

promotion of resilience and PTG at the individual level acts as a protective factor that encourages physical, social, and emotional well-being. Having police officers in the field who are better prepared and able to handle crises and balance their emotions will allow police to establish and maintain healthier relationships with individuals within the public whom they assist. As a result, police officers would feel emotionally balanced, available, and ready for the next crisis. Lastly, providing psychoeducational material to the family members of police officers during a major crisis would be helpful to inform family members of some of the signs and symptoms that may be present in their loved ones following their involvement in disasters.

A third implication of the findings is that counselors and police officers would benefit from training programs that reinforce strength-based approaches to treatment. These programs should focus on positive problem-focused coping techniques that produce resilience and PTG. Healthy long-term coping is possible for individuals who suffer trauma when positive coping mechanisms are engaged (Makwana, 2019). Assisting police officers in managing trauma, engaging effective coping mechanisms, and processing their emotions while practicing self-care measures can produce a healthy police force that can successfully protect and serve the public. Further, it would also allow the therapist to reinforce problem-focused coping techniques and emphasize the importance of practicing self-care measures. Suggestions could also be provided during these groups regarding therapy options and available resources to police officers after crises.

NYC police officers in this sample cycled through the appraisal process quickly as they were called to duty and worked through what was going on in NYC in the days

and weeks following 9/11. Participants appraised their situations based on the environment and reappraised their situations as the environments changed. Coping in the current study was based on the appraisal process and was context-dependent. Participants adjusted their appraisals to meet the demands that were needed in their environment. However, once the immediacy of the situation was over, participants worked for months, dealing with various negative stimuli at the same job assignment for a long period. Trauma frequency and severity played a significant role in shaping the level of PTG that was experienced (Chopko, Palmieri, et al., 2018). Providing a different context for police officers in situations that must be endured for long periods may enhance their ability to cope. This enhancement can be achieved by changing up the work duties of the police officers assigned to the worst environments by rotating their posts weekly or daily.

Empirical

Police officers in this sample initially functioned on autopilot. They focused on job tasks and processed their feelings later (Crowe et al., 2017). When mental health services are made available to police officers during crises, police officers often reject such services to remain focused on job-related tasks, choosing to delay the processing of their own feelings about the crisis (Lowell et al., 2018). Participants reported few debriefings or services were offered to them after 9/11, and many were left alone to manage with intense responses to the destruction. The implication of this finding is that police officers may be more favorable to debriefings and focus groups after a crisis is resolved. Such opportunities would help solidify feelings that the department in which they work has an overall sense of concern and a desire to care for them.

Several participants reported they engaged in both individual therapy and focus groups, and they found both helpful after 9/11. However, peer-to-peer focus groups were reported to be more beneficial by the police sample. Participants wanted to talk and process their feelings, and they perceived talking with someone who had had similar experiences as most effective in their ability to cope. The implication of this finding is that talking with co-workers is an important aspect of emotional coping and should continue to be encouraged. Mandating debriefings and peer-to-peer focus groups while offering overtime would ensure that all police officers involved in trauma-related incidents are evaluated for mental health issues. Professional mental health counselors educated in identifying mental health concerns in police officers and knowledgeable in trauma could implement focus groups that include other officers who have similar experiences. Focus groups could normalize crises for police officers and provide them with an opportunity to achieve growth through a crisis. Talking in a therapeutic environment is better than having a few beers with the guys after work and would be more effective in ameliorating their symptoms.

In this study, many police officers focused on work and dealt with their emotions later. Provisions made to participants regarding supportive services to process and deal with their experiences were noted as lacking after 9/11. However, the few officers who were invited to speak with a therapist or priest perceived this time to be helpful, yet such help was considered to be not enough. Not only were psychological services rare for the sample, but 22% ($n = 2$) indicated they felt their department's attention was lacking in this area. One participant perceived the counseling services provided were one way for the NYPD to put a band-aid on the situation. Despite the small efforts, the NYPD made

to provide services, the consensus of the participant sample was that those who had psychological issues were left alone with few treatment options.

