SURVIVING CRITICAL INCIDENTS: POLICE OFFICERS, POSTTRAUMATIC STRESS, AND POSTTRAUMATIC GROWTH

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I would also like to thank my parents, Mike and Connie Aud, and my sister, Heather Justice, for their support and prayers, whether my duties involved carrying a weapon or typing on a computer.

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ABSTRACT

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Surviving Critical Incidents: Police Officers, Posttraumatic
Stress, and Posttraumatic Growth

(Major Professor: Robert D. Hanser, Ph.D.)

Stress is inherently one of the negative aspects of law enforcement, but following a

critical incident involving serious bodily harm to, or the death of, a fellow police officer,

the level of stress for police officers increases dramatically. Police officers employed by

the primary and neighboring law enforcement agencies may suffer from posttraumatic

stress after the incident. Organizational policies and actions following a critical incident

may influence whether the police officers will experience posttraumatic stress or

encourage the officer to begin posttraumatic growth.

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INTRODUCTION

Law enforcement, by nature, is a dangerous and stressful occupation. Reactions of officers following a critical incident vary, dependant on individual personalities and coping mechanisms. Some officers who are exposed to a degree of treatment may be able to cope in a more positive manner than those officers who are not. What law enforcement officers experience during the aftermath of a critical incident emphasize the need to identify and assist officers suffering from posttraumatic stress, and to develop departmental policies to encourage posttraumatic growth in order to prevent long term negative economic and productivity ramifications for law enforcement agencies following a critical incident.

Statement of the Problem

Due to its paramilitary structure and function, oftentimes society holds law enforcement officers to a standard of objectiveness and professionalism that does not allow for the display of emotions when dealing with stressful and volatile situations. Law enforcement officers are expected to respond to society's most heinous and cruel acts without displaying anger, grief, or frustration; a response further encouraged by the police subculture, which encourages cynicism and isolation from society in general. However, when a critical incident occurs that profoundly affects the individual law enforcement officer or the law enforcement community, the appropriate emotional response to the critical incident is met with resistance and misunderstanding.

Law enforcement officers do not want to appear "weak" or emotional to their peers or to the public, but the overwhelming emotional response to a critical incident may require the officer to seek assistance to cope with and recover from a critical incident.

In addition to the individual law enforcement officer's hesitancy to seek assistance, the law enforcement agency may be reluctant to secure services for officers affected by a critical incident. This may be due to budgetary constraints, or may be the reinforcement of the police subculture's belief that law enforcement officers must support their fellow officers without outside interference. Regardless of the reasons, law enforcement agencies should implement policies for reacting to critical incidents before these incidents occur, and that these policies should be designed based on the agency's size, type, and financial allocations. These policies should also reflect the treatment of psychological as well as physical injuries that law enforcement officers sustain from a critical incident and should be prepared in collaboration with neighboring law enforcement agencies.

Some Caveats and Points of Clarification

Before proceeding further, it should be made clear that the focus of this thesis is on four key points. This thesis discusses measures law enforcement officers' levels of stress, their exposure to critical incidents, their respective agency's response to the critical incident, and the law enforcement officer's emotional response following the critical incident. It should be noted that all but one of these key points rely on the individual law enforcement officer's perception, and in no way does this thesis seek to determine whether an agency has adequate policies and procedures in place to respond to

critical incidents. This thesis should also not be viewed as a determinate of the participating law enforcement officer's general fitness for duty.

In addition, throughout this thesis the terms law enforcement officer, police officer, deputy, and officer will be used interchangeably, but refers to individuals who are employed on a full time basis by a law enforcement agency and whose permanent duties actually include the making of arrests, the performing of searches and seizures or the execution of criminal warrants, and is responsible for the prevention or detection of crime or for the enforcement of the penal, traffic or highway laws, as defined by the Louisiana Peace Officer Standards and Training Council (POST). Likewise, the terms law enforcement agency, police agency, department, and agency will be used interchangeably, but refers to those governmental agencies charged with enforcement of laws and ordinances within their respective jurisdictions.

Because the focus of this research is based on the perceptions of the participating law enforcement officers, the precision of some terms utilized throughout this thesis may be less accurate than expected from a more rigorous research experiment. The individual law enforcement officer's definition of these terms will vary greatly based on their own understanding, which will inevitably negatively affect the validity of some items, but all efforts have been made to minimize this unavoidable influence.

Lastly, it should be mentioned that this thesis would not have been possible without the cooperation and support of Sheriff Mike Tubbs of the Morehouse Parish Sheriff's Office, Chief Downey Black of the Bastrop Police Department, and the men and women of these agencies who contributed to this thesis. This writer would also like to

REVIEW OF RELATED LITERATURE

Stress and Law Enforcement

For law enforcement officers, stress is one of the top occupational hazards, affecting the officer's physical and mental health (National Institute of Justice, 1997b). According to the National Institute of Justice (1985), there are four general classifications of stress for law enforcement officers. These stressors are those inherent to police work, stressors stemming from the police agency, stressors from the criminal justice system and society, and individual stressors.

The first category is stressors inherent to police work. These arise from the nature of the job itself; shift work, role conflict, and constant threat to the officer's safety. Also included as stressors are alternating periods of boredom and excitement, the responsibility for protecting others, continued exposure to injured persons, the need to keep composed even if provoked, the presence of firearms, and the limited opportunities to complete cases. The second category is stressors stemming from the police agency itself. These include administrative actions, policies developed without input from officers, poor equipment, scrutiny of off duty behavior, poor supervision and lack of support from administrators. Lack of recognition, training, career opportunities, and excessive paperwork are also stressors in this category. The third category is stressors stemming from the criminal justice system and society. The criminal justice system produces stressors by lack of consideration in court appearance scheduling, lack of cooperation between agencies, restrictive court decisions, and early release of offenders

by the courts. From society, stress originates from a perceived lack of support by the public, negative attitudes toward law enforcement officers, unfavorable media coverage, and ineffective social support services to which officers must refer individuals. The fourth category is individual stressors. These are internal fears and feelings, and vary from person to person. Law enforcement officers reported the top three significant stressors as adverse court interactions, negative public reactions, and lack of appropriate equipment (Schwartz, 1978).

For those law enforcement officers who do not develop positive stress management techniques, the pressures of the law enforcement profession can be devastating. One dangerous defense mechanism a law enforcement officer may utilize is emotional hardening, a change in the law enforcement officer's personality that affects their ability to experience emotions (Pranzo & Pranzo, 1999). Emotional hardening is utilized by law enforcement officers to maintain composure during stressful situations by suppressing emotional reactions, but may become incorporated into the law enforcement officer's personality if exposed to stressful situations repeatedly or for long periods of time (Pranzo & Pranzo, 1999). The effects of emotional hardening may be a permanent change in the law enforcement officer's personality, values, and ideals, and make them appear more hostile, cynical, and apathetic (Pranzo & Pranzo, 1999).

More negative stress management techniques include the development of a "combat team syndrome," substance abuse, domestic violence, and suicide. The combat team syndrome occurs most often among specialized teams charged with executing high-risk operations that require the frequent use of physical force (Pranzo & Pranzo, 1999). The law enforcement officers that belong to these units may, in an attempt to cope with

overwhelming stressors, intentionally place themselves in situations that necessitate the use of violence, and perhaps even deadly force (Pranzo & Pranzo, 1999). These law enforcement officers could also become too overzealous in their use of force, begin abusing their authority as law enforcement officers, make invalid arrests, or perhaps begin committing criminal acts themselves (Pranzo & Pranzo, 1999).

Alcohol is the foremost substance abused by law enforcement officers, and it is estimated that alcohol abuse among law enforcement officers is double that of the general population, in which approximately 1 in 10 adults are believed to abuse alcohol (Violanti, 1999). Law enforcement shares the same risk factors for substance abuse as other high stress occupations (focus on masculinity, high levels of stress, peer pressure, and societal acceptance of the use of medications and alcohol to alleviate stress), but also possesses its own unique risk factors. Among these unique risk factors is the need for constant control over emotional responses and the nature of police work that requires the law enforcement officer to quickly resolve a problem and move on to the next complaint (Kirschman, 1997).

Acts of domestic violence committed law enforcement officers remain an elusive statistic, perhaps due to the reluctance of agencies to report such acts because of the requirements of the Lautenberg Amendment to the Gun Control Act of 1968 which mandates the removal of the officer's firearm (Rostow & Davis, 2004). However, it is estimated that domestic violence occurs in 14 to 60% of families of law enforcement officers (Kates, 2004). And similar to non-police spouses, victims of domestic violence may be hesitant to report these crimes due to fear of retaliation, feelings of

embarrassment, and potential economic ruin should their law enforcement spouse lose their job (Kirschman, 1997).

Similar to domestic violence, statistics regarding suicide rates among law enforcement officers are elusive. Fellow law enforcement officers may mislabel suicides as "accidental" shootings in order to protect the deceased officer's survivor benefits (Kirschman, 1997). Combined with the aforementioned negative stress management techniques (domestic violence potentially leading to divorce, alcoholism and substance abuse, and repeat complaints of misconduct due to the combat team syndrome), it is believed that more law enforcement officers are more likely to commit suicide than be killed in the line of duty (Kirschman, 1997). Unfortunately for most law enforcement officers, even though stress is one of the top occupational hazards, affecting the officer's physical and mental health, only 25% of law enforcement agencies offer stress management training (Territo & Sewell, 1999).

Critical Incidents

The culmination of stress experienced by a law enforcement officers during normal operations differs from the stress experienced from a critical incident; critical incidents cause considerable physical and psychological disruptions that can be linked directly with a specific traumatic event (Kirschman, 1997). Critical incidents have been defined in several ways. According to Bennett and Hess (2004), "A critical incident is any event that elicits an overwhelming emotional response from those witnessing it and whose emotional impact goes beyond the person's coping abilities" (p. 412) . For the purposes of this paper, the definition and criteria for critical incidents will be as described by Douglas Gentz, Ph.D.:

From a developmental perspective, a critical incident may be defined as an event requiring an extraordinary degree of adaptation by the individual who experiences it. In this type of definition, the main criterion for defending the term has moved from a description of the event itself to descriptions of changes the individual must make within himself in response to the event. This means that determining whether an event qualifies as a critical incident or not depends <u>primarily</u> on how difficult and significant the individual's adjustment will be and <u>secondarily</u> on descriptions of the event itself. (as cited in Federal Bureau of Investigation, 1991, p. 119)

Most law enforcement officers do not emphasize the physical dangers of law enforcement, and may have developed a denial strategy in response to the constant threat of danger (Skolnick, 1998). In actuality, law enforcement officers are the only peacetime occupational group who has a record of death and injury from gunfire (Skolnick, 1998). The most recent statistics released by the Federal Bureau of Investigation (2008) reported that in 2007, 57 law enforcement officers were feloniously killed, and of these, 55 were killed with firearms. The circumstances under which these officers were killed vary greatly: 16 officers in 2007 were killed during arrest situations, 16 officers were killed in ambush situations, 11 officers were killed during traffic pursuits or traffic stops, 5 officers were killed while responding to disturbance calls, 4 officers were killed while investigating suspicious persons or circumstances, and 3 officers were killed during tactical situations (Federal Bureau of Investigation, 2008).

