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Symptoms of post-traumatic stress disorder in police officers following September 11, 2001

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SYMPTOMS OF POST-TRAUMATIC STRESS DISORDER IN POLICE

OFFICERS FOLLOWING SEPTEMBER 11, 2001

A Project

Presented to the

Faculty of

California State University,

San Bernardino

In Partial Fulfillment

of the Requirements for the Degree

Master of Social Work

by

Jennifer Danielle Urban

June 2003

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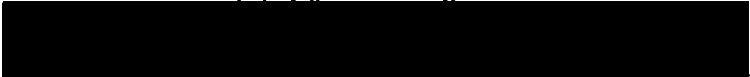
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by

Jennifer Danielle Urban

June 2003

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ABSTRACT

On September 11, 2001, three hijacked airliners flew
into both World Trade Center buildings and the Pentagon.
Emergency services personnel responded to both scenes of
horror. Trauma such as this has been known to lead to the
development of Posttraumatic Stress Disorder. This study
explores the reactions of police officers who were not
directly involved in the rescue efforts of September 11,
2001. Participants included 60 police officers at two
southern California law enforcement agencies. An Impact
of Event Scale was used to measure symptoms of PTSD, and a
questionnaire collected other relevant information.
Findings revealed that the majority of participants were
still, 16 months after the attack, experiencing at least a
moderate level of PTSD symptoms. Findings also showed a
significant correlation between perception of threat and
total score on the Impact of Event Scale. Recommendations
were made for follow up study and to assist the
participating agencies in meeting the needs of their
officers.

ACKNOWLEDGMENTS

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CHAPTER ONE

INTRODUCTION

Introduction

The contents of Chapter One present an overview of
this project. The problem is discussed, as well as the
purpose of the study and the significance of this problem
for the field of social work.

Problem Statement

Several studies (Anshel, 2000; Duckworth, 1986;
Harvey-Lintz & Tidwell, 1997; Tang & Hammontree, 1992)
have looked at anxiety symptoms and symptoms of traumatic
stress among police officers. The occupation is, by its
very nature, a dangerous, stressful and anxiety-provoking
one. According to a survey conducted by the FBI, the
majority of officers in the United States rate the number
one training need as "handling personal stress" (Reese,
1988). While the incidence of Posttraumatic Stress
Disorder (PTSD) in the general population is estimated to
be approximately one and a half percent, the incidence of
PTSD among police officers is estimated by some to be at
around 15% (Kinchin, 1996). This means that of every one
hundred uniformed police officers patrolling our streets
at any given time, fifteen will be suffering from symptoms

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associated with PTSD. Still others estimate the incidence of PTSD symptoms among law enforcement officers to range from 12% to 35%, a more frightening number (Harvey-Lintz & Tidwell, 1997).

The events of September 11, 2001 changed the world. In particular, the surviving police officers and other emergency services personnel who responded to the scenes of horror that day will never be the same. It seems to follow that police officers across the country, and even around the world, would also be impacted by the events of that day. The threat of terrorism became very real, and officers across the country have been involved in varying levels of new training and heightened security. The current study explored the presence of symptoms of posttraumatic stress disorder experienced by police officers who were not directly involved in the events of that day.

Purpose of the Study

The purpose of this study was to examine what, if any, symptoms of a traumatic stress reaction were still being experienced by police officers, as a result of the events of September 11, 2001, who were geographically distant from the events of that day.

Significance of the Project
for Social Work

Police officers, themselves, may initially not see
the need for this research. It seems that police officers
rarely recognize the signs of stress and anxiety in their
own lives until significant damage has been done. In the
past, police agencies have struggled with addressing the
needs of an officer as "victim." According to Reiser and
Geiger (1984, p. 319), this was due to a lack of
understanding about the consequences associated with high
stress and the "need of police officers to pretend that
they can handle anything and that feelings are not
important."

Thankfully, many police departments have begun, over
the past two decades, to recognize the importance of
addressing the stress and anxiety levels among their
officers, and have instituted such services as peer
counseling programs, stress management education, and
critical incident debriefing programs. For example,
approximately 50% of the police departments in the state
of California now have some sort of peer support program
to help officers deal with common life problems and
stressors (Benner, 2000). Police departments have a
vested interest in taking care of their officers, in terms
of finances, work force retention, and department morale.

When considering training, overtime, benefits, testing for

replacements, and lost knowledge, it can be quite costly

for a department to replace a veteran police officer

(Kureczka, 1996). In addition, in recent years, there

have been several incidences of police officers and

emergency personnel suing their departments for failing to

provide them with needed psychological services following

disasters, and have won monetary damages in these lawsuits

(Roach, 1999; Strawbridge, 1999; The Lawyer, 1996;

Thompson, 1999).

Police departments, and the communities which support

them, cannot afford to ignore the issues surrounding

anxiety, stress, and trauma and the impact of these on

their officers. Thus, given the serious events of

September 11, 2001, most police departments should be

interested in the issues addressed in this study. If the

departments are made aware of the struggles their officers

are facing, they are better able to provide the support

and resources needed to help their officers work through

their issues.

Several studies have attested to the importance

of attending to the mental health of emergency workers,

including police, paramedics, firefighters, etc., who

respond to community disasters (Alexander, 1990; Bradford

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& John, 1991; McCloy, 1992). Alexander (1990) suggested that rescue and medical personnel involved in disaster work may become "hidden victims." In other words, many resources are dedicated to helping the obvious victims of disasters, yet those responding to the disasters can sometimes be forgotten or not thought of as victims. According to Reese (1988), police officers are vicarious victims and can have their lives destroyed by the crimes they investigate. He also asserts that the combination of dealing with terrible situations and traumatized victims while working under the threat of physical danger, can all result in overwhelming stress. It is vital that the social work profession further understands these issues because social workers as a group are among the primary providers of mental health treatment in this country. As such, the profession has a responsibility to be educated, and aware of the impact of such tragic and traumatic events as those of September 11, 2001.

Finally, there is a high likelihood that there will be future terrorist attacks which may also impact this population (according to ongoing news reports and warnings issued by the government). There is a large population of law enforcement officers in this country, and the impact of these traumatic events may be widespread. This

population has traditionally been an under-served population by social work services, and while it is not the typical under-served population which social workers have focused on (for example, economically disadvantaged or minority persons), it is nevertheless a population which is in need. As social workers, we have an ethical obligation to conduct research which will improve services to special needs populations such as this population.

In order to appropriately respond to the needs of this population, the profession needs to be aware of the seriousness and extent of the problem. Once the profession clearly understands the special needs of police officers, partnerships between social workers and police agencies could perhaps be formed in order to address these needs. Social workers could provide counseling services, crisis debriefings, and stress management education, for example.

CHAPTER TWO

LITERATURE REVIEW

Introduction

Chapter Two consists of a discussion of the relevant
literature. Specifically, the underlying theories which
are guiding this study will be presented. In addition,
various sources of stress and trauma for police officers
will be examined, such as duty-related stress,
organizational stress, and stress caused by the social
system. The effects of trauma and stress in the lives of
police officers will be discussed, and finally, the
specific nature of terrorism and stress reactions will be
examined.