The implication of this finding is that instead of leaving police officers to deal with their own emotions, the NYPD can mandate focus groups after critical incidents are reconciled. Mandating peer-to-peer focus groups to police officers after they have had an experience with a traumatic incident on the job would be beneficial to police officers. Focus group discussions would provide a view into the life of other police officers who may have had similar experiences and could normalize their experiences and situations. This provision of focus groups could provide a forum for police officers to speak freely among their peers. In this study, participants perceived that speaking with other police officers was the most beneficial coping mechanism during 9/11. They felt as if no one could understand them unless they had similar experiences. The implication is that mandating peer-to-peer focus groups would remind police officers they are not alone in their feelings.

Conclusion

The initial event of 9/11 happened suddenly, and many participants were not mentally prepared for the situation, including images they were exposed to or the feelings they would experience. Participants responded on 9/11 unprepared, with little time to evaluate or think about how they were coping. Some focused on doing their job while others feared for their lives as the ground beneath their feet where they worked was unstable. As participant perceptions of the event changed and the fear for their life diminished, so did their appraisals. The stress appraisal process and the perception of control were important aspects of the relationship between participants' coping

mechanisms and work engagement (Violanti et al., 2018). The stress appraisal and interpretation of the event were depended on where they worked and what they did during and after 9/11. As the environment changed, so did the appraisal they made. As I expected, participants initially utilized more positive problem-focused coping techniques on 9/11 and in the following weeks. After the recovery and cleanup operations ceased, participants engaged in emotion-focused coping, and participants perceived many of the emotion-focused coping mechanisms used as being least effective in their ability to cope both during and after 9/11. An unexpected finding was that the initial use of the positive problem-focused coping technique during 9/11 was less effective after 9/11. Focusing on work, talking with others, focusing on others, and experience were all listed as the most effective coping strategies during 9/11. However, they continued to be mentioned as effective coping methods after 9/11 but were mentioned less frequently as being effective. Seeking mental health assistance and staying busy were listed as being the most effective coping mechanisms after 9/11. Emotionally distancing themselves from their situation initially worked well for the NYC police officers in this study, and the use of cognitive avoidance was viewed as a positive means of coping during 9/11 (Chopko, Palmieri, et al., 2018). However, some participants during and most after 9/11 realized a need to process what they had experienced. Some found talking with co-workers to be the most beneficial, while others used family and friends. More than half the sample sought mental health treatment, but not until after they retired because of the stigma held by the police department related to being psychologically weak. NYC needs to take care of police officers who commit their lives to protect and serve their community. The current research highlights the problems experienced by police officers both during and after

9/11. It further highlights the need for police officers to have continued services made available to them after a crisis. Providing resources and continued services after crises are resolved would enhance the quality of life of police officers and provide the best care and support to those who care, support, and serve others

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Appendix A: Recruitment Flyer

New York City Police Officers' Experiences of 9/11/01

You are invited to take part in a research study conducted by a doctoral student at Walden University in the clinical psychology program. The purpose of this study is to understand how NYC police officers coped with the stress of living and working through the 9/11 terrorist attacks. You will be asked to describe your coping experiences on what worked or did not work for you during and after 9/11/01.

Who is Eligible?

Requirements for participation in the study are that you worked on 9/11/01 or one shift post 9/11/01.

The Purpose of the Study?

The purpose of this study is to explore and gain an in-depth understanding of the lived experience of NYC police officers during and following the terrorist attacks of 9/11. You will be provided with a forum for your voice to be heard.

What will you be asked to do?

You will be requested to spend 60-90 minutes on a conference call with the researcher answering a few questions about your experience on 9/11 and the days that followed.

Compensation?

There is no compensation for your participation in this study. However, your participation will provide you with a voice and may increase professional understanding of what works best for NYC police officers during future potential terrorist attacks.