Although it is impossible to predict when a law enforcement officer will be feloniously killed, studies of past incidents do show trends and patterns that may indicate a higher risk for law enforcement officers to be feloniously killed. In 2007, 18 of the 57 officers killed were in the South Central United States, a region which has reported the highest number of law enforcement officers killed between 1998 and 2007, as demonstrated in Figures 1 and 2 (Federal Bureau of Investigation, 2008).
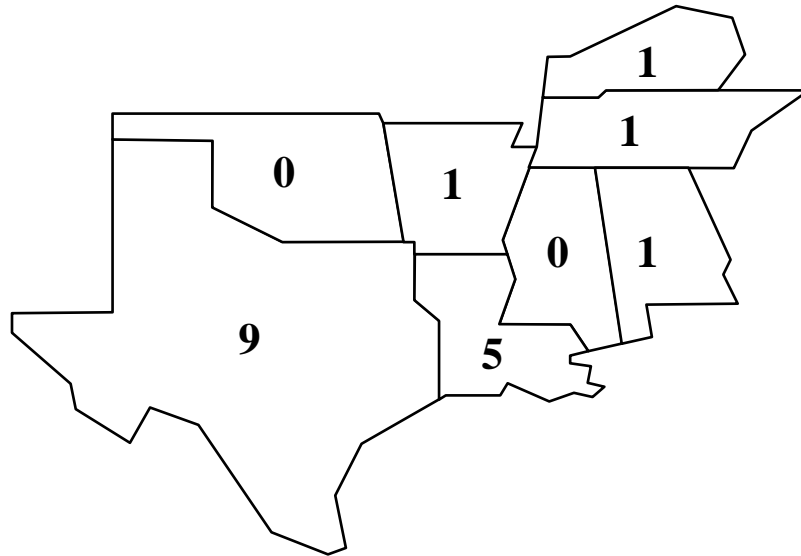
Figure 1: The number of law enforcement officers killed in 2007 within the East and West South Central Region of the United States. Adapted from *Law Enforcement Officers Killed and Assaulted, 2007*, Federal Bureau of Investigation, (2008).
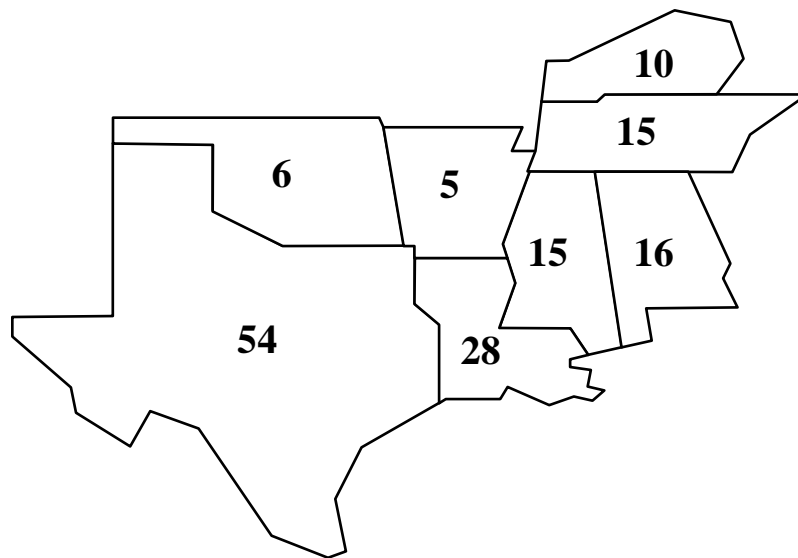
Figure 2: The number of law enforcement officers killed between 1998 and 2007 within the East and West South Central Region of the United States. Adapted from *Law Enforcement Officers Killed and Assaulted, 2007*, Federal Bureau of Investigation, (2008).

Additionally, the 2004 report of Law Enforcement Officers Killed and Assaulted (LEOKA) published by the Federal Bureau of Investigation discovered that for the 10 year reporting period 1995-2004, a disproportionate number of law enforcement officers were felonious killed in the southern portion of the United States; 47% of officers were from the southern portion of the United States, 20% from the western portion, 18 percent from the Midwestern portion, 9% from the northeastern portion, and 6 percent from the National Territories (Federal Bureau of Investigation, 2006). Assault rates were also higher in the southern portion of the United States: 14 per 100 law enforcement officers were assaulted, compared to 11 per 100 officers in the Midwestern portion, 11 officers per 100 in the western portion, and 10 officers per 100 in the northeast portion of the nation (Federal Bureau of Investigation, 2006).

Officer involved shootings or other deadly force situations remain the most commonly associated type of critical incidents for law enforcement. However, more law enforcement officers are injured or killed during non-deadly force incidents (National Institute of Justice, 1997a). For example, in 2007, 83 law enforcement officers died in accidents and 59,201 law enforcement officers were assaulted while on duty (Federal Bureau of Investigation, 2008).

Law Enforcement Agency Response

Following a critical incident, the law enforcement agency's credibility will be viewed by the manner of professionalism and impartiality during the subsequent investigation (International Association of Chiefs of Police, 1999). The public's view of agency and administrator leadership strengths are measured heavily based upon their response to crisis situations (Gordon & Milakovich, 1995). Unfortunately, many law

enforcement agencies respond inadequately to the needs of the officers employed by their agency, and less than one-third of agencies may have any type of policy regarding critical incidents (Haddix, 1996). Law enforcement agencies need to recognize that the psychological wound an officer suffers needs the same attention as physical injuries (Kureczka, 1996). Agencies should be prepared to assist officers psychologically following a critical event to reduce the officer's likelihood of emotional damage and decreased professional performance within the agency (Wade, 2001).

Law enforcement agencies should recognize that law enforcement officers who need assistance in dealing with critical incident stress may not seek help because they do not want to be stigmatized as weak (Kureczka, 1996). But law enforcement officers who do suffer from the more serious reactions to critical stress incidents, without proper assistance, eventually leave law enforcement, have a higher rate of absenteeism, increased family problems, and may abuse drugs and/or alcohol (International Association of Chiefs of Police, 1991). Law enforcement agencies may also become negatively affected by officers' responses to a critical incident due to reduced productivity caused by low morale, tardiness, leaves of absences, early retirements, stress-related disabilities, increased turnover, and fatigue for officers working overtime if the agency has a shortage of manpower (National Institute of Justice, 1997a).

Departmental policies should be designed to minimize a law enforcement officer's risk of diminished professional performance and emotional damage by considering the following factors described by the Federal Bureau of Investigation (1991, p. 146):

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1. The officers must perceive that they receive support from administration.

2. They must perceive that the investigation is supportive of them, not with a prosecutive or persecutive slant.

3. They must perceive that supervisors are supportive of them, and

4. They must perceive that peers are supportive of them.

Further minimization of risk may be accomplished through peer counseling and mandated departmental leave of absence (National Institute of Justice, 2006).

Law enforcement agencies should also be wary of secondary injuries or "bureaucratic friendly fire" (Kirschman, 1997). Following a critical incident, litigation involving the actions of the officer or the policies of the department may come into question. Agencies should not ostracize the officer or officers involved because this causes further damage to the morale and may lead the officer to seek disability retirement in retaliation against the department (Kirschman, 1997).

Departmental policies regarding critical incidents should not be restricted to merely the officers present during the critical incident. These policies should prepare the law enforcement agency in assisting other personnel. Other personnel include investigators, communications officers, civilian personnel, and the administrators of the agency should they be impacted by the critical incident (International Association of Chiefs of Police, 1993). In essence, according to the International Association of Chiefs of Police (1993) "Effective procedures allow a police department to respond in a prompt, organized manner and remain sensitive to the profound human emotions they must confront." (Background section, para. 4)

Posttraumatic Stress

Many law enforcement officers report that the most stressful aspect of critical incidents is not necessarily the critical incident itself, but what happens following the critical incident (Federal Bureau of Investigation, 1991). In a 1987 study conducted by Stratton, Parker, and Snibbe, approximately 60% of officers reported that following a critical incident involving a shooting there was a substantial impact on their subsequent lives (as cited in Federal Bureau of Investigation, 1991, p.213). Regardless of level of physical injury, if any, the psychological stress caused by critical events can affect the officer profoundly (National Institute of Justice, 1985).

Following a critical incident involving a shooting, law enforcement officers may immediately experience emotional effects; first entering into a shock phase, characterized by detachment and disorientation, then a reaction phase, characterized by disbelief, fear, anger, and guilt (National Institute of Justice, 1985). Officers also experience physical reactions, such as crying, vomiting, involuntarily defecating or urinating, dizziness, tremors, profuse sweating, and have affected vision (Adams, McTernan, & Remsberg, 1982; National Institute of Justice, 1985). However, the effects of the critical incident may not immediately occur after the event; it may occur days, weeks, or months following the event (Adams et al., 1982).

Law enforcement officers may develop posttraumatic stress, or "afterburn", following the critical incident (Adams et al., 1982). Posttraumatic stress is characterized by the following behaviors following the critical incident: re-experiencing the traumatic event, avoiding activities that relate to the event, reduced responsiveness to others and/or disassociation, and increased arousal, guilt, and anxiety (Comer, 2007). Other behaviors

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include chronic tension and irritability, insomnia, impaired concentration and memory, survivor guilt, repetitive nightmares, inability to tolerate noises, sadness and depression, loss of sexual interests, increased startle reaction, denial/reaction formation (claiming the incident did not affect them), fear of being involved in similar incidents, and placing blame onto the law enforcement agency (National Institute of Justice, 1985). The law enforcement community, sometimes called the "police subculture" or the "police family", is formed by bonds that these officers share with each other through shared experiences, and law enforcement officers may attempt to place blame on the officer who was injured or killed during a critical incident in an attempt to deny their own vulnerability and mortality (Federal Bureau of Investigation, 1991; International Association of Chiefs of Police, 1993).