Theories Guiding
Conceptualization

One theory which guided this study is the person-in-
environment theory. This theory studies the individual
within the context of his/her surroundings. A police
officer does not live and operate in a vacuum. The
officer interacts with family, friends, social system, and
work environment. The work environment, in particular,
often requires a completely different response from the
officer than do the other environments within which an
officer lives. For example, an officer is expected to

hide personal emotions and be in control of others around him while on the job, yet is then expected to be able to express his emotions and be less controlling with his family (Duckworth, 1986; Reiser & Geiger, 1984). These contradicting expectations placed on the individual officer can have a significant impact, which cannot be overlooked. It is simply not enough to look solely at the individual person. The surrounding environment must also be examined when looking at levels of functioning and symptoms of pathology. The law enforcement environment, with its expectation for officers to avoid showing emotions, can actually be a "breeding ground" for the development of PTSD, as avoidance is one of the coping strategies which is associated with more acute stress and poorer recovery (Jenkins, 1997).

In addition, both the biomedical and behavioral models of PTSD acquisition were considered as they relate to the types of trauma experienced by police officers. Police officers may have past traumas from their personal lives which will affect them, in addition to the often repetitive traumas they experience in the line of duty (Harvey-Lintz & Tidwell, 1997), all of which were considered in how these may influence the way September 11 affected officers. According to the biomedical model,

repetitive trauma can cause an addiction to the neurochemicals released during stressful events, which may lead to the development of PTSD symptomatology (Jones and Barlow, 1990). The symptoms of PTSD, such as increased startle response and anxiety, are relieved when endorphin levels increase, but are reexperienced when endorphin levels decrease, and this creates a symptom cycle (Harvey-Lintz & Tidwell, 1997). According to the behavioral model, re-exposure to multiple stressors, such as the kind experienced by officers, can lead to the development of PTSD symptoms (Harvey-Lintz & Tidwell, 1997).

Finally, it is known that different people will experience a similar event in different ways, and what one person perceives as a stressful event, another may not (Aguilera, 1998; Buren, 1981). The current study took this into account by exploring participants' perceptions about the events of September 11, 2001, including the degree of threat perceived by participants and any changes the participants have made in their approach to their job since then.

Occupational Stress:
Duty Related

Law enforcement seems to be, inherently, a high-stress occupation (Brown & Campbell, 1990). According to

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Band and Manuele (as cited in Tang & Hammontree, 1992),

the stress experienced by police officers is highly

violent in comparison with stress experienced by the

general population. In a study of 141 Los Angeles Police

Department (LAPD) officers who worked during the 1992

riots in Los Angeles, 71% of the officers surveyed had

observed physical violence, 74.5% had observed physical

injury, 92.9% had observed the burning of property, mostly

because of anger, and 54% indicated they had personal

knowledge of injury to other officers or citizens (Harvey-

Lintz & Tidwell, 1997).

Officers are also exposed frequently to traumatic

situations over which they have little to no control, such

as traffic accidents, officer-involved shootings, hostage

situations, and crimes involving children (Reiser &

Geiger, 1984). These intense and traumatic events often

result in serious, long-term consequences not just for the

officers involved, but also for their families and their

departments (Kureczka, 1996). One expert estimated that

70% of officers who use deadly force leave law enforcement

within five years (Vaughn, 1991, as cited by Kureczka,

1996). In Harvey-Lintz and Tidwell's 1997 study of the

LAPD officers who worked during the 1992 riots in Los

Angeles, one officer commented about repeated exposure to

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trauma. This officer listed 12 children who had been killed or injured during his watch in just 3 months before the riots. These included an eight and nine year old brother and sister pair who hanged themselves by the same rope over a door jam; a six year old who found her dad's gun and shot her four year old sister in the head; a two year old boy shot in the head while being held by a gang-involved cousin; and several other victims of drive-by shootings (Harvey-Lintz & Tidwell, 1997).

Occupational Stress: Organizational

Officers do not encounter stress only on their beats. In many police departments, officers do not feel that management provides the support they need. In fact, according to one study, officers reported that poor administration and a lack of support caused levels of stress just as severe as the actual dangers of the job (Spielberger, Westberry, Grier, & Greenfield, 1981, as cited by Tang & Hammontree, 1992). LAPD officers involved in the 1992 Los Angeles riots reported that they perceived the department's upper management as "non-supportive and self-contradictory," and they felt the management "second-guessed" decisions made in the field (Harvey-Lintz & Tidwell, 1997, p. 81). Another study found that officers who reported high levels of supervisor support, low role

ambiguity, and satisfaction with the flexibility of their agency generally reported lower stress levels (Evans & Coman, 1993).

In addition, for officers who do experience trauma-related difficulties, one of the main reasons given for not seeking professional counseling is a concern about the impact seeking help might have on their job stability (Harvey-Lintz & Tidwell, 1997). These authors found that less than eight percent of officers indicated they would seek professional help for stress-related events, and officers reported that they did not feel their department's administration would support their seeking professional help. If a police department's administration maintains a work environment in which it is not safe for an officer to seek help for stress-related issues, the department is in fact contributing to the officer's level of stress.

Social System Stressors

Police officers often have insufficient support systems off the job (Mashburn, 1993), which can lead to increased levels of stress and anxiety. The very nature of the work they do makes police officers distrustful of those outside their inner circle of other officers (Mashburn, 1993). The stress of the job often causes

officers to have poor family relationships, which may

increase stress rather than providing a source of support.

For example, in one study, approximately 40% of the police

officers surveyed reported at least one incident of

physical aggression during a conflict with their spouse or

significant other during the preceding year (Neidig,

Russell, & Seng, 1992, as cited by Lott, 1995). In

addition, police officers are socialized to maintain an

image of being in control (Reiser & Geiger, 1984), and

society expects officers to handle stressful experiences

by being tough and not showing their feelings (Duckworth,

1986). This type of avoidance of affective expression can

lead to increased symptomatology (Reiser & Geiger, 1984)

Effects of Trauma and Stress

Much research has been conducted on the widespread

effects of stress. Some literature suggests that over 70%

of all work absences result from stress-related illnesses

(Adams, 1987, as cited by Tang & Hammontree, 1992).

Failure to cope effectively with stress leads to increased

rates of heart disease and stomach disorders (Lord, Gray,

& Pond, 1991, as cited by Anshel, 2000). Chronic stress

can have a tremendous effect on the immune system, thereby

decreasing the officer's ability to fight off illness and

disease (Anshel, 2000). One study found a significant

correlation between levels of job-related stress reported by officers and the levels of illness and absenteeism reported by those officers (Tang & Hammontree, 1992). All of these reinforce the importance of recognizing and treating stress-related symptoms in officers.

Another commonly seen effect of stress among police officers is the use of alcohol and other drugs as a means of coping. Dietrich and Smith (1984) contend that alcohol is an accepted form of coping among police officers. Some experts believe that if the rate of alcoholism in the general population is 10%, the rate among police officers is double that, making one of every five police officers an alcoholic (Noonan, 1999). Additionally, the abuse of alcohol has been cited as an important contributing factor in police suicides. One study documented alcohol abuse in 60% of the suicides in the Chicago Police Department (Wagner & Brezeczek, 1983). A similar study in Detroit found alcohol abuse in 42% of their officer suicides (Violanti, 1995). Other research has shown that police officers are more prone than civilians to alcoholism, domestic violence, and divorce (Jackson, 1991, as cited by Lott, 1995).

Chronic, ongoing stress has also been shown to affect an officer's ability to perform on the job. In one study,

following involvement in a stressful incident in the line of duty, officers who were identified as having symptoms of PTSD reported having increased startle responses, lack of concentration, and job difficulty (Harvey-Lintz & Tidwell, 1997). Stress can also lead to poor decision-making skills, discipline problems, tardiness, on-the-job accidents, complaints from citizens, and high officer turnover rates (Kureczka, 1996).

