



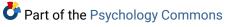
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Stress associated with law enforcement work and its effect on conjugal relationships

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STRESS ASSOCIATED WITH LAW ENFORCEMENT WORK AND ITS EFFECT ON CONJUGAL RELATIONSHIPS

by

PATRICIA S. PEACE

A thesis submitted in partial fulfillment of the requirements for the Honors in the Major Program in Psychology in the College of Sciences and in The Burnett Honors College at the University of Central Florida Orlando, Florida

Summer Term 2011

Thesis Chair: Dr. H. Edward Fouty

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ABSTRACT

The purpose of this study was to determine if there was a difference in stress from associated with the occupation of law enforcement exists across the officers' relationship domains. The sample consisted of 51 participants that was comprised of both law enforcement officers and their significant others. Unlike past studies, this study included those that were married, divorced, in a civil union, single, or cohabitating. Based on past research it was hypothesized that the stress placed on officers and their significant other would be higher than that of other relationships. An anonymous survey was sent out to a several departments. Separate one-way between subjects Analysis of Variances (ANOVAs) were conducted to compare the effects of stress on law enforcements officers and their relationships. There was no significant effect of stress found in regards to the occupation itself as it pertained to the relationship [F(1, 48) = 0.99, P = 0.32]. There was no significance of stress felt in regards to the individuals' relationship on its own [F(1, 48) = 1.62, P = 0.21].

ACKNOWLEDGEMENTS

I would like to thank my loving husband, grandmother and children for being so supportive throughout my schooling career.

I would also like to thank Dr. Fouty, Dr. Berman, and Dr. Winton, for all their time, patience, and academic support.

A special dedication to an old friend, Tom McCall (who inspired this thesis). He was an officer for several years and ended up taking his own life due to the stress of the job as well as marital problems, leaving behind 3 beautiful daughters.

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INTRODUCTION

Stress is a common factor in life. Stress can be theoretically divided into two types: eustress and distress (Ward, 2008). Eustress is a form of positive stress; in other words a stress that can actually be good for you. One must acquire the ability to handle normal day to day stress, and that is where eustress comes into play. Distress on the other hand is the type that most people are familiar. This type of stress is what gets your heart pumping, palms sweating, blood pressure rising, and your stomach in knots. Eustress can evolve into some of these symptoms as well; however it manifest with a positive situation, such as the birth of a baby or preparing to be wed. Both types of stress can evolve singularly or coexist at the same time. These forms of stress are normal, but if an individual suffers too much stress in their life there are symptoms that can arise.

Research conducted by McEwen and Sapolsky (2002) in regards to stress and cognitive function looked at how stress "affects cognition in a number of ways, acting rapidly via catecholamines and more slowly via glucocorticoids" (McEwen, 2002, p 1). Their research showed that catacholamines are affected by beta adrenergic receptors and glucose that is available. Glucocorticoids aid in the modulation of synaptic plasticity and may change the dendritic structures for weeks. In episodes of long term stress, there is a possibility of losing neurons especially within the hippocampus. This type of change in brain function can lead to impairment of declarative memory or effect emotionally laden memory function that is structured within the amygdala.

Symptoms of Stress

There are many symptoms that are associated with the effects of stress. According to the Mayo Clinic, symptoms are felt across many planes of our existence. These effects are physical, emotional, psychological and behavioral. Some of the physical symptoms include: headache, chest pain, fatigue, upset stomach, sleeping problems, muscle tension or pain, and even changes in ones' sex drive (Mayo Clinic, 2011). Emotional and/or psychological issues include anxiety, irritability or anger, sadness or depression, restlessness, and lack of motivation or focus (Mayo Clinic, 2011). Behavioral problems range from overeating to undereating, drug and/or alcohol abuse, tobacco use, social withdrawal, and anger outbursts (Mayo Clinic, 2011). These effects are likely to affect relationships.

Selye proposed the concept of the 'general adaption syndrome'. This theory was based on the body's response to external stressors and consists of three phase process. The first is the 'alarm phase' (Selye, 1946). This is the point at which the body becomes aware of a threat and mobilizes the sympathetic nervous system. This is also known as the 'fight or flight' syndrome. During this phase muscles tense, heart rate increases, digestion ceases, pain sensors are reduced, and blood pressure increases. The second phase, is called the 'resistance phase'. This phase is a physiological response that continues from the alarm phase (Selye, 1946). At this point the body is more vulnerable to other stressors. The last and final phase is the 'exhaustion phase', in which a continuous stressor can deplete the body of energy and increase the probability of physical, physiological, psychological, and behavioral problems(Selye, 1946).