You are under no obligation to participate in this study and can withdraw from the study at any time. If you have any questions or are interested in participating, please contact [email address redacted] or call [redacted].

Appendix B: Demographics Questionnaire

If you would like to participate in this study, please respond to the following questions:

Assigned Number: _____

Contact Name: _____

Phone Number: _____

Email/ Address: _____

Sex: _____

Date of Birth: _____

Age: _____

How old were you on 9/11/2001: _____

Race/ Ethnicity: Asian Black Hispanic White Other _____
(Circle One)

Education Level: High-School/ Associates /Bachelors /Masters /Specialist /Doctorate
(Circle One)

Currently working or retired: _____

**Current Career/
Occupation:** _____

Marital Status: Single/Married/Divorced/Widowed (Circle One)

Length of Employment with NYPD: _____

Where were you located on 9/11/01 when the planes hit the World Trade Center: _____

How long did you work in the clean-up efforts at the World Trade Center: _____

Do you currently have mental health insurance coverage?

Are you a member of the World Trade Center Health Program? _____

Appendix C: Interview Questions

1. How would you describe your experience of coping **during** 9/11?
2. Of the ways you coped, which, if any, do you perceive to have worked best **during** 9/11? Would you use them again?
3. Of the ways you coped, which, if any, do you perceive, **did not** work well **during** 9/11? What, if anything, would you do differently in the future?
4. How would you describe your experience of coping **after** 9/11?
5. Which of the ways you coped, if any, **did not** work well **after** 9/11? What, if anything, would you do differently in the future?
6. Which of the ways you coped, if any, worked best **after** 9/11? Why do you think this worked well for you?
7. Is there anything that I did not ask that you feel I should have?
8. Is there anything additional you would like to add?

Appendix D: Solicitation Letter

May 3, 2019

<Name redacted>

<Business redacted>

<Address redacted>

<Address redacted>

<Name redacted>:

It was a pleasure speaking with you this afternoon. Thank you again for returning my call. As I explained, my name is Christine Fiore, and I am currently working on my dissertation. I am conducting a qualitative research study as a partial requirement of my Ph.D. program at Walden University. My research is on how a small sample of NYC police officers coped during and following the terrorist attacks of 9/11/01.

Because my participants will be discussing their ability to cope with trauma, they may feel distressed after participating in my study and may need psychological services. For the wellbeing of my participants, I need to secure a therapist or two who would be willing to conduct one or two pro bono treatment sessions for any participant who needs treatment.

I have attached a copy of my CV and Study Information Sheet so that you can get to know my study and myself better.

If you agree, I ask that you send me a confirmation letter stating how many sessions you would be willing to conduct (one or two) for any one of my study participants. If you have any questions or need further clarification, I will be happy to speak with you further.

Again, I so appreciate you getting back to me, and thank you for your time and consideration on my behalf.

Sincerely,

Christine A. Fiore
Walden University
Clinical Psychology Ph.D. Student
[email address redacted]
[telephone number redacted]

June 19, 2019

<Name redacted>
<Business redacted>
<Address redacted>
<Address redacted>

RE: Treatment for my study participants

<Name redacted>:

It was a pleasure speaking with you this afternoon. Thank you again for returning my call. As I explained, my name is Christine Fiore, and I am currently working on my dissertation. I am conducting a qualitative research study as a partial requirement of my Ph.D. program at Walden University. My research is on how a small sample of NYC police officers coped during and following the terrorist attacks of 9/11/01.

Because my participants will be discussing their ability to cope with trauma, they may feel distressed after participating in my study and may need psychological services. For the wellbeing of my participants, I need to secure a therapist or two who would be willing to conduct one or two pro bono treatment sessions for any participant who needs treatment.

I have attached a copy of my CV and Study Information Sheet so that you can get to know me and my study better.

If you agree, I ask that you send me a confirmation letter stating how many sessions you would be willing to conduct (one or two) for any one of my study participants.