Normal responses to traumatic events include such symptoms as tearfulness, shakiness, nightmares, insomnia, irritability, isolation, hypervigilance, panic, headaches, gastrointestinal upset, depression, guilt, apathy, anger, and extreme fear (Mitchell, 1983). Other symptoms of an acute stress reaction may include decreased concentration, hyperarousal, shock, disorientation, and confusion (Armstrong & Lund, 1995). One study found that following a mass-casualty traffic accident, 71% of the rescue personnel involved had recurring sensory phenomena during the first week after the accident, and after one month, 87% of the crew were still moderately to severely affected by the accident (Watts & Walkden, 1994).

One tremendous risk when discussing police officers and anxiety, particularly PTSD, is the risk of suicide. Research shows that the suicide rate among police officers

is three times the national average (Quinnett, 1998). The
risk among police officers must be taken seriously, as
these officers have a readily available firearm, which is
nearly always the method used by officers who commit
suicide (Violanti, 1995). One study showed that the
suicide rate among police officers doubled between 1950
and 1990 (Violanti, 1995). In 1994, eleven New York City
police officers committed suicide; only two officers were
killed by criminals that year (Baker & Baker, 1996).

Terrorism and Trauma

Terrorist acts present a unique situation for police
officers, due to the often large-scale nature of the
event. Local law enforcement agencies are likely to be
the first responders to any scene of terrorism within the
United States, and yet, many law enforcement agencies have
ignored the possibility that an act of terrorism could
occur in their jurisdiction (Rehm, 2000). Research has
shown that officers' perceptions about their own
professional performance during a critical incident will
have a significant impact on their reactions following the
incident (Duckworth, 1991). Thus, perceptions by
themselves or others that they performed at a less than
optimal level during the disaster event will likely
increase the stress symptoms experienced by officers after

the event. If the agency has failed to prepare for an act of terrorism, and this contributes to the officers' perceptions of their professional performance as substandard, this may increase the officers' stress reaction.

According to the DSM-IV-TR criteria for PTSD, part of the situational dynamics which lead to the development of PTSD include a feeling of helplessness during the traumatic event (APA, 2000). Thus, if officers feel that they were helpless or were unable to perform in what they view as a satisfactory manner during the event, there would probably be a greater likelihood that PTSD would develop.

Following the 1995 domestic terrorist bombing of the Alfred P. Murrah Federal Building in Oklahoma City, Oklahoma, many of the rescuers developed symptoms of PTSD. Family and other personal relationships were disrupted, the divorce rate in the Oklahoma City Police Department increased nearly 30%, and a thirty-year old police sergeant committed suicide three days before he was to receive a medal of valor (Lewis, Tenzer & Harrison, 1999). Even as late as 1999, four years after the bombing, rescue workers were just beginning to ask for help, "rescuers who kept a stiff upper lip -- until the nightmares became

unbearable, until the drugs became their friends, and their marriages fell apart. They moved on, but were forced to return to the building over and over, night after night" (Lewis, Tenzer & Harrison, 1999, p. 7).

The terrorist events of September 11, 2001 bring yet another factor into the equation, as the question is raised about the impact of such a massive event on those who were not directly involved or directly affected by the events.

One study conducted following the 1995 Oklahoma City bombing compared reactions to the event between three groups of people (n=472) who were divided based on their exposure and proximity to the event (Sprang, 1999). One group had direct exposure to the bombing (i.e. heard or saw the explosion), one group was in Oklahoma City but had no direct exposure to the bombing, and the control group was selected from a different state. Analysis of the findings revealed that despite the differences in levels of exposure to the event and in the geographical distance from the event, there were no significant differences in retrospective reports of the respondents' immediate reaction to the bombing. All three groups reported significant levels of stress in the immediate aftermath (4.4, 4.2, and 4.1 on a scale of 0-5, with 0 = no distress

and 5 = extreme distress). Thus the study found widespread stress reactions to the event. The study also revealed that all three groups reported similar levels of symptoms of avoidance, re-experiencing, and increased arousal scales. The findings surprised the researcher, who expected to find more differences between the groups. The researcher postulated that the nature of the event, especially with regard to the magnitude of the bombing and the intense media coverage, may have contributed to "geographically diverse distress" (Sprang, 1999, p. 8). As the terrorist acts of September 11, 2001, share these qualities, i.e. tremendously large-scale and resulting in intense media coverage, it seemed likely that there would again be evidence of widespread stress reactions, regardless of proximity to the event.

In discussing the aftermath of the Oklahoma City bombing, Stein (1997, p.18) defines trauma as "an intolerable break in the world as it should be." He described the bombing as, "an assault and an insult that violated many peoples' "stimulus barrier" and symbolic boundary of safety (p.17)." He argues the position that in looking at who was wounded or traumatized in this incident, "One then might go so far as to draw the boundary of the nation (p.18)." The DSM-IV-TR criteria

for PTSD requires that the person has been exposed to a traumatic event in which the person experienced, witnessed, or was confronted with an event that involved actual or threatened death or serious injury, and the person's response involved intense fear, helplessness, or horror (APA, 2000). It is entirely plausible, and in fact likely, that people across the nation would meet these criteria. The Oklahoma City bombing, a tragedy of giant magnitude, yet one which seems small-scale in comparison to the attacks of September 11, 2001, can be considered to traumatize an entire nation; thus it may be that the more recent events have also traumatized the nation.

In addition to the trauma of the actual event, some of the other factors which lead to the development of PTSD, such as feelings of ineffectiveness or helplessness, feelings of rage at the injustice of it all and towards the perpetrators, feelings of guilt about surviving or about not being able to help, all are common in an event of this magnitude (Sims & Sims, 1998). Stein (1997, p. 21) makes the case that, "the wish to have been downtown to do something to help, ...and the sense of guilt for not having been there, are all pervasive themes throughout Oklahoma (and even farther) following the bombing." It is

likely that these will be similar themes for those distant from the events of September 11.

One research study was conducted during the week following September 11, 2001 which involved a national survey of stress reactions. The researchers pointed out that people need not be present at a traumatic event to have stress symptoms, especially if they consider themselves similar to the victims. "...most or all Americans may have identified with the victims or perceived the attacks as directed at themselves as well" (Schuster et al., 2001, p. 1507). The researchers surveyed 768 adults, using a questionnaire listing PTSD symptoms (as reported by 50% or more of the Oklahoma City bombing survivors). Forty-four percent of those surveyed reported at least one of five substantial stress symptoms (feeling very upset when remembering, repeated intrusive thoughts, difficulty concentrating, sleep difficulties, or irritabilty/anger outbursts) since September 11, 2001, and 90% of the adults reported at least low levels of stress symptoms. And although they found that the people who were closest to New York had the highest rate of substantial stress reactions (61%), people across the country also reported substantial stress reactions (Schuster et al., 2001).

In addition, the researchers in that study expressed concern that due to the anticipation of further attacks, concern that the attacks could happen anywhere and at anytime, and ongoing media coverage serving as a traumatic reminder, all may result in heightened anxiety, persistent stress symptoms, and fears which may worsen existing symptoms and cause new ones (Schuster et al., 2001).

Because of the role law enforcement will play in any terrorist incident in this country, all of the above concerns are especially applicable to this population.

Summary

The literature important to the project was presented in Chapter Two. The theoretical framework was explained, and the various types of stress inherent to police work were discussed. The dynamics of trauma and stress reactions were examined, and finally, the link between terrorism and trauma was identified and discussed.

CHAPTER THREE

METHODS

Introduction

Chapter Three documents the steps used in developing the project. Specifically, the study design and sampling methods will be presented, the data collection and instrument used will be discussed, the specific procedures and human subject protections will be explained, and the statistical analyses used will be identified.