According to a study by Khansair, Murgo, and Faith (2003), stress also affects the immune system. They studied the effects of "stress on the endocrine and central nervous systems

and the interactions between these systems and the immune response after exposure to the stress signals" (Khansair et al, 2003, p. 1). They found that an individual could become sick more often or infections not heal as rapidly due to stress. Stress can cause numerous physiological symptoms, and bring about many comorbid disorders and diseases. These are just some of the problems that may arise due to stress, but the possibilities are endless.

Prevalence

The prevalence of stress is multidimensional because it encompasses a vast range of causes (Weiten & Lloyd, 2006). Some causes are work, the loss of a loved one, family life, abuse, illness, bills, divorce, school, etc. (Weiten & Lloyd, 2006). Because one or all of these things are felt during a lifetime, stress is bound to be felt by everyone. It is all in the amount of stress incurred and how it is dealt with that makes all the difference on how someone will be affected. According to Carpi "Stress has become so endemic it is worn like a badge of courage" (Capri, 1996, p. 1). This illustrates that stress has been embedded and woven into our society.

Types of Therapy for Stress

Because stress is encumbering, there are an immense number of treatments based on the physical, psychological, emotional, and behavioral problems (Weiten & Lloyd, 2006). In regards to the psychological, emotional and behavioral problems, some of the treatments include: cognitive behavioral therapy (CBT) (Butler, Chapman, Forman, & Beck, 2006), support groups, anti-anxiety & anti-depression medications (NIMH, 2008), stress inoculation therapy (SIT) (Meichenbaum, 1996), art therapy (ATCB, 2007), and music therapy (American Music Therapy Association, 1999). Frequently combinations of treatments are used in order to control the symptoms associated with stress.

Cognitive behavioral "combines the theories and techniques of behavior and cognitive therapy (Kramer, Bernstein, & Phares, 2009, p. 292). This form of therapy modifies specific behaviors educating the client/patient about approaches to dealing with/adapting to stressors. The reactions to stressors have a direct connection to a specific feeling or behavior, and are presented as an ABC model of therapy (Andersen, 2010, p.133). The ABC's consists of: A: the activating event, B: the belief, and C: consequences (Ellis, 1991). The activating event can be internal or external, but is considered the trigger (Claspell, 2010). The belief is the patient/clients' feeling, thought, attitude, or their perception of how they react to life events (Claspell, 2010). The consequence consist of the emotional and/or behavioral reaction that signifies the emotion(s) that the patient/client is feeling, whether irrational or rational (Claspell, 2010). This form of therapy has become quite common, and a leading treatment for many disorders (Kramer et al, 2009).

There are a variety of different support groups to aid individuals through their stressful times. Some support groups may include divorce, bereavement (Hospice, 2010), abuse (Domestic Abuse Council, 2010), sexual assaults (National Sexual Violence Resource Center, 2011), work groups, etc. There is evidence that support groups do aid an individual; based on some studies it is suggested "that social support mobilized to help a person cope with a stressor reduces the negative effects of the stressor on health" (Glanz, Rimer & Viswanath, 2008, p.195).

Stress inoculation training is "a flexible individually-tailored multifaceted form of cognitive-behavioral therapy" (Meichenbaum, 1996, p. 4). It is based on a three phased intervention. The first phase is the conceptualization phase, in which the client and therapist begin to build report with one another. Also during this initial phase "clients are taught how to breakdown global stressors into specific short-term, intermediate and long-term coping goals"

(Meichenbaum, 1996, p. 4). The second phase applies skills acquisition and rehearsal that arises during the first phase of therapy. It is at this time that coping skills are taught and used in the clinical setting that is personalized towards the clients' individual needs. The final phase is application and follows through with the skills that have been formed and practiced. "Such techniques as imagery and behavioral rehearsal, modeling, role playing, and graded in vivo exposure in the form of "personal experiments" are employed" (Meichenbaum, 1996, p. 4).

Through this last phase clients should be able to adapt to stressors with a more positive outcome.

Art and music therapy are forms of psychotherapy that aid clients by allowing them to work out their issues using the fine arts under guidance of a therapist (ATCB, 2007, p. 1). The Art Therapy Credentials Board, Inc. states that art therapy uses "art media, the creative process, and the resulting artwork to explore their feelings, reconcile emotional conflicts, foster self-awareness, manage behavior, develop social skills, improve reality orientation, reduce anxiety, and increase self-esteem" (ATCB, 2007, p. 1). It incorporates many forms of art like painting, drawing, sculptures, modeling clay, collages, knitting, crocheting, etc. There are several psychometric instruments used with this form of therapy as well; for example the Diagnostic Drawing Series (DDS) (Brooke, 2004), the Levick Emotional and Cognitive Art Therapy (LECATA) (Kaplan, 2011), and the Formal Elements Art Therapy Scale (FEATS) (Mattson, 2011).