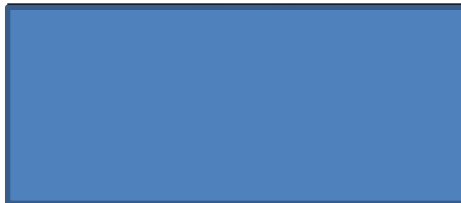
If you have any other questions or need further clarification, I will be happy to speak with you further. Again, I so appreciate you getting back to me, and thank you for your time and consideration on my behalf.

Sincerely,

Christine A. Fiore
Walden University
Clinical Psychology Ph.D. Student
[email address redacted]
[telephone number redacted]

Appendix E: Confirmation From Referral Sources

Anxiety Therapy



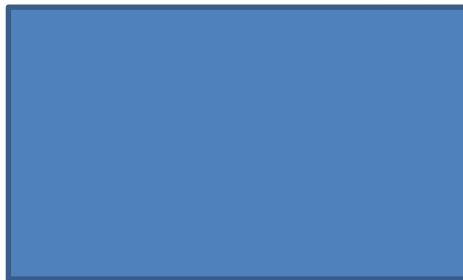
June 20, 2019

Ms. Fiore:

This letter is to confirm that I am willing to conduct one or two pro bono treatment sessions for any participants in your study who do not have access to therapy. I will also evaluate any participants I see to determine if they are in need of further treatment and provide whatever assistance I can in finding treatment for them.

I have also attached my CV in case that is needed.




Regards,



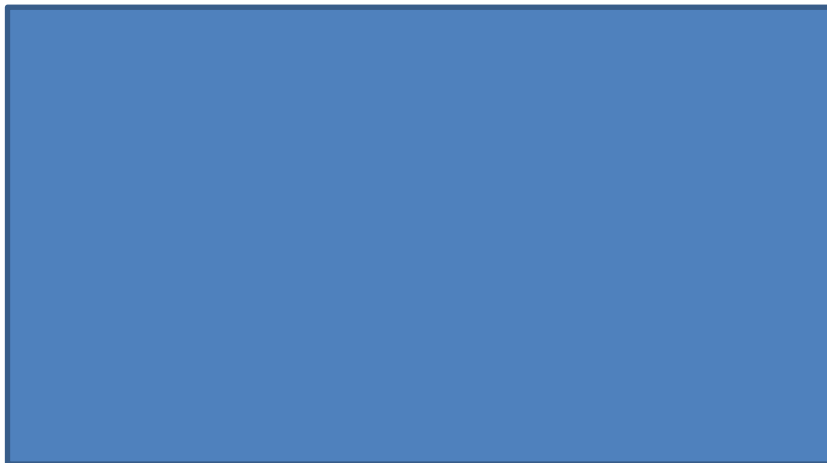


June 25, 2019

Dear Ms. Fiore,

Thank you for reaching out to us. 
 would be happy to be a referral resource for the participants in your dissertation research at Walden University. This letter is to verify that I, , agree to provide one session of free-of-charge services per participant. This session may be used for evaluation, consult, or to secure a referral. Should the participant require or request additional sessions, they will be referred to a preferred by them service provider.

Sincerely,



Appendix F: Referral Resources for Participants



OR



Stress and Trauma Evaluation and Psychological Services (S.T.E.P.S.)

STEPS**Phone:** 631-683-8499**Web:** www.TraumaProfessionals.comwww.drdeborahserani.com**Main office:**

755 Park Ave, Suite 140

Huntington, NY 11743

Other Suffolk County offices:

220 Fort Salonga Road, Office #14

Northport, NY 117768

2500 Nesconset Hwy, Suite 5D

Stony Brook, NY 11790

Nassau County Office:

1130 North Broadway, Suite 150

Massapequa, NY 11758

Crisis Hotline Number:

NYC WellTalk (888) NYC-WELL or Text "WELL" to 65173*

24/7 Nassau and Suffolk County (516)679-1111