Important to note is the distinction between posttraumatic stress and Posttraumatic Stress Disorder (PTSD). Law enforcement officers will be affected differently following a critical incident: two out of three officers reported having a significant emotional reaction following the event, and of these, 37% have mild reactions, 35% have moderate reactions, and 28% have severe reactions (Federal Bureau of Investigation, 1986). Regardless of the intensity of the reaction, if the reactions last more than 30 days after the critical incident, the officer may be diagnosed with Posttraumatic Stress Disorder. Estimates place approximately 4 to 10% of officers within the category of suffering from this disorder (Kureczka, 1996). An officer's vulnerability to stress following a critical incident is dependent on several factors. Shakespeare-Finch (2006) stated that:

> … a lack of recreational activities, support in nonwork domains, and lack of social interaction further predicted symptoms of PTSD at twelve-month follow-up. (as cited in Shakespeare-Finch, 2006, p. 39)

In addition, prior traumatic event exposure, individual and family history of psychological/psychiatric problems, biological responses during the immediate time following the event, and peri-traumatic dissociation may increase an officer's risk for developing PTSD (as cited in Shakespeare-Finch, 2006, p. 45). The Federal Bureau of Investigation (1999) summarized seven factors that determine an individual's reaction to a critical incident:

> These factors include: The nature of the traumatic incident; the coping style or ego strength of the involved person; similar prior experience in which the person mastered the stressful event; the degree of warning prior to the traumatic event; physical and psychological proximity to the traumatic event; concurrent stresses or losses in the victim's life; and the extent and nature of the victim's social support. (p. 218)

Posttraumatic Growth

For the law enforcement officer, critical incidents may cause significant changes in perspectives for their own personal lives (Federal Bureau of Investigation, 1991). As noted previously, only a small percentage of officers may suffer from a Posttraumatic Stress Disorder; some officers who have experienced a critical incident may show positive adjustment to the event. McGowan (2006) described the study of this phenomenon, known as Posttraumatic Growth, by stating:

> This fledgling field has already proven the truth of what once passed as bromide: What doesn't kill you can actually make you stronger. (p. 72)

Positive changes experienced by officers following a critical incident include an improvement in their relationships and their ability to relate to others, a sense of new possibilities for their life, a greater appreciation of life, a greater sense of personal strength, and changes in their spiritual development and beliefs (DeBrule & Range, 2002;

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Tedeschi & Calhoun, 2004). Within the police subculture, the lack of social bonds

outside of the law enforcement profession leads officers to rely upon other officers,

family members, and spouses for support following a critical incident. These

relationships may become stronger as the officer becomes more comfortable in

discussing the critical incident with those individuals that the officer trusts (Tedeschi &

Calhoun, 2004). Additionally, the officer may reestablish relationships with friends and

family members, and may experience more compassion for those persons who have also

endured a critical incident (Tedeschi & Calhoun, 2004). Changes and improvements in

relationships could also include accepting the need to rely upon others, putting forth more

effort into interpersonal relationships, greater willingness to express emotions, being able

to count on others during times of crisis, greater sense of closeness with others, and

improved views of the public in general (American Psychological Association, n.d.).

Police officers who have experienced a critical incident may change their views

on law enforcement and their life. Police work is no longer a routine for these officers;

the dangerousness of the profession causes the officer to be more cautious of their

surroundings and more aware of their responsibilities (Pranzo & Pranzo, 1999). New life

possibilities the officer may experience also include developing new interests, being more

likely to change aspects of their life which need changing, belief that they can do better

things with their life, perceiving new opportunities that were not present before the

critical incident, establishing new goals in life, and making choices in a more conscious

manner (American Psychological Association, n.d.).

According to the National Institute of Justice (2006), about one-third of officers,

following a critical incident involving a shooting, reported feeling elation including "joy

at being alive" (What Happens in the Months Following a Shooting? section, para. 2).

Officers may begin to reassess their values and priorities about what they believe are most important in their lives and find greater appreciation in the value of their own life (American Psychological Association, n.d.). Immediately following a critical incident, the officer may be severely impacted by the lack of the ability to control the situation, but eventually, the officer may develop a greater feeling of self-reliance in their abilities and better acceptance of a situation's outcome (American Psychological Association, n.d.). Officers may also express greater confidence in their ability to handle difficult situations and feelings of increased personal strength (American Psychological Association, n.d.). Spiritual change can also follow a critical incident. An officer may begin to question and reevaluate their religious beliefs, develop a better understanding of spiritual matters, or find their religious faith to be stronger (American Psychological Association, n.d.).

Law enforcement officers may show growth in some of these aforementioned areas in their lives following a critical incident, but rarely does growth occur in all of these areas at a given time. Moreover, change is not immediate; it develops over time based on the individual's coping process (American Psychological Association, n.d.).

Research Questions

Based on the data gathered and examined from previous literature the following five research questions were formulated for further exploration:

Question 1:

Do law enforcement officers who have more years of experience report greater stress relating to normal operations?

Question 2:

Do law enforcement officers who have experienced more critical incidents report higher levels of posttraumatic stress?

Question 3:

If a law enforcement officer has experienced a critical incident recently, will their indicators for posttraumatic stress be higher?

Question 4:

Do law enforcement officers who do not perceive support from their agency and peers report a greater incidence of posttraumatic stress indicators?

Question 5:

Do law enforcement officers who do perceived support from their agency and peers report a greater incidence of posttraumatic growth indicators?

METHODS AND PROCEDURES

For this thesis, a qualitative overview of three studies will be conducted in order to address the research questions presented.

Sample of Studies

The first study to be examined was published by Alyssa Taylor and Craig Bennell in 2006 entitled "Operational and Organizational Police Stress in an Ontario Police Department: A Descriptive Study." The second study to be examined was published in 2009 by Shira Maguen, Thomas J. Metzler, Shannon E. McCaslin, Sabra S. Inslicht, Clare Henn-Haase, Thomas C. Neylan, and Charles R. Marmar in 2009 entitled "Routine Work Environment Stress and PTSD Symptoms in Police Officers." The third and final study to be examined was published in 2000 by Margaret Mitchell, Karen Stevenson and Desmond Poole entitled *Managing post incident reactions in the police service*.

Selection Criteria

Studies were selected based on the following criteria: the credentials of the researchers, the year in which the studies were published, and the methods by which data was collected. Each study was either primarily investigated by or conducted with the assistance of at least one Doctoral level researcher. All of the studies were the most recent studies of their respective topics to be published. Finally, all of the studies were quasi-experimental or non-experimental in design and primarily utilized descriptive statistics of quantitative data gathered by surveys. For descriptive purposes, each study

will be presented separately with their relevant sections: sample characteristics, procedure, data instruments, and limitations of the data.

The Ontario Police Department Study

This study was selected for analysis due to the focus on perceived levels of stress experienced by police officers, both operational and organizational. The authors examined correlations between numerous variables and stress levels, including age, which is similar to this writer's first research question, whether law enforcement officers who have more years of experience report greater stress relating to noral operations.

Sample characteristics. For their study, Taylor and Bennell (2006) utilized an electronic questionnaire made available to the Ontario Police Department's 1,600 officers, which resulted in 237 officers opening the questionnaire and 154 completing the questionnaire, a response rate of approximately 65%. Their sample size of 154 police officers consisted of 119 males and 35 female officers, ranging in age between 24 to 58 years, and with an average of 15.70 years of police experience. Their sample included 2 Superintendents, 5 Inspectors, 10 Staff Sergeants, 18 Sergeants, 17 Detectives, 101 Constables, and 1 unknown rank.

Procedure. For the first study, the authors secured permission from the administrators at the Ontario Police Department to allow their police officers to participate in the study. Subsequently, emails were sent to all officers by utilizing the police department's server. These emails contained a link to the online questionnaire requesting the officers to follow the link and complete the questionnaire. After the officers completed the questionnaire, their responses were submitted and the officers received an online briefing.

Data instruments. The authors developed a two-part electronic questionnaire to assess self-reported perceived stress levels of officers. The first section of the questionnaire contained 18 questions and was designed to gather demographic data; the second section contained 40 questions and measured operational and organizational stress of police officers based on Dr. Donald McCreary's (2006) Operational Police Stress Questionnaire (PSQ-Op) and Organizational Police Stress Questionnaire (PSQ-Org).

The questionnaires are designed to allow the respondent to select their level of stress experienced within the past six months by utilizing the scale ranges from 1 (no stress at all) to 7 (a lot of stress). Additionally the choice "not applicable" was added by the researchers for each item.

Limitations of the data. Several limitations relating to the study are identified by the authors. First, the authors address the low response rate. Although the questionnaire was made available to the Ontario Police Department's 1,600 officers, only 154 actually completed and submitted the questionnaire. The authors surmise that the low response rate may be due to lack of incentive for participation, or a lack of personal interaction and distribution. The authors propose informing the participants in advance of the time required to complete the survey and emphasizing the importance of researching stress in order to encourage higher response rates. Second, the authors relate that some variables could have been measured more thoroughly, but indicate that doing so could lower response rate as the time required to complete the questionnaire increases. Third, the authors address the subjective nature of self-report questionnaires. The authors propose that the desire to conform may cause bias in some responses, and that in the future combining objective with subjective measures may reduce some bias. Lastly, the authors

state that the classification of some stressors listed in the questionnaires, as well as the clarity of some questions presented may have caused some problems. The authors concede that the exact impact of these issues are unclear, but recommends further examination of the questionnaires should they be considered for further research purposes.

The New York City and San Francisco Bay Area Police Department's Study

This study was selected for analysis due to the focus on determining what variables are most closely associated with posttraumatic stress. The authors examined correlations between numerous variables and posttraumatic stress, including the influence of critical incident exposure, which is similar to this writer's second research question, whether law enforcement officers who have experienced more critical incidents report higher levels of posttraumatic stress. The authors also examined the correlation between the work environment and posttraumatic stress, similar to this writer's fourth research question, whether law enforcement officers who do not perceive support from their agency and peers report a greater incidence of posttraumatic stress indicators.

Sample characteristics. Maguen et al. (2009) selected participants from police academies for the New York Police Department, San Francisco Police Department, Oakland Police Department, and San Jose Police Department. For their longitudinal research, 5,855 police officers were introduced to the study, and selected the first 180 officers as a "sample of convenience," excluding those with prior combat, law enforcement, and emergency service experience who may have previously experienced critical incidents. Their sample size of 180 officers consisted of 157 males and 23 female offices, with an average age of 27. Of the respondents, 47% were Caucasian, 20% were

Latino, 15% were Asian American/Pacific Islander, 10% were African American, and 8% reported other or multiple ethnicities, 77% of the respondents were unmarried, 89% had completed 2-4 years of college, and 5.1% had completed a graduate degree.

Procedure. For the second study, the authors made presentations at various police academies introducing the police officers to the study. The authors distributed letters to the police officers, one letter from the police officers' chief administrator and the second letter from the researchers describing the study. The authors included in their letters the procedure, contact number, and a participation form which offered the participant the option of being contacted by the researchers. The authors also posted flyers at each police academy which included a contact number for the police officers should they decide to participate in the study.

The researchers informed participants that the study utilized procedures approved by the University of California's Human Subjects Committee and Institutional Review Board, and assured participants that all information obtained through the research would remain confidential per a Federal Certificate of Confidentiality. The researchers also secured written informed consent prior to initiating the evaluations. The evaluations consisted of a self-report questionnaire and interviews.

The authors selected the first 180 police officers to volunteer for the study. These police officers were initially evaluated to establish a baseline of stress levels before the police officers were assigned to full time patrol duties. Eighty-two percent of these police officers were then re-evaluated 12 months later.

Data instruments. For this study, the authors utilized a six part questionnaire. The first section of the questionnaire was used to gather demographic information: age, gender, ethnic minority status, marital status, and education level.

The second section of the questionnaire was used to measure prior trauma exposure by utilizing the Life Stressor Checklist-Revised (LSC-R) (Wolfe, Kimerling, Brown, Chresman & Levin, 1996). The LSC-R is a 30 item questionnaire which measures exposure to stressful events over the participants' lifetime. The questionnaire is administered during an interview and the respondent indicates whether they had experienced the event asked and if they believed they could have been killed or seriously harmed as a result. The authors chose to measure prior trauma history for their study by the participant's indication that they had experienced one of the nine incidents listed on the LSC-R, incidents which include natural disasters, accidents or injuries caused by accidents, serious physical or mental illnesses, neglect, abortion or miscarriage, assault, abuse, sexual assault, and sexual abuse.