Study Design

The purpose of this study was to examine the impact the terrorist attacks of September 11, 2001, have had on the development of symptoms of Post-Traumatic Stress Disorder in police officers who were not directly involved in the events of that day. It was the author's hypothesis that police officers who were not present at the sites of the terrorist attacks would experience at least a moderate level (as measured on the Impact of Event Scale) of PTSD symptomatology as a result of the events of September 11, 2001. In addition, the researcher hypothesized that certain variables would influence the IES score, specifically:

1. Participants who reported a higher amount of media exposure (television coverage, radio coverage, and written media) during the week following 9/11/01 would have higher IES scores than those who reported a lower amount of media exposure.

2. Participants who have more social support (i.e. have more close friends, spend more time with close friends, and who participate in social activities) would have lower IES scores than those with less social support.

3. Participants who felt personally threatened by the attacks of 9/11/01 would have higher IES scores than those who did not feel threatened.

4. Participants who have received stress management education in the past and who feel a high degree of employer support would have lower IES scores than those without stress management education and employer support.

5. There would be a positive correlation between those who have a higher IES score and those who noted specific behavioral changes as a result of September 11, 2001 (increased use of alcohol or drugs, increased conflict in personal life,

increased stress level, or change in approach to work).

6. Those participants who report a higher number of past traumatic events would have a higher IES score.

The study utilized primarily quantitative methods, although there were a few open-ended questions on the research instrument which provided additional information. Much of the information collected was easily collected via traditional quantitative methods - i.e. yes/no questions or multiple-choice questions. However, some of the data could only be collected via open-ended questions, as all of the possible responses could not possibly be predicted.

One limitation of the study was that the researcher had to be the one to personally distribute the research instruments to the participants, due to time and resource constraints. This could potentially have created a researcher bias when the researcher explained the purpose of the study to the participants. However, by ensuring that a pre-written statement was provided to all participants, this bias was minimized.

Sampling

The study participants included police officers who were not directly involved in the terrorist events of

September 11, 2001. The sample consisted of 60

participants. A convenience sample of officers was

selected from two police agencies located geographically

close to the researcher, in the Southern California area.

Cathedral City Police Department and the Riverside County

Sheriff's Department both participated in the study, and

provided approval letters to the researcher prior to data

collection (see Appendix A).

The participants included police officers who were

employed in a law enforcement agency on September 11,

2001, and who were still employed as a police officer at

the time of data collection (not necessarily in the same

agency). The sample included primarily patrol officers,

with a small number of first-line supervisors and

detectives. None of the participants were present at any

of the terrorist sites the day of the attacks, and none of

the participants responded to any of the sites to assist

with rescue efforts in the aftermath. This was because

this study was designed to measure symptoms in those

officers who were not directly involved in the events of

September 11, 2001.

Data Collection and Instruments

The data for this study was collected via a four-page

instrument (see Appendix B). The first page of the

instrument asked for demographic information, including gender, age, religious preference, marital and child status, ethnicity, educational level, length of employment as a police officer and within the current agency, and current position in the agency. The demographic variables were all independent variables, with levels of measurement ranging from ratio (age) to nominal (ethnicity).

The dependent variables were measures of subjective stress. This is a score which was obtained from the participants' completion of the Impact of Event Scale (IES), which was the second page of the research instrument. The researcher obtained consent from the primary author, Dr. Horowitz, to use the scale. The IES (Horowitz, Wilner, & Alvarez, 1979) contains 15 statements, which participants rate for applicability to themselves for the seven days before completing the instrument. The total score, ranging from 0 to 75, is the overall measure of subjective stress. In addition to the overall score, the IES contains 2 subscales, the avoidance subscale and the intrusion subscale, the scores for both of which were scored and analyzed as dependent variables. The level of measurement for the dependent variables was be continuous.

Testing of the IES has shown the split half reliability of the total scale to be high (r = 0.86). Cronbach's Alpha showed the internal consistency of the subscales to also be high (intrusion = 0.78, avoidance = 0.82). A correlation of 0.42 (p > 0.0002) between the intrusion and avoidance subscale scores shows association between the subscales but indicates that they do not measure the same symptoms. Test-retest reliability indicates a score of 0.87 for the total stress scores, 0.89 for the intrusion subscale, and 0.79 for the avoidance subscale (Horowitz, Wilner, & Alvarez, 1979).

The scale has also been tested for its sensitivity in measuring changes in levels of stress reported by the participants, and has been shown to have content validity. The scale was tested on samples which had experienced significantly differing levels of trauma, and the test accurately showed significant differences in the mean scores of the two samples. In addition, the scale showed decreased scores for participants following intervention aimed at treating PTSD, as would be expected (Horowitz, Wilner, & Alvarez, 1979).

For hypothesis one, media exposure was defined as the combined number of hours participants reported watching television coverage, listening to radio coverage, and

reading written coverage during the week following
September 11, 2001 (questions 31, 32, and 33 on the
instrument).

For hypothesis two, social support was defined as
participation in certain activities at least four times
per month (church/religious activities, physical exercise,
sports team, social organization/club, or youth
activities), having at least two people in whom the
participant confides about stress, and spending at least
four hours per month with those people (questions 39, 40,
and 41 on the instrument). A yes for each question was
given one point, leading to a possible maximum score of 3.

For hypothesis three, perception of threat was
defined as a sum of two questions (36 and 37 on the
instrument). A yes answer for each question was given one
point, leading to a possible maximum score of 2.

For hypothesis four, employer support was measured
using three Likert-scale questions (42, 43, and 44 on the
instrument). There were five possible responses for each
question, leading to a possible maximum score of 15.

For hypothesis five, participants were asked to check
any behavioral changes which they felt were a result of
the events of September 11, 2001, including increased
alcohol consumption, increased use of legal or illegal

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drugs, increased conflict in personal life, increased stress level, and change in approach to work (question 38 on the instrument).

For hypothesis six, participants were asked to estimate how many traumatic events they have experienced in both work and non-work experiences, in their lives (question 46 on the instrument).

The remaining questions on the instrument solicited additional information about past mental health needs, utilization of mental health services, and awareness of available mental health treatment.

The instrument was pre-tested on 5 police officers known by the researcher, but who were given no information about the goals of the study, and who were not participants in the study. After each participant completed the instrument, the researcher discussed with the participants any vague or confusing questions, and necessary changes were made to ensure that the questions were clear. The instrument took the pre-test volunteers between 15 and 30 minutes to complete.

Procedures

The researcher distributed the research instruments to participants in person. The researcher attended several briefing sessions which the police agencies held

at the beginning of each shift, and introduced the study and distributed the instruments at that time. At the Riverside Sheriff's Department, the participants were given envelopes with the instrument, and a sealed box with a hole in the top was left in the briefing room. Participants were asked to complete the instruments at their leisure. Participants were asked to place their completed instrument in the envelope, seal it, and drop the envelope in the box. The box was left in the briefing room for one week past the last briefing attended, and the researcher then returned to pick up the box. At the Cathedral City Police Department, at the request of the sergeant in charge, the officers were given time during the briefing to fill out the instrument. The instruments were then collected immediately and given to the researcher by the watch commander.

Following collection of the instruments, the researcher labeled each instrument in order to identify which police department the participant worked for.

The total time the researcher spent on distribution and collection of the instruments from the participants was 2 weeks. The data was collected during January 2003 and February 2003.