The third section of the questionnaire was used to measure negative life events by utilizing the Life Experiences Survey (LES) (Sarason, Johnson & Siegel, 1978). The LES is a 50 item questionnaire which allows the respondent to score life changing events by using a 7 point Likert scale. The respondent scores events such as marriage, financial changes, deaths of relatives, etc., by deciding the influence of the event on a range from "extremely negative" to "extremely positive" influences on their life. Every event that is reported is coded as one unit, and if the event is not reported as having been experienced by the respondent, it is coded as zero. Positive events are scored separately from negative

events, and for the purposes of their study, the authors narrowed the timeframe of reported events to those occurring within the preceding 12 months.

The fourth section of the questionnaire was used to measure cumulative exposure to critical incidents by utilizing the Critical Incident History Questionnaire (CIHQ) (Brunet, Weiss, Best, Liberman, Fagan & Marmar, 1998). The questionnaire lists 39 critical incidents and respondents indicate how often they experienced the incidents listed. The total cumulative exposure score is then calculated by adding together the respondents' answers for all of the incidents listed. The authors chose 14 of the items listed on the CIHQ which were personally life threatening for the police officer for the purposes of their study.

The fifth section of the questionnaire was used to measure stress caused by the work environment by utilizing the Work Environment Inventory (WEI) (Liberman, Best, Metzler, Fagan, Weiss & Marmar, 2002). The questionnaire contains 68 items scored using a 5 point Likert scale ranging from "strongly agree" to "strongly disagree." For the purposes of their study, the authors reversed positively phrased items on the WEI, causing all items to be negatively phrased, thus the higher the score, the more negative the work environment stress. Items in this questionnaire included management and administrators, supervisors, equipment, training, boredom, role conflict, peers, shift work, discrimination in the workplace, and public attitudes toward police officers. The authors found differing results with their analysis than the WEI instrument was originally developed for, which was for veteran police officers.

The final section of the questionnaire was used to measure PTSD related symptoms by utilizing the Civilian Mississippi Combat Scale (MCS-CV) (Keane,

Caddell & Taylor, 1988). The MCS-CV consists of 35 items scored using a 5 point Likert scale ranging from "not at all" to "extremely true." The higher the score reported by the respondent, the more PTSD symptoms present. For the purposes of their study, the authors requested the respondent to report the extent to which they experienced each of the items listed "since beginning police service."

Limitations of the data. The authors noted several limitations relating to the study. The authors noted that even though they utilized a comprehensive measure of work environment stressors, certain aspects were not measured, such as morale, cohesion, and strength of leadership, which may have explained some variances in both the work environment and PTSD symptoms. The authors also surmise that a more detailed method for measuring discrimination in the workplace may show some impact on job satisfaction, mental health issues, cohesion, and morale for women and minority populations.

The authors also note that they were unable to develop a temporal relationship between PTSD symptoms and negative life events, critical incident exposure, and work environment stress, therefore could not make any conclusions regarding directionality.

The authors warn that because the sample population was a "sample of convenience," conclusions drawn regarding women and minority populations should be interpreted with caution, as well as bias that may be present due to self-selection.

The Strathclyde Police and Royal Ulster Constabulary Study

This study was selected for analysis due to the focus on assessing the incidence and effects of critical incidents on police officers, namely the police officer's experience, their reaction to the incident and how the work environment influenced their reaction, and

how the agency assisted officers suffering from posttraumatic stress. The authors examined the correlation between the time since the critical incident and posttraumatic stress symptoms, similar to this writer's third research question, whether a law enforcement officer who has experienced a critical incident recently will report higher indicators for posttraumatic stress. The authors also examined the correlation between the work environment and posttraumatic stress, similar to this writer's fourth research question, whether law enforcement officers who do not perceive support from their agency and peers will report a greater incidence of posttraumatic stress indicators. Finally, the authors examine the relationship between critical incidents and positive consequences for the police officer, similar to this writer's fifth research question, whether law enforcement officers who perceived support from their agency and peers report a greater incidence of posttraumatic growth indicators.

Sample characteristics. For their study, Margaret Mitchell, Karen Stevenson and Desmond Poole (2000) selected participants from the United Kingdom's Strathclyde Police in Scotland and the Royal Ulster Constabulary (renamed the Police Service of Northern Ireland in 2001).

For the Strathclyde Police sample, 1,245 questionnaires were distributed and 612 responses were collected, a response rate of approximately 49.1%. Of the responses, 426 indicated experiencing a critical incident and these were used for the study. This sample included 372 males and 54 females, ranging in age from 22 to 54 with an average of 37 years of age, and with a range of police experience from 1.5 to 33.5 years, the average length of service at approximately 15 years. Of the respondents, 117 were classified as supervisors and the remaining 309 were classified as constables.

For the Royal Ulster Constabulary (RUC) sample, 1,600 questionnaires were distributed and 768 responses were collected, a response rate of approximately 46.5%. Of the responses, 574 indicated experiencing a critical incident and these were used for the study. This sample included 7.7% females (23 respondents did not report gender), an age range from 24 to 59 with an average of 38.9 years of age (37 respondents did not report age), and a range of police experience from 1 to 41 years, the average length of service at approximately 17.25 years (21 respondents did not report length of service). Of the respondents, 47% were classified as supervisors, but 200 respondents did not report their rank and/or classification.

In addition, questionnaires were mailed to the Chief Constables of each of the 55 constabularies in the United Kingdom to evaluate each agency's policies for responding to a critical incident, of which 41 responded, 1 refused, and 13 did not respond, resulting in a response rate of approximately 73%.

Procedure. For the Strathclyde study, the authors distributed 1,245 questionnaires to a sample population that included officers with the rank of probationary officer to chief inspector, including those officers assigned to traffic, mobile and foot patrol, firearms, female and child unit, investigations, crime scene, and support units.

For the RUC study, the authors distributed 1,600 questionnaires to a 20% sample of police officers with the rank of probationary officer to chief inspector, including superintendents, obtained by random sampling. The officers selected for the sample were assigned to the same duties as those described in the Strathclyde sample.

To evaluate differing departmental policies regarding critical incidents, a questionnaire and cover letter were sent to the Chief Constables of each of the 55 constabularies in the United Kingdom.

Data instruments. For the Strathclyde study, the authors utilized a four part questionnaire. The first section of the questionnaire was used to measure perceptions of the organization, approach to work, and overall job satisfaction. The second section of the questionnaire was used to measure negative aspects of the job, including sources of pressure from work, coping, and social support. The third section of the questionnaire was used to measure the police officer's general health, including physical and psychological health. The final section of the questionnaire included questions relating to critical incidents: posttraumatic symptoms assessment, reactions following the incident, degree of apprehension experienced, whether the police officer had or would have participated in a critical incident stress debriefing (CISD), and whether any positive consequences were a result from the critical incident.

The authors utilized measures from the Pressure Management Indicator (PMI) (Williams & Cooper, 1988) to measure sources of occupational stress and effects. The scales for each indicator were comprised of 4 to 6 questions with the cumulative score from these used for a measure of that particular indicator. The authors utilized the Modified PTSD Symptom Score (MPSS) (Coffey, Dansky, Falsetti, Saladin & Brady, 1998) or the Revised Impact of Events Scale (R-IES) (Marmar & Weiss, 1997), to assess posttraumatic stress symptoms, as well as the General Health Questionnaire (GHQ-12) (Goldberg, 1992), to measure psychological distress.

For the RUC study, the same questionnaire was utilized as in the Strathclyde study with the exception of single items chosen from the PMI scales in order to reduce the overall size of the questionnaire. The authors cited security issues occurring at the time and the desire to achieve as high a response rate as possible for the reasoning behind shortening the questionnaire.

For the Chief Constables, the authors utilized a short questionnaire requesting the details of various departmental policies and actions, as well as questions regarding the objectives of critical incident stress management programs within their agencies. This questionnaire included the agency's definition of a critical incident, whether debriefings in some form are conducted, the motivation for critical incident stress management programs, the manner in which debriefings are conducted, the main goals of the critical incident stress management programs for the agency and individuals, other methods used for critical incident stress management, and any commentary regarding the effectiveness of such programs.

Limitations of the data. The authors concede that conclusions drawn regarding this study are limited due to the nature of a cross-sectional study, and recommend a follow-up study for a more accurate longitudinal study of the impact of critical incidents and the effectiveness of intervention programs.

RESULTS

For the purposes of this thesis, results pertinent to the focus of the five stated research questions will be examined.

The Ontario Police Department Study

In the "Operational and Organizational Police Stress in an Ontario Police Department: A Descriptive Study", Taylor and Bennell (2006) derived several sets of data relating to stress experienced by police officers under normal operations, both operational and organizational stress.

Table 1 shows a ranking of operational stressors from Taylor and Bennell's (2006) study in order, from the most stressful to the least stressful. Table 1 demonstrates that the top three ranked operational stressors reported by police officers of a possible 7-point rating were fatigue ($M = 4.47$, $SD = 1.86$), not enough time available to spend with friends and family ($M = 4.09$, $SD = 2.01$), and shift work ($M = 4.04$, $SD = 1.93$). The three lowest ranked operational stressors were making friends outside the job ($M = 2.60$, $SD = 1.76$), working alone at night ($M = 2.47$, $SD = 1.68$), and risk of being injured on the job ($M = 2.13$, $SD = 1.30$). The overall mean for operational stressors were 3.33 out of 7.00 ($SD = 1.21$).

Table 2 shows a ranking of organizational stressors from Taylor and Bennell's (2006) study in order, again from the most stressful to the least stressful. Table 2 demonstrates that the top three ranked organizational stressors reported by police officers of a possible 7-point rating were the feeling that different rules apply to different people

Table 1

Ranking Order of Operational Police Stressors (out of 7.00)

Stressor (N)	M	SD
Fatigue (e.g. shift work, overtime) (153)	4.47	1.86
Not enough time available to spend with friends and family (151)	4.09	2.01
Shift work (134)	4.04	1.93
Finding time to stay in good physical condition (156)	3.98	1.80
Work related activities on days off (147)	3.67	1.75
Eating healthy at work (156)	3.62	1.70
Occupational-related health issues (146)	3.60	2.16
Feeling like you are always on the job (154)	3.47	2.02
Negative comments from the public (152)	3.47	1.92
Paperwork (154)	3.45	1.80
Over-time demands (143)	3.37	1.83
Managing you social life outside of work (155)	3.36	1.84
Lack of understanding from friends and family about your work (154)	3.12	1.98
Limitations to your social life (154)	2.95	1.78
Upholding a "higher image" in public (155)	2.87	1.86
Friends/family feel the effects of stigma associated with your job (153)	2.74	1.71
Traumatic events (143)	2.66	1.61
Making friends outside the job (154)	2.60	1.76
Working alone at night (118)	2.47	1.68
Risk of being injured on the job (143)	2.13	1.30

Note. Reprinted from "Operational and Organizational Police Stress in an Ontario Police

Department: A Descriptive Study," by A. Taylor and C. Bennell, 2006, *The Canadian*

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Table 2

Ranking Order of Organizational Police Stressors (out of 7.00)

Stressor (N)	*M*	*SD*
The feeling that different rules apply to different people (153)	4.78	1.78
Feeling like you always have to prove yourself to the organization (154)	4.41	1.82
Inconsistent leadership style (153)	4.36	1.99
Dealing with the court system (144)	4.17	2.02
Bureaucratic red tape (153)	4.14	1.77
Perceived pressure to volunteer free time (153)	3.91	1.90
Staff shortages (154)	3.81	1.83
Excessive administrative duties (152)	3.66	1.90
Dealing with co-workers (154)	3.60	1.64
Leaders over-emphasize the negatives (154)	3.58	2.15
Lack of resources (153)	3.54	1.80
Dealing with supervisors (153)	3.43	1.78
Unequal sharing of work responsibilities (153)	3.42	1.83
Constant changes to the policy/legislation (154)	3.40	1.69
The need to be accountable for doing your job (153)	3.39	1.88
Too much computer work (152)	2.97	1.78
Inadequate equipment (147)	2.71	1.65
Internal investigations (147)	2.63	1.76
If sick or injured your co-workers seem to look down on you (149)	2.53	1.93
Lack of training on new equipment (152)	2.50	1.63

Note. Reprinted from "Operational and Organizational Police Stress in an Ontario Police Department: A Descriptive Study," by A. Taylor and C. Bennell, 2006, *The Canadian Journal of Police & Security Services, 4*(4), p. 227. Copyright 2006 by Meritus Solutions, Inc. Used with permission.

(M = 4.78, SD = 1.78), feeling like you always have to prove yourself to the organization (M = 4.41, SD =- 1.82), and inconsistent leadership style (M = 4.36, SD = 1.99). The three lowest ranked organizational stressors were internal investigations (M = 2.63, SD = 1.76), if you are sick or injured your co-workers seem to look down on you (M = 2.53, SD = 1.93), and lack of training on new equipment (M = 2.50, SD = 1.63). The overall mean for organizational stressors were 3.55 out of 7.00 (SD = 1.17).

Taylor and Bennell (2006) conducted a paired sample t-test and discovered significant differences between the overall average rankings for operational stressors and organizational stressors, namely that organizational stressors (M = 3.55, SD = 1.17) were ranked higher than operational stressors (M = 3.33, SD = 1.21), $t(153)$ = 3.40, $p < .01$. Taylor and Bennell (2006) also conducted a one-way analysis of variance (ANOVA), which demonstrated differences between average stress ratings for the individual stressors. The most significant finding was that the average rating for traumatic events (M = 2.79, SD = 1.60) was lower than the average rating for all other stressors, operational and organizational (M = 3.45, SD = 1.09), $t(94)$ = 4.56, $p < .001$.

Taylor and Bennell (2006) examined the personal and demographic characteristics of the respondents to determine whether relationships existed between certain moderators and stress by utilizing correlations, t-tests, and ANOVA statistics. They discovered several individual characteristics did have a significant relationship with reported levels of stress, as demonstrated in Table 3 and Table 4. These significant moderators were age, the presence of health problems, education-level, and degree of job satisfaction.

Table 3

Significant Demographic and Personal Moderators of Police Stress

Variable	Operational *M (SD)*	Significance	Organizational *M (SD)*	Significance	Overall *M (SD)*	Significance
Age		$r = -.22$, $p < .01$		$r = -.15$, *ns*		$r = -.22$, $p < .01$
Health Problems						
Yes	3.72 (1.16)	$t(151) = 3.38$, $p < .01$	3.91 (1.10)	$t(151) = 3.10$, $p < .01$	3.81 (1.05)	$t(151) = 3.47$, $p < .01$
No	3.12 (1.18)		3.36 (1.16)		3.24 (1.10)	
Education-level						
High-school	2.95 (1.26)	$F(3, 149) = 3.28$, *ns*	2.87 (1.07)	$F(3, 149) = 6.43, p < .001$	2.91 (1.12)	$F(3, 149) = 5.15, p < .01$
College	3.21 (1.09)		3.57 (1.10)		3.39 (.99)	
University	3.66 (1.26)		3.89 (1.16)		3.78 (1.15)	
Post-graduate	2.66 (.76)		2.64 (.84)		2.65 (.78)	
Job Satisfaction						
Extremely unsatisfied	4.06 (1.45)	$F(4, 149) = 5.36, p < .001$	4.85 (1.09)	$F(4, 149) = 9.68, p < .001$	4.46 (1.17)	$F(4, 149) = 8.21, p < .001$
Unsatisfied	3.85 (1.17)		3.91 (.92)		3.88 (.97)	
Neutral	3.67 (1.15)		4.00 (1.11)		3.84 (1.09)	
Satisfied	3.02 (1.12)		3.22 (1.11)		3.11 (1.03)	
Extremely Satisfied	2.74 (.97)		2.75 (.82)		2.75 (.80)	

Note. Reprinted from "Operational and Organizational Police Stress in an Ontario Police Department: A Descriptive Study," by A. Taylor and C. Bennell, 2006, *The Canadian Journal of Police & Security Services, 4*(4), p. 228. Copyright 2006 by Meritus Solutions, Inc. Used with permission.

Table 4

Correlations Between Potential Moderators

	Gender	Rank	Marital Status	Having Children	Exercise	Alcohol	Age	Health Problems	Education level	Job Satisfaction
Gender	1.00	.00	.35**	.15	.22**	.22**	-.16*	.03	.14	-.07
Rank		1.00	-.08	-.28**	.14	-.20*	.52**	-.04	.26**	.04
Marital Status			1.00	.47**	.35**	.09	-.24**	.06	-.09	-.07
Having Children				1.00	.34**	.12	-.42**	.00	.20*	-.07
Exercise					1.00	.15	-.29**	.10	.04	-.05
Alcohol						1.00	-.06	-.07	.04	.11
Age							1.00	-.03	-.29**	.21**
Health Problems								1.00	.07	.23**
Education level									1.00	-.16*
Job Satisfaction										1.00

* p < .05
** p < .01

Note. Reprinted from "Operational and Organizational Police Stress in an Ontario Police Department: A Descriptive Study," by A. Taylor and C. Bennell, 2006, *The Canadian Journal of Police & Security Services, 4*(4), p. 228. Copyright 2006 by Meritus Solutions, Inc. Used with permission.

The results from Taylor and Bennell's (2006) study showed a significant negative correlation between officer age and operational stress, but a less significant negative correlation between officer age and organizational stress. However, the results indicate a significant negative correlation between officer age and overall stress rankings, as shown in Table 3. Also important to note is the positive correlation between officer age and job satisfaction, as demonstrated in Table 4. Job satisfaction showed to be significantly related to both organizational and operational stress rankings; officers who reported being extremely unsatisfied or unsatisfied with their jobs reported higher levels of stress overall than officers who reported being satisfied or extremely satisfied with their jobs.

The New York City and San Francisco Bay Area Police Department's Study

In the "Routine Work Environment Stress and PTSD Symptoms in Police Officers", Maguen et al (2009) derived several sets of data relating to critical incident exposure and posttraumatic stress disorder symptoms.

The authors utilized the Life Stressor Checklist-Revised as a baseline measure for prior exposure to critical incidents, in which 41% of the participants indicated experiencing no prior trauma, 31% indicated experiencing 1 prior traumatic incident, 19% indicated experiencing 2 prior traumatic incidents, and 9% indicated experiencing 3 prior traumatic incidents. Respondents were then surveyed using the Critical Incident History Questionnaire to their exposure to 14 critical incidents that were viewed as personally life threatening to police officers. The percentages and frequency of exposure among these critical incidents are shown in Figure 3.

Results from the Life Experiences Survey showed that the respondents reported a range of 0 to 24 negative life events within the previous 12 months, with a mean of 4.42

Item	Mean (SD)	Percentage Endorsed
Disease Exposure	(5.80, 9.06)	51.7
Animal Attack	(1.65, 1.12)	25.6
Trapped	(2.37, 2.29)	21.1
Threatened (Knife or other)	(2.08, 1.76)	20
Threatened (Gun)	(1.63, 1.42)	10.6
Injured (Intentionally)	(3.83, 3.82)	10
Toxic Substance Exposure	(2.28, 1.93)	10
Injured (Accidentally)	(2.75, 2.77)	8.9
Shot at	(1.55, 0.69)	6.1
Car Accident	(1.25, 0.46)	4.4
Natural Disaster	(4.33, 5.77)	1.6
Beaten	(2.50, 2.12)	1.1
Man-Made Disaster	(2, 0)	0.5
Taken Hostage	(0,0)	0

Figure 3. Frequency and Percentage of Critical Incident Personal Life Threat Items Endorsed by Police Officers. Reprinted from "Routine Work Environment Stress and PTSD Symptoms in Police Officers," by S. Maguen, T. Metzler, S. McCaslin, S. Inslicht, C. Henn-Haase, T. Neylan, and C. Marmar, 2009, *The Journal of Nervous and Mental Disease, 197*(10), p. 756. Copyright 2009 by Lippincott Williams & Wilkins. Used with permission.

negative life events ($SD = 4.74$). Results from the Work Environment Inventory indicated a mean item score from -2 to 0.84 ($M = -0.44$, $SD = 0.46$), and results from the Mississippi Combat Scale – Civilian Version to assess PTSD symptoms indicated a mean score of 61 ($SD = 11$, range, 36-100), which was below scores for PTSD patients and psychiatric patients.

The authors examined correlations between variables and PTSD symptoms, as shown in Table 5. The authors next ran a path model predicting PTSD symptoms in M-plus version 5.1, as shown as Figure 4 and in Table 6.

The authors discovered several variables which had a significant direct effect on PTSD symptoms, these being ethnicity ($B = -0.20$, $t = -3.25$, $p < 0.01$), negative life events in the past 12 months ($B = 0.19$, $t = 2.94$, $p < 0.01$), critical incident exposure ($B = 0.15$, $t = 2.33$, $p < 0.05$), and work environment ($B = 0.36$, $t = 5.79$, $p < 0.01$).

The authors discovered that two variables showed significant indirect paths to PTSD symptoms, negative life events ($B = 0.08$, $t = 2.81$, $p < 0.05$) and critical incident exposure ($B = 0.07$, $t = 2.28$, $p < 0.05$).

In addition, there were two variables which showed direct effects from variables relating to the work environment, negative life events ($B = 0.23$, $t = 3.19$, $p < 0.01$) and critical incident exposure ($B = 0.18$, $t = 2.50$, $p < 0.05$).

The authors, given the data, surmise that a positive correlation did exist between PTSD symptoms and critical incident exposure, negative life events, and work environment.

Table 5

Correlations Among Variables in Path Model

Variable	1	2	3	4	5	6	7
1. Gender (87% male)	---						
2. Ethnicity (47% white)	-0.09	---					
3. Prior trauma ($M = 1.00$, $SD = 0.97$)	0.17*	-0.13	---				
4. Negative life events ($M = 4.42$, $SD = 4.74$)	0.05	-0.06	0.07	---			
5. CI exposure ($M = 1.25$, $SD = 1.10$)	-0.22**	0.09	0.09	0.21**	---		
6. Work environment ($M = -0.44$, $SD = 0.46$)	-0.04	0.05	0.09	0.26**	0.24**	---	
7. PTSD symptoms ($M = 61$, $SD = 11$)	-0.01	-0.19*	0.20**	0.33**	0.28**	0.45**	---

*$p < 0.05$, 2-tailed; **$p < 0.01$, 2-tailed.

Gender: 1 = male, 2 = female; ethnicity: 0 = ethnic minority, 1 = white; NLE indicates negative life events checklist; CI, log transformed number of critical incidents experienced in first year of police service.