Protection of Human Subjects

Participants in this study were required to give
informed and voluntary consent. A cover letter was
attached to each instrument distributed, which explained
the purpose of the study, the time commitment, and the
involved risks (see Appendix C). The letter explained
that participation was completely voluntary, and that the
participants were free to decline at any time. The letter
included a check-off box for the participants to indicate
their consent to participate.

Participants remained anonymous, as no identifying
data was collected from the participants. Results of the
study will be made available to the police departments
participating only in group data form, as presented in the
final paper, available June 2003.

A participant number was assigned to each instrument
and appeared on the both the instrument and the debriefing
statement. The researcher's and research advisor's phone
numbers appeared on the debriefing statement, and the
participants were instructed to keep the debriefing
statement. Any participant who wished to withdraw from
the study could do so by contacting the researcher or
research advisor, and requesting that his/her survey be

removed from the study, identified by the participant's number. No participants chose to withdraw from the study.

Because the instrument did ask participants about traumatic events and sensitive subject material, there was a small risk that participation would arouse symptoms of stress, trauma reaction, or depression. In order to address this risk, a list of local counseling services was provided in the debriefing letter which was attached to each instrument (see Appendix D).

Data Analysis

Descriptive univariate analyses were completed, providing numbers of respondents, percentages, means, and standard deviations, for each of the main variables (i.e. demographics, IES total score and subscale scores, etc.).

Inferential analyses were conducted to look for associations between certain variables. Pearson's r was used to look for correlation between the IES score and number of hours of media exposure. Pearson's r was also used to look for correlations between the IES score and social support, the IES score and perception of threat, and the IES score and perceived employer support. Crosstabulations and chi-square tests were used to explore

connections between the IES severity level and various

other variables.

Summary

Chapter Three presented the study design, sample

description, data collection and instruments, procedures,

human subjects protections, and data analyses used in this

research project.

CHAPTER FOUR

RESULTS

Introduction

Included in Chapter Four is a presentation of the results. Demographics of the study participants, scores on the Impact of Event Scale, and results of the data analyses will be presented. Finally, the chapter concludes with a summary.

Presentation of the Findings

There were 60 participants in the study, 27 from the Riverside Sheriff's Department and 33 from the Cathedral City Police Department. Of the participants, 93% were male (n=56) and 7% were female (n=4). Seventy percent of the participants (n=42) were Caucasian, 22% were Hispanic (n=13), 3% were Asian (n=2), and 5% were of other ethnicities (n=3). Ninety-five percent (n=57) of the participants had at least some college education, with 44% (n=26) having at least an Associate's degree. The ages of the participants ranged from 23 years to 62 years, with a mean age of 35 years. Fifty-eight percent (n=35) of the participants were married, 23% (n=13) were separated or divorced, 18% (n=11) were single, and one participant was widowed (see Appendix D).

Of the participants, 78% were assigned to regular patrol positions (n=47), 7% were detectives (n=4), 13% were sergeants (n=8), and one participant had a special duty assignment. The number of years employed as a police officer ranged from just over one year to 31 years, with a mean of 10 years. The number of years employed with their current agency ranged from one year to 19 years, with a mean of almost 7 years.

Total scores on the Impact of Event Scale ranged from 0 to 47, with a mean total score of almost 12. This falls in the "Moderate" range of symptom severity on the scale scoring guide (0-8 Low, 9-18 Moderate, 19+ High). Of the participants, 18% (n=11) fell into the "High" range, 35% (n=21) fell into the "Moderate" range, and 47% (n=28) fell into the "Low" range on the IES. On the intrusion subscale, scores ranged from 0 to 23, with a mean intrusion subscale score of 6. On the avoidance subscale, scores ranged from 0 to 31, with a mean avoidance subscale score of 5.

Eighteen percent (n=11) of participants reported that they "Often" and 20% (n=12) reported that they "Sometimes" avoided letting themselves get upset when they thought about the events of September 11, 2001, or were reminded about it during the 7 days prior to filling out the scale.

Twenty-seven percent (n=16) of participants reported that they "Sometimes" thought about it when they didn't mean to. Twelve percent (n=7) reported that they "Often" and 30% (n=18) of participants reported that they "Sometimes" had waves of strong feelings about it.

Participants reported having experienced a wide range of traumatic experiences ranging from 0 to 1000 in number. When the mean was run initially, including all 51 numerical responses, the mean was 80 traumatic events. However, when limited to numbers reported between 0 and 100 (which excluded 5 numerical responses), the mean number reported was 17 traumatic events.

Participants reported a mean of 32 hours of media exposure during the week following September 11, 2001 (including television, radio, and written media), with a range of 2 hours to 99 hours.

Participants positively endorsed the three questions asking about social support factors. Eighty-eight percent (n=53) of participants reported that they participate in social activities at least 4 times per month. Eighty-five percent (n=51) of participants reported having at least 2 people in their lives in whom they confide about stress, and 98% (n=50) of those reported that they spend at least 4 hours per month with these people.

Participants overall reported low perception of threat. Twenty-three percent (n=14) of participants reported that they personally felt threatened by the events of September 11, 2001, and 30% (n=18) felt there was a realistic concern that they or their family would be directly impacted by the events of that day.

Participants reported a fairly high level of perceived employer support, as shown by a mean score of 10 out of a possible 15 points (scores 1 to 5 on each of 3 questions). This averages out to a mean of 3.33 on each question, which falls into the "somewhat supportive" to "mostly supportive" range. Sixty percent (n=36) of participants reported that employer-provided training on topics such as stress management or trauma was at least "somewhat helpful," while 25% (n=15) felt it was "minimally helpful" and 13% (n=8) felt this type of training was "not at all helpful."

Participants overall did not indicate that their behaviors had changed significantly as a result of the events of September 11, 2001. Only one participant reported an increase in alcohol consumption as a result of the events of September 11, 2001, and no one reported an increase in their use of legal or illegal drugs. No participants reported an increase in conflict in their

personal life, and no one reported an increase in their stress level. Twenty percent (n=12) reported a change in their approach to work as a result of September 11, 2001.

Forty-eight percent (n=29) of participants reported that "yes," they felt the past traumas in their lives affected them currently. Only 25% (n=15) of participants reported having felt at some time in their lives they needed counseling. Of those, 80% (n-12) had actually sought counseling previously in their lives.

Seventy-five percent (n=45) of participants reported that "yes," they were aware of employer-provided counseling or assistance programs. Fifteen percent (n=9) reported that they had previously utilized such employer-provided programs, and 52% (n=31) of participants reported that they would use an employer-provided program.

Of those participants who responded that they would not use an employer-provided program, written comments included statements such as "Would prefer to deal with it on my own," "I keep to myself," "Handle it myself," "It's none of their business," "I don't trust these programs," "Does no good," and "Because [the agency] sucks, they care nothing about the employees, we are only a number." One respondent wrote, "I don't believe in counselors, counseling or anything that has to do with an individual

creating opinions based on taught theory." Another participant wrote, "Department does not need to be involved or know about my personal problems." Others wrote, "I would seek my own independent service that would have NO ties to this agency," "I would not share it with anyone that would give information to the admin," and "They would use it against me in some way to determine I'm not fit for duty."

There was no correlation found between the IES score and the amount of media exposure. There was no correlation found between the IES score and the level of reported social support. There was no correlation found between the IES score and perceived employer support. There was no correlation found between the IES score and prior training on stress and trauma. There was no correlation found between the IES score and reported changes in behaviors. There was no correlation found between the IES score and the number of previous traumatic events reported by participants.