Note. Reprinted from "Routine Work Environment Stress and PTSD Symptoms in Police Officers," by S. Maguen, T. Metzler, S. McCaslin, S. Inslicht, C. Henn-Haase, T. Neylan, and C. Marmar, 2009, *The Journal of Nervous and Mental Disease, 197*(10), p. 758. Copyright 2009 by Lippincott Williams & Wilkins. Used with permission.
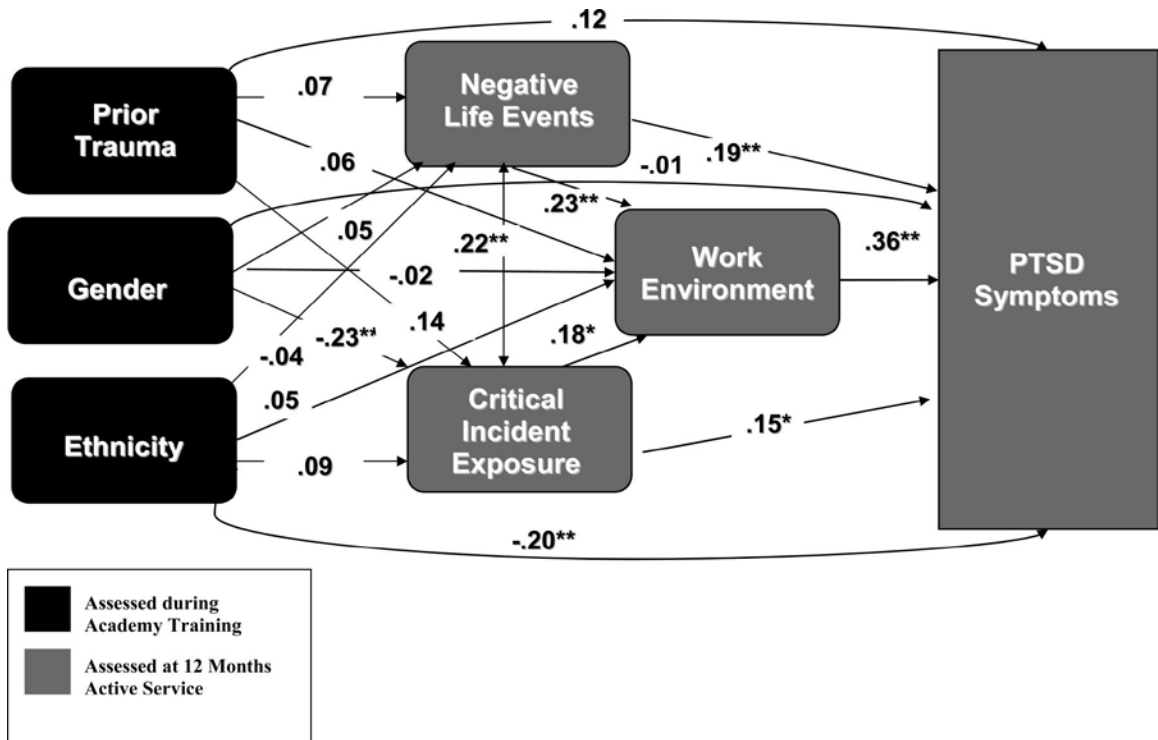
Figure 4. Path Model Predicting PTSD Symptoms in Police Officers. Reprinted from

"Routine Work Environment Stress and PTSD Symptoms in Police Officers," by S.

Maguen, T. Metzler, S. McCaslin, S. Inslicht, C. Henn-Haase, T. Neylan, and C. Marmar,

2009, *The Journal of Nervous and Mental Disease, 197*(10), p. 758. Copyright 2009 by

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Table 6

Direct and Indirect Effects for the Path Model of PTSD Symptoms

Model Variable	St. Beta	*SE*
Prior trauma		
Direct effect	0.12	0.06
Total indirect effects	0.07	0.04
Specific indirect effects	0.02	0.03
Total effect	0.19**	0.07
Gender		
Direct effect	-0.01	0.06
Total indirect effects	-0.04	0.04
Specific indirect effects	-0.01	0.03
Total effect	-0.05	0.07
Ethnicity		
Direct effect	-0.20**	0.06
Total indirect effects	0.03	0.04
Specific indirect effects	0.02	0.03
Total effect	-0.17*	0.07
Negative life events		
Direct effect	0.19**	0.07
Total indirect effects	0.08*	0.03
Specific indirect effects	0.08*	0.03
Total effect	0.28**	0.07
Critical incidents		
Direct effect	0.15*	0.07
Total indirect effects	0.07*	0.03
Specific indirect effects	0.07*	0.03
Total effect	0.22**	0.07
Work environment		
Direct effect	0.36**	0.06
Total indirect effects	---	---
Specific indirect effects	---	---
Total effect	0.36**	0.06

$*p < 0.05$, $**p < 0.01$.

St. Beta indicates standardized beta; *SE*, standard error for standardized effects; specific indirect effects = indirect effects with WEI as mediator; gender: 1 = male, 2 = female; ethnicity: 0 = ethnic minority, 1 = white.

Note. Reprinted from "Routine Work Environment Stress and PTSD Symptoms in Police

Officers," by S. Maguen, T. Metzler, S. McCaslin, S. Inslicht, C. Henn-Haase, T. Neylan,

and C. Marmar, 2009, *The Journal of Nervous and Mental Disease, 197*(10), p. 759.

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The Strathclyde Police and Royal Ulster Constabulary Study

In their study *Managing post incident reactions in the police service,* Mitchell, Stevenson, and Poole (2000) determined what critical incidents were experienced by the Strathclyde and RUC samples in the study, and the results are demonstrated in Tables 7 and 8. The authors then examined several sets of data relating to time elapsed since exposure to critical incidents and posttraumatic stress symptoms for both the Strathclyde and RUC sample, as demonstrated in Table 9 and Table 10.

In the Strathclyde sample, the incidents had occurred between one week and 30 years prior to the study, with a mean length of 5.75 years. In the RUC sample, the incidents had occurred between one week and 24 years prior to the study, with a mean length of 8.31 years. The authors did discover a weak negative correlation between time elapsed since the critical incident and frequency of posttraumatic symptoms, but no correlation between time elapsed since the critical incident and severity of symptoms.

Mitchell, Stevenson, and Poole (2000) examined several sets of data relating to agency response and posttraumatic stress symptoms. Their findings are demonstrated in Tables 11 and 12.

The authors discovered a strong correlation between posttraumatic stress symptoms and sources of pressure from the agency in the Strathclyde sample, the top three stressors being daily hassles in the workplace, relationships with other officers in the workplace, and the organizational climate. In the RUC sample, the top sources of pressure from the agency that demonstrated a strong correlation to posttraumatic stress symptoms were organizational climate, responsibility for actions and decisions, and daily hassles.

Table 7

The incidents described: Strathclyde sample

Nature of incident	n
Death	305 (71.5%)
Various	129
Road traffic accident	96
Lockerbie	60
Kintyre	20
Threat	87 (20.4%)
Personal threat	77
Firearms	6
Prolonged danger	4
Abuse or cruelty	19 (4.4%)
Direct	14
Secondary by interview/film	5
'Morale' issues	12 (2.8%)
Complaint from public or supervisor	11
Perceived workplace harassment	1
Total	426* (100%)

* this includes 3 other unique incidents not included in order to protect the anonymity of respondent

Note. Reprinted from *Managing post incident reactions in the police service* (p. 28), by

M. Mitchell, K. Stevenson, and D. Poole, 2000, Health and Safety Executive Books. Her

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Table 8

The incidents described: RUC sample

Nature of incident	N (percent of sample)
Security related incidents	400 (67%)
Death of a police officer	94
Attack on police	82
Death of a civilian	70
Personal threat	57
Attending bomb/shooting incident	46
Death of a soldier	18
Drumcree	15
Riot	15
Terrorist death by police	3
Civilian incidents	182 (30%)
Sudden death	67
RTA	49
Dangerous/threatening situation	16
Public disorder	6
Assault on police officer	6
Rape	3
Other incidents	13 (2%)
Death by police firearms incident	3
Attending post mortem	2
Injury by police firearm incidents	2
Problems with colleagues/supervisor	5
Complaints from public	1
Total	597

Note. Adapted from *Managing post incident reactions in the police service* (p. 35), by M.

Mitchell, K. Stevenson, and D. Poole, 2000, Health and Safety Executive Books. Her

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Table 9

Number and percentage of respondents in various time periods post-incident with high

scores on either measure of post trauma symptoms: Strathclyde sample

	No. of respondents (%)	
Time period	No symptoms	High symptoms
1 – 10 weeks (29 respondents)	6 (20.6%)	2 (6.8%)
11 weeks - 1 year (74 respondents)	16 (21.6%)	11 (14.8%)
56 weeks – 2 years (37 respondents)	13 (35%)	4 (10.8%)
106 weeks – 5 years (117 respondents)	40 (34%)	6 (5.1%)
264 weeks – 10 years (137 respondents)	43 (31.3%)	6 (4.3%)
530 weeks – 30 years (49 respondents)	15 (30.6%)	7 (6.2%)

Note. Reprinted from *Managing post incident reactions in the police service* (p. 34), by

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Table 10

Number and percentage of respondents in various time periods post-incident with high

scores on either measure of post trauma symptoms: RUC sample

	No. of respondents (%)	
Time period	No symptoms	High symptoms
1 – 12 weeks (48 respondents)	12 (25%)	6 (16.6%)
16 weeks - 1 year (58 respondents)	22 (38%)	4 (9%)
54 weeks – 2 years (108 respondents)	8 (31%)	3 (11.5%)
264 weeks – 5 years (141 respondents)	30 (21%)	27 (19%)
530 weeks – 24 years (186 respondents)	45 (25%)	23 (12%)

Note. Reprinted from *Managing post incident reactions in the police service* (p. 38), by

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Table 11

Correlation of variables measured with post trauma symptoms (Strathclyde sample)

Sources of pressure	Correlation	Significance
Daily hassles	.249	.0001
Relationships	.243	.0001
Organizational climate	.205	.002
Workload	.200	.0003
Home / work balance	.140	.0112
Personal responsibility	.130	.019
Recognition	-	ns
Managerial role	-	ns
Organizational commitment	-.128	.02
Organizational satisfaction	-.157	.0045
Job satisfaction	-.162	.0034
Control (of events)	-.164	.003
Organizational security	-.166	.0027
How un-worried (confidence level)	-.222	.0001
Ability to bounce back (resilience)	-.266	.0001
Mental well-being (state of mind)	-.319	.0001

Correlations are positive, the higher the score of the measure the higher the number of posttraumatic stress symptoms. The more zeros in the significance figure the more significant is the correlation. Only significance levels greater than .002 are remarkable; "ns" indicates the correlation is non significant, that there is no relationship between the variable and the number of posttraumatic stress symptoms.