There was a positive correlation found between the IES score and perception of threat. A Pearson's correlation test showed a .418 correlation, at a significance level of .001, between the IES score and feeling a realistic concern that the participant or

his/her family would be directly impacted by the events of
September 11, 2001. A Pearson's correlation test showed a
.267 correlation, at a significance of .05, between the
IES score and feeling personally threatened. When the two
items were combined into one measure, the correlation was
.388 with a significance of .002.

Cross-tabulations, or chi-square tests, were
conducted to look at relationships between several
variables. When looking at ethnicity and the IES score,
it was discovered that while 59% (n=25) of Caucasians
scored in the "Moderate" or "High" ranges, only 23% (n=3)
of Hispanics scored in the "Moderate" range, and no
Hispanics scored in the "High" range. However, the chi-
square test did not reveal a statistically significant
relationship between the two variables.

Chi-square tests showed no significant association
between education level and the IES score, nor between
past need for counseling and the IES severity level.
There was no significant association found between
ethnicity and perception of threat, nor between ethnicity
and changed behaviors.

Chi-square tests did show some statistically
significant associations, however. A significant
association was found between IES severity level (i.e.

high, moderate, or low) and feeling that past traumas affect one's life currently, with the Pearson's chi-square value at 11.6 (p < .01). A significant association was also found between perception of threat and feeling that past traumas affect one's life currently, with Pearson's chi-square value at 9.8 (p < .01). Finally, a significant association was found between feeling a realistic concern for self or family and feeling that past traumas affect one's life currently, with the Pearson's chi-square value at 5.9 (p < .05).

Summary

Chapter Four reviewed the results extracted from the project. An overview of the demographical data on the participants was presented. Descriptive data and frequencies were provided on many of the variables measured. Correlations and associations found between various variables were presented.

CHAPTER FIVE

DISCUSSION

Introduction

Included in Chapter Five is a presentation of the conclusions drawn from the findings of this research project. A discussion of the limitations of the study will be provided. Additionally, recommendations for further study will be made, as well as recommendations for better serving the needs of the participants included in the study. Finally, the chapter concludes with a summary.

Discussion

The results show that a majority of the officers who participated in this study were still experiencing, sixteen to seventeen months after the events of September 11, 2001, a significant level of PTSD symptomatology related to the terrorist attack. Fifty-three percent of the participants fell in the "Moderate" or "High" ranges on the IES severity rating. This is a significant finding, as these officers were not involved in the events of that day and only one participant knew anyone who was injured or killed in the attack. Additionally, these officers were located on the opposite side of the country from where the attacks took place. This finding validates

the researcher's hypothesis that a significant number of the participants would be experiencing at least a moderate level of PTSD symptoms related to the attacks of September 11, 2001.

One important note is that the data was collected during a time when the United States was considering going to war in the Middle East, which may have increased fear levels and may have brought up memories or other issues related to the attacks.

Five out of the remaining six hypotheses formulated by the researcher were not supported by the findings. The first hypothesis was that participants who reported a higher amount of media exposure would have higher IES scores. Each type of media exposure was analyzed separately (television, radio, and written), and they were analyzed together as one concept, and there were no correlations found. One issue which may have affected this outcome is that participants were asked to recall the number of hours of media exposure during the week following September 11, 2001. Estimating this nearly a year and a half afterwards may have been difficult to do accurately.

The second hypothesis was that participants who reported a greater level of social support would have

lower IES scores. No correlation was found here. This may indicate that working through trauma is a personal issue and not related to outside support. However, this finding also may be due to an inadequate measure of social support. Social support here was measured using the researcher's own construct, and it may be helpful to do further research using a more reliable, previously tested, measure of social support.

Hypothesis three was that participants who felt personally threatened by the attacks of September 11, 2001, would have higher IES scores than those who did not feel threatened. This hypothesis was found to be true. A strong correlation was found between the IES score and those who felt a realistic concern for themselves and their families during the terrorist attack. It seems to make sense that someone who feels threatened or in danger by an event would have a stronger reaction to and more feelings about that event. In the United States, people typically do not have realistic concerns that their lives or those of their loved ones could be ended at any minute in an act of war. On September 11, 2001, that feeling of safety and security for many Americans was shattered. Police officers, in particular, are in a unique position, as they would be called to respond to any local incident

or attack. This creates an extra level of caution and fear. All of this may have contributed to this finding, and this would be a good area for further study.

The fourth hypothesis was that participants who have received stress management education in the past and who feel a high degree of employer support would have lower IES scores. This hypothesis was not found to be true. There was no correlation found between the IES scores and stress management education or employer support. These variables were analyzed separately and together, with none of the analyses showing anything significant. This may be an indication that these variables do not impact how a person processes a traumatic event, or it may be a reflection of the measure.

The fifth hypothesis was that participants who have noted specific behavioral changes as a result of the terrorist attacks would have higher IES scores. This was not found to be true. However, four out of the five changes measured received virtually no endorsement from the participants. The behaviors asked about included increased alcohol consumption and increased use of legal and illegal drugs, behaviors which first, are highly likely to be underreported, and second, which the participants may not have related to the terrorist

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attacks. The one behavioral change which did receive

endorsement by a number of participants was "Change in

approach to work." While there was still no significant

correlation found between this and the IES score, this

issue would certainly be an area which would warrant

further exploration. The participants were not asked to

identify how they had changed their approach to work, and

this would be interesting to look into.

The sixth and final hypothesis was that those

participants reporting a higher number of past traumatic

events in their lives would have higher IES scores. There

was no correlation found between these two items.

However, participants reported a huge range in numbers for

this question, from 0 to 1000, and 9 participants

responded with non-numerical responses such as, "A lot,"

"Too many to count," and "Too many." The wide range may

be due to participants' interpretations of what qualifies

as a "traumatic event," as this was not defined for them.

It is interesting that participants employed in the same

occupation could have such varying views on this, however,

and this again would be an interesting area to explore

further.

Other data analyses led to some additional

interesting findings. While nearly half (48%) of those

who reported having any past traumatic events also felt that those past events affect their lives currently, only 25% of the participants overall reported having felt at some time in their lives they needed counseling. Additionally, only 80% of those who had felt a need for counseling had actually sought counseling. These findings are consistent with prior research which has shown that police officers, in general, may not recognize their need for assistance, and may be reluctant to seek assistance.

The issue of whether or not past traumatic events currently affect the participants' lives was also important in relation to the IES scores and severity levels. A statistically significant association was found between these two variables. This may indicate that it is not the number of past traumatic events which affects the IES score, but rather, whether or not those events are still affecting the person. A statistically significant relationship was also found between past traumatic events and perception of threat, indicating that perhaps one's feelings about past events increases one's fear about current happenings, such as the events of September 11, 2001. Finally, a statistically significant relationship was found between past traumatic events and feeling a realistic concern for self or family. This, again, seems

to suggest that affective reactions to past events may impact fears about current events.

Another interesting finding is that while 75% of respondents said they were aware of employer-provided counseling or assistance programs, only 15% of respondents indicated that they had ever used such programs. Additionally, 48% of respondents indicated they would not use an employer-provided program. This is particularly interesting in that the mean for the employer support rating feel between "Somewhat supportive" and "Mostly supportive," indicating that most of the officers reported feeling a good deal of support from their employers relative to stress and trauma issues.

The comments made by those respondents who would not use an employer-provided program (previously noted) indicate two main themes – first, many officers indicated a belief that counseling does not help and that they should handle matters on their own, and second, many officers indicated fear that seeking assistance from an employer-provided program would somehow negatively impact their employment. These are common issues among this population, and are important issues to address. These will be discussed further in the "Recommendations" section.