Note. Adapted from *Managing post incident reactions in the police service* (p. 118), by

M. Mitchell, K. Stevenson, and D. Poole, 2000, Health and Safety Executive Books. Her

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Table 12

Correlation of variables measured with post trauma stress (RUC sample)

Sources of pressure	Correlation	Significance
Balance home / work	.303	<.001
Organizational climate	.271	<.001
Responsibility for decisions	.230	<.001
Daily hassles	.229	<.001
Workload	.206	<.001
Need for recognition	.168	<.001
Control (of events)	.165	<.001
Relationships at work	.104	<.02
Managerial role	.104	<.02
Organizational satisfaction	-.131	<.003
Organizational commitment	-.165	<.001
How unworried (confidence)	-.216	<.001
Job satisfaction	-.239	<.001
Ability to bounce back (resilience)	-.268	<.001
Mental well-being (state of mind)	-.399	<.001

Correlations are positive, the higher the score of the measure the higher the number of posttraumatic stress symptoms. The more zeros in the significance figure the more significant is the correlation. Only significance levels greater than .002 are remarkable; "ns" indicates the correlation is non significant, that there is no relationship between the variable and the number of posttraumatic stress symptoms.

Note. Adapted from *Managing post incident reactions in the police service* (p. 119), by

M. Mitchell, K. Stevenson, and D. Poole, 2000, Health and Safety Executive Books. Her

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Mitchell, Stevenson, and Poole (2000) also examined several sets of data relating to critical incidents and positive consequences for the police officer, demonstrated in Tables 13 and 14.

In the Strathclyde sample, 117 respondents reported that nothing positive had resulted from the critical incident, 2 respondents provided a neutral response, 5 respondents reported negative consequences, but of the remaining 214 responses, increased self reliance, greater appreciation of life, and increased group cohesion were the top three listed positive outcomes. For the Strathclyde sample, comments regarding increased self reliance included those comments relating to decision making, and comments regarding group cohesion include those comments relating to better work relationships and discussing the incident in an informal and informal setting.

In the RUC sample, 252 respondents reported that nothing positive had resulted from the critical incident, 14 respondents reported negative consequences, but of the remaining 293 responses, increased self reliance, greater appreciation of life, and increased vigilance about personal safety were the top three listed positive outcomes of critical incidents. For the RUC sample, comments regarding a greater sense of self reliance included those relating to stress management and improved skills to be utilized in the future, and comments regarding group cohesion included those relating to improved relationships with colleagues and supervisors.

Table 13

Positive effects of incident: Strathclyde sample

Positive aspect of incident	Number (214)
Increased self reliance	91 (43%)
Greater appreciation of life	31 (15%)
Increased group cohesion	29 (14%)
Increased vigilance about personal safety	25 (12%)
Satisfaction about job well done	22 (10%)
Conviction of culprit	7 (3%)
Value of police work	6 (3%)
Commendation / promotion	2 (1%)
Appreciation of other emergency services	2 (1%)
Total	214

Note. Reprinted from *Managing post incident reactions in the police service* (p. 52), by M. Mitchell, K. Stevenson, and D. Poole, 2000, Health and Safety Executive Books. Her Majesty's Stationery Office: London. Crown Copyright 2000. Used with permission.

Table 14

Positive effects of incident: RUC sample

Positive aspect of incident	Number (214)
Increased self reliance	70 (24%)
Greater appreciation of life	60 (20%)
Increased vigilance about personal safety	49 (17%)
Satisfaction at job well done	45 (15%)
Increased group cohesion	23 (8%)
Positive value of police work	16 (5.5%)
Commendation / promotion at work	16 (5.5%)
Conviction of culprit	12 (4%)
Appreciation of work of other services	2 (1%)
Total	293 (100%)

Note. Reprinted from *Managing post incident reactions in the police service* (p. 55), by M. Mitchell, K. Stevenson, and D. Poole, 2000, Health and Safety Executive Books. Her Majesty's Stationery Office: London. Crown Copyright 2000. Used with permission.

Research Questions

Question 1. By using age as a comparative measure of work experience, the first question, whether law enforcement officers who have more years of experience have more stress relating to normal operations, was answered. A negative correlation between officer age and overall levels of stress was shown to support the opposite assertion, that younger police officers report higher levels of stress than older officers.

Question 2. The second question, whether law enforcement officers who have experienced more critical incidents report higher levels of posttraumatic stress, was answered. A positive correlation between critical incident exposure and posttraumatic stress disorder symptoms was present in the data, as well as the evidence that critical incident exposure had an indirect as well as a direct effect on posttraumatic stress symptoms.

Question 3. The third question, whether the more recently a law enforcement officer has experienced a critical incident, the higher the indicators for posttraumatic stress, was partially answered. A weak negative correlation between time elapsed since exposure to a critical incident and the frequency of posttraumatic stress disorder symptoms was demonstrated, although no correlation could be demonstrated between time elapsed since exposure to a critical incident and the severity of posttraumatic stress disorder symptoms. Data suggests that the severity of posttraumatic stress disorder symptoms remains constant, but the frequency by which they are experienced by officers diminishes over time.

Question 4. The fourth question, whether law enforcement officers who do not perceive support from their agency and peers report a greater incidence of posttraumatic

stress indicators, was answered when utilizing work environment and organizational climate as comparatives for agency support. A positive correlation between work environment and posttraumatic stress disorder symptoms was present, as well as data indicating that work environment directly affected posttraumatic stress disorder symptoms. Additionally, a positive correlation between organizational climate and posttraumatic stress disorder symptoms was demonstrated.

Question 5. The final question, whether law enforcement officers who perceived support from their agency and peers report a greater incidence of posttraumatic growth indicators, was answered when examining the individual responses of officers reporting posttraumatic growth indicators following a critical incident. This question may also be answered by utilizing inductive reasoning when examining the parallel correlations of posttraumatic growth indicators and work related variables to posttraumatic stress disorder symptoms.

DISCUSSION AND RECOMMENDATIONS

Discussion

Question 1, the question of whether law enforcement officers who have more years of experience have more stress relating to normal operations, was answered when using age as a comparative measure of work experience. Data showed that in actuality, younger officers report more stress than older officers. This may be explained in several different ways. First, age of the officer may be viewed as a representative of the officer's rank within the structure of the organization, and consequently, older officers are not subject to as many stressors shared by younger "front line" officers who have not yet attained a supervisory rank. Second, older police officers may have adapted coping mechanisms for stress, and may not become as frustrated by the stressors related to law enforcement as younger officers may. Finally, younger officers who report high levels of stress may terminate their employment with the law enforcement agency within their first few years of duty, thus only those officers who report lower levels of stress initially remain to achieve more years of experience. However, several other variables should be considered and more research should be conducted to specifically examine the correlation of stress to years of experience.

Question 2, whether law enforcement officers who have experienced more critical incidents report higher levels of posttraumatic stress, was answered. There are several explanations for this positive correlation. First, as noted in the literature review, some law

enforcement officers may have developed a denial strategy in response to the constant threat of danger associated with their profession. Once an officer has become exposed to numerous critical incidents, the denial response is no longer sufficient to "shield" the officer from the emotional response required to cope with the emotional impact of a critical incident. Second, if exposed to numerous critical incidents within a short period, the officer may not have had time to adequately cope with the first incident, thus overwhelming the officer's coping abilities. The officer may not have had prior experience with the initial or subsequent incidents, and without adequate time to effectively cope with the first event, the officer's coping abilities are simply overwhelmed. Finally, non-deadly force incidents are the most common type of critical incidents that officers will be exposed to, and should the law enforcement agency have a definitive definition of a critical incident as an event and not as an incident which may affect the officer on an individual basis, the officer may not receive the appropriate assistance required from their agency, thus increasing the officer's vulnerability to posttraumatic stress.

The time elapsed since the exposure to critical incidents and its relation to posttraumatic stress was explored in question 3, whether the more recently a law enforcement officer has experienced a critical incident the higher the indicators for posttraumatic stress. It was shown that although the time elapsed since the critical incident occurrence was weakly correlated with the frequency of posttraumatic stress symptoms, what was more significant was the data indicating that the severity of the symptoms does not decrease with the passage of time. What this indicates is that following the initial "shock phase" immediately after a critical incident, the officer may

still experience symptoms of posttraumatic stress which will gradually decrease in frequency over time. However, the intensity of these symptoms remains unchanged, which may be explained by examining the police subculture itself. As noted in the literature review, posttraumatic stress vulnerability is dependent on several factors, including support in nonwork domains, lack of recreational activities, and lack of social interaction. The police subculture encourages ostracism from mainstream society, encouraging the aforementioned vulnerabilities. When the shared experiences by officers which form the bonds characterized by the police subculture are critical incidents, the result can only be the re-experiencing of the critical incident every time the officer attempts to establish new or reestablish social bonds within the subculture.

The law enforcement agency itself has been shown to have a significant impact on the well being of the officer following a critical incident. Both question 4, whether law enforcement officers who do not perceive support from their agency and peers report a greater incidence of posttraumatic stress, and question 5, whether law enforcement officers who perceive support from their agency and peers report a greater incidence of posttraumatic growth indicators, addressed this issue Again, this may be due to the nature of the police subculture; the lack of social bonds outside of the law enforcement profession lead officers to rely upon other officers, family members, spouses, and the law enforcement agency for support following a critical incident, but if the officer cannot trust or rely upon other officers or their agency to offer support, then the officer will not seek assistance in coping with the aftermath of a critical incident which may have profoundly affected the officer. However, if the officer is assured that they will be supported and not ridiculed by other officers in seeking assistance, then the officer is

more apt to seek support and thus develop more positive coping strategies. If the officer's peer and agency response is negative, then the officer will have greater vulnerability to posttraumatic stress; if the officer's peer and agency response is positive, then the officer will have less vulnerability to posttraumatic stress and may have a greater occurrence of posttraumatic growth.

Recommendations for Administrators

Administrators for law enforcement agencies should understand the impact of departmental actions and policies on an officer's well being both before and after a critical incident. Administrators should consider stress management training programs as part of the initial orientation phase for new law enforcement officers. Although emphasis is placed on the skills needed by police officers to confront violent offenders, such as firearms training and training in less lethal weapons, less emphasis is placed on how to deal with the dangers of stress accumulation and negative coping mechanisms. Again, the frequency of deadly force incidents remains relatively low compared to the stress of day to day operations that affect law enforcement officers constantly. If a stress management training program is implemented, administrators may discover a lower employment turnover rate due to officers who cannot effectively handle the stressors of normal operations terminating their employment with the agency. Officers would benefit by having an alternate coping mechanism to deal with the pressures of the profession, thus minimizing emotional hardening, the combat team syndrome, substance abuse, domestic abuse, and suicide.

In regard to stress under normal operations, by regulating manageable work schedules, the top three stressors relating to operational stress may be reduced, and by

ensuring fair and consistent enforcement of departmental actions, the top three stressors relating to organizational stress may be reduced.

Supervisory training programs which emphasize positive reinforcement would also be beneficial to agencies, as job satisfaction was shown to be strongly related to lower stress levels, positive work environments were shown to be a protective factor for police officers against the development of posttraumatic stress disorder, and organizational satisfaction and commitment were shown to be related to lower levels of posttraumatic stress symptoms. Proper supervisory training may also promote stronger group cohesion and increase the recognition of officer accomplishments, factors shown related to posttraumatic growth for the officer.

Administrators should review their existing policies regarding critical incidents, if present, and if not, implement policies based upon the agency's size, type, and financial allocations. The following recommendations should be included in the policies developed for law enforcement agencies by policymakers.

Policy Recommendations

Recognizing the need to balance the credibility and integrity of the agency with the needs of the individual police officers, the following section discusses the aspects of and recommendations for policies relating to critical incidents for law enforcement agencies.