Limitations

Some of the limitations of this study have already

been discussed, particularly the need for better measures

on some of the variables, including social support,

traumatic events, and behavioral changes. Some of these

variables were originally planned to be measured in more

depth, but the instrument was shortened due to concerns

about potential return rates and the amount of time

required to complete the instrument.

Another important issue which may have impacted the

findings is that the data was collected quite a long time

period after September 11, 2001, about 17 months for the

last participants who completed the surveys. The data may

have been much stronger if collected during a time closer

to the attack.

Finally, it is important to note that the data was

collected during the months just prior to the United

States' attack on Iraq. This time was filled with

contemplations of war, and this may also have influenced

the findings in a small way.

Recommendations for Social
Work Practice, Policy
and Research

The finding that many of the officers who

participated in this study are still, 17 months after the

fact, experiencing symptoms of PTSD as a result of September 11, 2001, indicates that this is a population which is in need of mental health services. While both of the law enforcement agencies who participated in this study do, in fact, have employee assistance programs designed to assist officers in need of mental health services, many of the officers indicated a distrust of the programs and the agencies. Additionally, the officers indicated a disbelief in the value of counseling. There is a need here for social workers and other mental health professionals to explore these issues.

One area to explore is how the employer-provided programs are being "marketed" to the officers. The majority of officers indicated they did not need services, yet the majority of officers scored in the "Moderate" and "High" ranges on the Impact of Event Scale. Perhaps the officers are not aware of the symptoms and manner in which events such as 9/11/01 affect them. There may be a need for further education about this topic.

Another area for exploration is the officers' confidence in their anonymity if they do seek services from their employer-provided programs. This concern about the agency finding out about their issues and using the information against them is certainly one which would

prevent an officer from seeking help, even if clearly

needed. Perhaps the agencies and the social workers or

other mental health professionals working with them could

explore methods to increase this level of confidence, or

work to find service delivery methods which would assure

anonymity. While it may seem far-fetched to some, the

idea of having internet services may be a viable option

for officers who have this concern. Chat rooms, email,

and online resource directories would all help to ensure

anonymity while still providing assistance to those who

are in need.

For social workers who do work with this population,

the findings of this study underscore the importance of

building trust, being knowledgeable about the population,

and exploring issues related to trauma and the impact of

trauma in a person's life.

Further research would be helpful in several areas.

As mentioned previously, the social support variable could

be measured more accurately using another tool. It would

be beneficial to explore how officers have changed their

approach to work as a result of September 11, 2001, and

how this may impact other areas of their lives. Officers'

beliefs about counseling and the mental health field in

general could be explored, as well as how those beliefs are changed.

Additionally, this study opens up a tremendous field of looking at how traumatic events, particularly large-scale events such as those of September 11, 2001, affect various populations. If police officers 3000 miles from the events were still significantly impacted nearly a year and a half after the events, there may be other populations, including the general public, who are similarly affected. This is an area where further research would be warranted.

Conclusions

This study explored how the terrorist attacks of September 11, 2001, have impacted police officers who were not involved in the events of that day and who were geographically located a long distance from the events. The findings of the study indicate that a significant number of officers are still, over a year past the event, experiencing traumatic symptoms as a result of the attacks. The findings also indicate that officers do not always recognize the traumatic symptoms they experience, nor do they recognize the impact this has in their lives. Finally, the study shows a need for creativity in meeting the mental health needs of police officers.

APPENDIX A

AGENCY LETTERS

Cathedral City

POLICE DEPARTMENT

February 4, 2003

Jennifer Urban
CSUSB MSW Student

Re: Research Project

Dear Jennifer,

Lt. Reshaw and I have reviewed your research project questionnaire, and have approved it to be disseminated to our sworn patrol personnel. As we discussed, you may contact the officers and patrol sergeants during the patrol briefing period at the beginning of each shift.

The dates and times are:

Feb 5, 2003 / Wednesday – 6:00 AM and 6:00 PM Patrol Briefings
Feb 5, 2003 / Wednesday - 8:30 AM – Detective Bureau Meeting (second floor)
Feb 6, 2003 / Thursday – 6:00 AM and 6:00 PM Patrol Briefings

Please arrive about 10 minutes prior to shift and contact the on-duty Watch Commander. He has been advised you will be arriving with your research survey.

Respectfully,

Sgt. Laura Hanlon

Lt. Al Reshaw

RIVERSIDE COUNTY

BOB DOYLE, SHERIFF
CORONER-PUBLIC ADMINISTRATOR

Sheriff
CORONER-PUBLIC ADMINISTRATOR

73-370 FRED WARING DRIVE • PALM DESERT, CA 92260 • (760) 836-1600

Jennifer Urban
CSUSB MSW Student

January 10, 2003

Ref: Research Project

Ms. Urban;

Lt. Wilham and I have reviewed you research project and questionnaire. We have approved it and referred it to our station commander. Capt. McManus has given his approval for your project. You may begin meeting with the Palm Desert Deputies during our regular roll call briefings. The hours are 6:00 A.M., 2:00 P.M., and 10:00 P.M. Please let me know when you wish to start.

Respectfully;

Sgt. H. Humphries, Palm Desert Administration
760-836-1682

APPENDIX B

INSTRUMENT

Today's Date: _____

(1) **Gender:** ☐ Male ☐ Female   (2) **Age:** _____

(3) **Religious Preference:**
☐ Catholic   ☐ Protestant Christian   ☐ LDS/Mormon   ☐ Other Christian
☐ Hindu   ☐ Islam   ☐ Buddhist   ☐ Judaism
☐ Other _____   ☐ None

(4) **Family Status:**
☐ Single, never married ☐ Married ☐ Separated ☐ Divorced ☐ Widowed

(5) How long have you been in this status? _____
(6) How many children do you have? _____
(7) How many of your children live with you at least half of the time? _____

(8) **Ethnicity:**
☐ Caucasian   ☐ African-American ☐ Hispanic   ☐ Asian
☐ Pacific Islander   ☐ Native American ☐ Middle-Eastern ☐ Other

(9) **Education:**
☐ High school diploma ☐ Some college ☐ Associate's degree
☐ Bachelor's degree ☐ Some graduate work ☐ Master's degree ☐ Doctorate

(10) How long have you been working as a police officer? _____

(11) How long have you been working in this agency? _____

(12) What is your current position in this agency?
☐ Patrol   ☐ Special duty assignment   ☐ Detective   ☐ First-line supervisor
☐ Management

IMPACT OF EVENT SCALE

Below is a list of comments made by people about stressful life events and the context surrounding them. Read each item and decide how frequently each item was true for you during the past 7 days regarding the terrorist events of September 11, 2001.

If the item did not occur during the past seven days, choose the NOT AT ALL option. Circle the number of the response which best describes that item. Please complete each item.

(0) = Not at all   (1) = Rarely   (3) = Sometimes   (5) = Often

		Not at all	Rarely	Sometimes	Often
13.	I thought about it when I didn't mean to.	0	1	3	5
14.	I avoided letting myself get upset when I thought about it or was reminded about it.	0	1	3	5
15.	I tried to remove it from my memory.	0	1	3	5
16.	I had trouble falling asleep or staying asleep, because of pictures or thoughts that came into my mind.	0	1	3	5
17.	I had waves of strong feeling about it.	0	1	3	5
18.	I had dreams about it.	0	1	3	5
19.	I stayed away from reminders of it.	0	1	3	5
20.	I felt as if it had not happened or was not real.	0	1	3	5
21.	I tried not to talk about it.	0	1	3	5
22.	Pictures about it popped into my mind.	0	1	3	5
23.	Other things kept making me think about it.	0	1	3	5
24.	I was aware that I still had a lot of feelings about it, but I didn't deal with them.	0	1	3	5
25.	I tried not to think about it.	0	1	3	5
26.	Any reminder brought back feelings about it.	0	1	3	5
27.	My feelings about it were kind of numb.	0	1	3	5

Researcher use only: (28) = Intrusion subscale _____   (29) = Avoidance subscale _____   (30) = Total score _____

(31) Please estimate how many hours of television you watched during the week following 9/11/01.

_____

(32) Please estimate how many hours of radio coverage you listened to during the week following 9/11/01.

_____

(33) Please estimate how many hours you spent reading written coverage during the week following 9/11/01.

_____

(34) Did you know anyone who was directly impacted by the events of 9/11/01? ☐ Yes ☐ No

(35) If yes to #34, please describe: _____

(36) Did you personally feel threatened by the terrorist attacks of 9/11/01? ☐ Yes ☐ No

(37) Did you feel there was a realistic concern that you or your family would be directly impacted by a terrorist attack during or after the events of 9/11/01? ☐ Yes ☐ No

(38) Do you feel that you were impacted by the events of 9/11/01? ☐ Yes ☐ No
    If **yes**, please check any of the following which apply:
    ☐ Increased alcohol consumption
    ☐ Increased use of legal or illegal drugs
    ☐ Increased conflict in personal life
    ☐ Increased stress level
    ☐ Change in approach to work

(39) Do you participate in **any** of the following activities at least 4 times per month? ☐ Yes ☐ No
    (Church/religious activities, physical exercise, sports team, social organization/club, or youth activities)

(40) Do you have at least 2 people in your life in whom you confide about stress in your life? ☐ Yes ☐ No

(41) If yes, do you spend at least 4 hours per month with any of those persons? ☐ Yes ☐ No

(42) How supportive do you feel your immediate supervisors are, with regards to work-related issues?

    ☐ 1 - Not at all supportive
    ☐ 2 - Rarely supportive
    ☐ 3 - Somewhat supportive
    ☐ 4 - Mostly supportive
    ☐ 5 - Very supportive

(43) How supportive do you feel your supervisors and administrators would be supportive of your seeking professional help for problems related to family issues, substance abuse, depression, or stress?

    ☐ 1 - Not at all suportive
    ☐ 2 - Minimally supportive
    ☐ 3 - Somewhat supportive
    ☐ 4 - Mostly supportive
    ☐ 5 - Very supportive

(44) Have you ever received any training from your employer covering topics such as stress management or how to cope with trauma? ☐ Yes ☐ No

(45) If **yes** to #44, how many hours of training have you received? _____

(46) In your life, including both work and non-work experiences, estimate how many traumatic events you have experienced: _____.

(47) Do you feel that any of those prior traumatic experiences affect your life currently? ☐ Yes ☐ No

(48) Have you ever in your life experienced a time when you felt you had mental health needs for which counseling would be helpful? ☐ Yes ☐ No (Ex: depression, anxiety, nightmares, flashbacks, loss of pleasure, sleep problems, etc.)

(49) If **yes** to #48, did you seek treatment for those issues? ☐ Yes ☐ No

(50) Are you aware of any programs or assistance available through your employer which would help you address stress-related problems, family problems, substance abuse problems, etc? ☐ Yes ☐ No

(51) If **yes** to #50, what do you know is available? _____

(52) Have you ever utilized any such service offered by your employer? ☐ Yes ☐ No

(53) Would you utilize this type of service if offered through your employer? ☐ Yes ☐ No

(54) Why or why not?

_____

_____

(55) Would you ever seek **other** (i.e. not provided by employer) professional help for stress or anxiety-related problems or for issues of family problems, substance abuse, etc.? ☐ Yes ☐ No

(56) If **yes** to #55, to whom would you go for help?

_____

Please use the back of this sheet to add any additional comments. Thank you for your participation!

APPENDIX C

INFORMED CONSENT

Dear Participant:

The attached survey is being used in a research study which will examine reactions among police officers to the events of September 11, 2001. This study is being conducted by Jennifer Urban, under the supervision of Dr. Trang Hoang and Dr. Rosemary McCaslin, as a thesis project for the Master's in Social Work program at California State University - San Bernardino. This study has been approved by the Institutional Review Board, California State University, San Bernardino.

Participation in this study is completely voluntary and completely anonymous. This survey will take you approximately 15 - 30 minutes to complete in its entirety. The University requires that you give your consent before participating in this study. (See check box below.)

There will be no identifying data collected on the survey. All of your responses will be held in the strictest confidentiality, and the results of this study will be reported in group format only. At the completion of the study, a copy of the final results will be provided to your department, for any who are interested.

You are free to withdraw from the study at any time. At the end of the survey, you will find instructions regarding this, should you feel it necessary.

After you complete the attached survey, please place it in the attached envelope, seal the envelope, and place it in the collection box at your police department no later than three weeks from the date you received this packet.

Thank you for your participation. If you have any questions, please contact Jennifer Urban at (760) 831-0391 or Dr. Trang Hoang at (909) 880-5500.

Sincerely,

Jennifer Urban
MSW Student

By placing a check mark in the box below, I acknowledge that I have been informed of, and that I understand, the nature and purpose of this study, and I freely consent to participate. I also acknowledge that I am at least 21 years of age.

Place a check mark here: ☐

APPENDIX D

DEBRIEFING STATEMENT

<u>Debriefing Statement</u>

Thank you for your participation in this study.

Some of the questions in this survey may have triggered feelings of stress, depression, or other difficulty. If you are experiencing difficulty coping with any of the issues addressed in this study, or any other stressful event, please call one of the following numbers for assistance.

Riverside County Mental Health - (760) 863-8445
Village Counseling - (760) 773-0669
Family Services of the Desert - (760) 347-2398
Desert Regional Medical Center - (760) 323-6511

You will notice at the bottom right-hand corner of this page, and on the bottom right-hand corner of the first page of the survey, a number appears. This is your participant number, which in no way identifies who you are. **Please tear off this page** before returning the survey, and if at any point in the future, you wish to have your survey withdrawn from the study, please contact the researcher at the phone number provided and ask to have your number withdrawn.

Thank you!

Jennifer Urban   Dr. Trang Hoang
(760) 831-0391   (909) 880-5500

APPENDIX E

DEMOGRAPHICS

Variable	Choices	Frequency	Percent
Gender	Male	56	93.3
	Female	4	6.7
Religion	Catholic	20	33.3
	Protestant	18	30.0
	Other Christian	11	18.3
	None	5	8.3
	Other	3	5.0
	LDS/Christian	2	3.3
	Islam	1	1.7
Ethnicity	Caucasian	42	70.0
	Hispanic	13	21.7
	Asian	2	3.3
	Other	2	3.3
	Middle Eastern	1	1.7
	African American	0	0
Marital Status	Married	35	58.3
	Single, Never Married	11	18.3
	Divorced	10	16.7
	Separated	3	5.0
	Widowed	1	1.7
Education	High School Diploma	3	5.0
	Some College	31	51.7
	Associate's Degree	12	20.0
	Bachelor's Degree	12	20.0
	Some Graduate Work	1	1.7
	Master's Degree	1	1.7
Current Position	Patrol	47	78.3
	Special Duty Assignment	1	1.7
	Detective	4	6.7
	Sergeant (1st Line Supervisor)	8	13.3

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