Policies should address both the physical and psychological injuries that officers sustain from a critical incident. Whereas the physical injuries are relatively easily treated, psychological injuries are often more difficult to detect and effectively treat.

Policies should include mandated professional counseling for officers directly involved in the critical incident. As stated earlier, many law enforcement officers will not seek the treatment they need because they do not wish to be stigmatized. Voluntary professional counseling sessions should also be offered to officers who were not directly involved in the critical incident, but who are profoundly affected nonetheless. These sessions should be discrete in nature and allow for flexible working schedules.

Peer counseling sessions should also be allowed; administrators should allocate the time and resources for officers to meet and debrief without supervision from an administrator. This will allow officers who are developing negative coping mechanisms in reaction to the critical incident to express this more openly and honestly.

A training course designed for officers to recognize posttraumatic stress indicators could be easily designed and taught by a counseling professional to supervisors in order to accurately identify officers most at need for assistance.

A mandated leave of absence should be included in the policy, but due to the difference in each individual's coping ability, this time should not be restricted to a few days. For those officers who are affected more profoundly, a longer leave of absence should be allowed. Again, critical incidents do not affect every law enforcement officer equally, and some officers may require more time to effectively cope with the aftermath of a critical incident.

Policy implementation. A policy designed to address the specific needs of a department following a critical incident, including mandated leave of absence and counseling opportunities, can be implemented by the chief administrator of said agency.

This policy needs to be included in the departmental policies and procedures, and every direct line supervisor needs to be informed of this policy.

Local and neighboring law enforcement agencies should develop policies in conjunction with each other, especially in jurisdictions with limited manpower and financial resources. Neighboring law enforcement agencies, although not directly involved in the critical incident, should also prepare to offer counseling services for its officers, as the law enforcement community is often intertwined with personnel connections. Also, those agencies that have previously experienced a critical incident may assist the neighboring agency with tactics and treatments that have succeeded or avoid those that have failed for their own agency.

Reasons for implementation. The costs for implementing policies relating to critical incidents would be minimal compared to the revenue spent for extended leaves of absences and the cost of personnel working overtime hours due to these leaves of absences. Additionally, the cost of professional counseling services would be nominal compared to the replacement cost of hiring new personnel due to the resignation of an experienced police officer. For smaller agencies without adequate resources, volunteer professional counseling may be used to debrief those officers most affected by the critical incident. Agencies may also consider the alternative of having a member of the agency trained in counseling services.

The implementation of a policy addressing critical incidents will assist administrators in quickly acting upon a pre-set plan of action following a critical incident. This will greatly assist administrators, as administrators themselves are not immune to the effects of a critical incident, such as confusion and difficulty concentrating. Also, a

quick response by administrators may assist in minimizing the initial severity of posttraumatic stress symptoms, thus reducing the vulnerability of officers to long term emotional damage.

A policy that has been well-designed to meet the needs of the agency and the officers themselves will be beneficial to all. The agency will benefit in decreased risks of misconduct, absenteeism, early retirement, stress-related disabilities, and reduced productivity. Law enforcement officers will benefit in that a positive agency response will decrease the likelihood of the officer to suffer from posttraumatic stress and encourage posttraumatic growth.

Conclusion

Although the probability of an agency experiencing a critical incident resulting in the serious bodily harm to or the death of a police officer remains relatively low, many agencies are not adequately prepared to address the issue. As noted earlier, less than one-third of agencies have any policies addressing critical incidents. This writer advises every law enforcement agency to design and implement policies for reacting to critical incidents before they occur, and model these policies to meet the needs of the specific agency and of the law enforcement officers employed by the agency. By implementing sound policies in conjunction with neighboring law enforcement agencies, and taking a proactive approach to stress management, the negative effects of a critical incident may well be greatly minimized and law enforcement agencies would be facilitating posttraumatic growth for their individual police officers, in turn strengthening the agency following a critical incident.

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EDUCATION

Master of Arts, Criminal Justice   Expected May 2010
     University of Louisiana at Monroe, Monroe, LA

Bachelor of Arts, Criminal Justice   December 2007
     Minors: Sociology, Military Science
     University of Louisiana at Monroe, Monroe, LA

AWARDS AND RECOGNITION

J. Edgar Hoover Memorial Scholarship   2009
     Former Agents of the FBI Foundation

First Place Winner, Graduate Division, National Student Paper Competition   2009
     American Criminal Justice Association / Lambda Alpha Epsilon

Graduate Assistantship   2008
     University of Louisiana at Monroe

Recognition of Outstanding Merit and Accomplishment   2008
     Who's Who Among Students in American Universities & Colleges

Third Place Winner, Graduate Division, National Student Paper Competition   2008
     American Criminal Justice Association / Lambda Alpha Epsilon

Kinsey Memorial Law Enforcement Scholarship   2007
     University of Louisiana at Monroe

Outstanding Accomplishment   2005 - 2009
     The Dean and Faculty of the College of Arts and Sciences
     University of Louisiana at Monroe

Certificate of Appreciation – Law Enforcement Officer of the Year   2005
     Office of the Mayor, Bastrop, LA

Outstanding Police Officer – First Place Winner   2004 - 2005
     Department of Louisiana Veterans of Foreign Wars

Police Officer of the Year   2004 - 2005
     Boone/McDowell VFW Post 227 & Ladies Auxiliary

Certificate of Appreciation for Distinguished Service   2004
     The Ladies of Place Aux Dames Civic and Social Club

PROFESSIONAL EXPERIENCE

Morehouse Parish Sheriff's Office, Bastrop, LA   2006 - Present

Grant Writer / Manager
Locate grant funding, write initial grant applications, complete financial reports, and ensure compliance with mandated performance tracking reports required by funding agencies.

Training Officer
Research, develop, and instruct professional development courses for correctional and patrol officers, ensure policy and procedural compliance with state and federal guidelines, instruct as needed at North Delta Regional Training Academy and screen and test potential applicants with the agency.

Patrol Deputy
Investigate traffic collisions, enforce traffic, local, and criminal laws, investigate citizens' criminal complaints, patrol residential areas and business districts, provide security for community events, and generally assist citizens in the community.

Correctional Officer
Monitor inmate status and activities, maintain current and accurate records for use by the Louisiana Department of Corrections, and conduct initial medical screening of inmates for medical staff.

University of Louisiana at Monroe, Monroe, LA   2008 - 2009

Graduate Research Assistant – Criminal Justice Department
Collaborate with faculty in preparing publications relating to law
enforcement and criminal justice, assist faculty with delivery of
criminal justice curriculum, aid the criminal justice faculty and
administration with general operating duties and tasks.

Bastrop Police Department, Bastrop, LA   1999 - 2005

Patrol Officer
Investigate traffic collisions, enforce traffic, local, and criminal
laws, investigate citizens' criminal complaints, patrol residential
areas and business districts, provide security for community
events, and generally assist citizens in the community.

Field Training Officer
Supervise junior patrol officers, prepare daily shift activity logs,
and evaluate new patrol officers performance and abilities.

PROFESSIONAL DEVELOPMENT

Louisiana P.O.S.T. Certified Corrections Instructor   2010
     Louisiana Peace Officer Standards and Training Council

Louisiana P.O.S.T. Certified Level III   2010
     Corrections Officer
     Louisiana Peace Officer Standards and Training Council

Louisiana P.O.S.T. Certified Instructor   2009
     Federal Bureau of Investigation Training School

Confronting the Challenge of Sexual Exploitation   2009
     National Law Center for Children and Families

Critical Incident Stress Management: Individual and Peer Intervention   2008
     International Critical Incident Stress Foundation

Crisis Intervention Team   2007
      Mental Health Crisis Response Task Force - Northeast Delta Louisiana

Risk Management   2005
      Multijurisdictional Counterdrug Task Force Training

Drugs in America   2005
      Multijurisdictional Counterdrug Task Force Training

Explosives, Booby Traps, Bomb Threat   2005
      Multijurisdictional Counterdrug Task Force Training

Analytical Investigative Tools   2005
      Multijurisdictional Counterdrug Task Force Training

Chemical Testing for Intoxication / Intoxilyzer 5000 Certification   2003
      Louisiana Department of Public Safety and Corrections
      Office of State Police

T-Cap / Criminal Patrol   2001
      Regional Counterdrug Training Academy

Patrol Officer's Response to Street Narcotics   2001
      Regional Counterdrug Training Academy

Law Enforcement Response to Domestic Violence   2000
      YWCA, Morehouse Parish District Attorney's Office

HazMat Awareness   1999
      Fire and Emergency Training Institute

First Responder Training Course   1999
      Louisiana Department of Health and Hospitals

Emergency Vehicle Operations   1999
      North Delta Regional Training Academy

Louisiana P.O.S.T. Certified Level I   1999
      Law Enforcement Peace Officer
      Louisiana Peace Officer Standards and Training Council

DISCIPLINE RELATED EXPERIENCE

Consumer Advisory Network, Member
      National Criminal Justice Reference Service, U.S. Department of Justice

Jail / Detention Suicide / Risk Factors and Liability, Instructor and Developer
      Institute of Law Enforcement

Legal Issues for Correctional Officers, Instructor and Developer
      Morehouse Parish Sheriff's Office

Correctional Officer Response to Impaired Inmates, Instructor and Developer
      Morehouse Parish Sheriff's Office

Professional Development for Correctional Officers, Instructor and Developer
      Morehouse Parish Sheriff's Office

Suicide Intervention for Correctional Officers, Instructor and Developer
      Morehouse Parish Sheriff's Office

History of Law Enforcement, Instructor
      North Delta Regional Training Academy

Orientation to the American and Louisiana Criminal Justice System, Instructor
      North Delta Regional Training Academy

Overview of the Criminal Justice Process, Instructor
      North Delta Regional Training Academy

Report Writing, Instructor
      North Delta Regional Training Academy

PROFESSIONAL MEMBERSHIPS

Louisiana Sheriffs' and Deputies' Political Action Committee
American Correctional Association
American Criminal Justice Association / Lambda Alpha Epsilon

PUBLICATIONS

Rawls, A. C. (2008). Critical Incidents: Police Officers, Posttraumatic Stress, Posttraumatic Growth, and Law Enforcement Agencies. *Contemporary Issues in Criminology and the Social Sciences, 2*(3), 111- 118. July, 2008.

Rawls, A. C. (2009). Critical Feminist Theory and Domestic Violence. *The L.A.E. Journal of the American Criminal Justice Association,* ISSN No. 1094-8481.

Rawls, A. C. (2009). Domestic Violence from a Critical Feminist and a Social Learning Perspective. *Crime, Punishment, and the Law, 1*(2), 65-75. December, 2009.

GRANTS AWARDED

Award Amount: $18,353   2009 - 2013
Project Title: Improving and upgrading phone system technology for the Morehouse Parish Sheriff's Office, Bastrop, LA
Awarding Agency: US Bureau of Justice Assistance
Solicitation: Recovery Act: Edward Byrne Memorial Justice Assistance Grant (JAG) Formula Program: Local Solicitation

Award Amount: $929,994   2009 - 2011
Project Title: Enhancing jail operations by creating and preserving employment positions and improving training programs for correctional officers, Morehouse Parish Sheriff's Office, Bastrop, LA
Awarding Agency: US Bureau of Justice Assistance
Solicitation: Recovery Act: Assistance to Rural Law Enforcement to Combat Crime and Drugs Competitive Grant