The Diagnostic Drawing Series is designed to obtain information about the patient in the matter of a single session (Brooke, 2004). "By presenting structured and semi-structured drawing tasks, the DDS provides information toward the clarification of DSM-III, DSM-III-R, and DSM

IV diagnoses" (Brooke, 2004, p. 56). The intended value of this test is to assess the cognitive capacity, as well as the behavioral state of the patient/client (Brooke, 2004).

The Levick Emotional and Cognitive Art Therapy (LECATA) test was developed to ascertain a client/patients' level of emotional and cognitive function. There are 5 tasks that are encompassed in this assessment, and they are:

- 1) free task with story
- 2) self-drawing
- 3) scribble developed into a picture
- 4) place you like to be (3-5 years), place important to you (6-11+ years)
- 5) family drawing (Kaplan, 2011)

These drawings are then evaluated and given age scores based on the "cognitive and emotional levels" (Kaplan, 2011, p. 64).

The Formal Elements Art Therapy Scale (FEATS) is designed to include a rotation scale that measures the angle or tilt of specific objects, such as 'tree or person' (Mattson, 2011). According to Mattson, the rotations of such objects in a drawing have been shown "to be an important criterion in distinguishing certain patient groups, such as schizophrenia and organic brain disorders" (Mattson, 2011 p. 120).

Music therapy works in the same fashion of art therapy. It is intended to allow the client to work through issues of anxiety, stress, and depression through assessing "emotional well-being, physical health, social functioning, communication abilities, and cognitive skills through musical responses; design music sessions for individuals and groups based on client needs using music improvisation, receptive music listening, song writing, lyric discussion, music and imagery, music performance, and learning through music" (American Music Therapy Association, 1999). Although this form of therapy dates back to the days of Aristotle, it has just

become popular in the past few decades (American Music Therapy Association, 1999). The use of the arts to aid clients is a relaxing form that allows the individual to work through their problems and have something to reflect on after all efforts are put into it.

Medications

Medications are a popular resource to help alleviate symptoms associated with the effects of stress. There are a multitude of medications that cover an array of disorders (NIMH, 2008). Antidepressants come in a number of ways, and it can take time to find the right one that works. Selective serotonin reuptake inhibitors (SSRI's) are very common and often the first drugs that physicians use, they include: Prozac, Zoloft, Paxil, Lexapro and Celexa. Serotonin and norepinephrine reuptake inhibitors (SNRI's) include: Effexor, Pristiq, and Cymbalta (Mayo, 2011). Other drugs in this category are Wellbutrin, Trazadone, Remeron, and Nefazodone. There are also tricyclic and tetracyclic drugs like Amitriptyline, Clompiramine, Doxepin, Imipramine, Trimipramine, Desipramine, Notriptyline, Protriptyline, Amoxapine, and Maprotiline (Mayo, 2011). If all these types of medications fail Monoamine Oxidase Inhibitors (MAOI's) can be used (Mayo, 2011). These drugs are typically used as a last form of therapy due to the dangerous side effects that can arise. These include Pheneizine, Selegiline, Isocarboxazid, and Tranylcypromine (Mayo, 2011).

Antianxiety drugs come in just as many forms, but this is because many drugs are used for multiple uses (NIMH, 2011; Mayo, 2011). One class of antianxiety medications is benzodiazepines and tranquilizers. Some of the medications that fall into this category are Xanax, Klonopin, Valium and Ativan (NIMH, 2011). The cross over drugs that are used to treat both depression and anxiety can include: BuSpar, Prozac, Zoloft, Paxil, Lexapro, Effexor, and

Tofranil (Mayo, 2011). Some betablockers are used to treat both hypertension and antianxiety. Betablockers help reduce the effect of adrenaline which can cause palpitations, sweating, and shaking (NIMH, 2011). The contradiction is that betablockers reduce heart rate and blood pressure, which can deeply affect people who do not suffer from hypertension. However, if an individual suffers from both hypertension and anxiety these types of drugs can aid a person to curb both disorders.

Another side effect of stress can include gastrointestinal disorders such as ulcers, gastroesopheal reflux disease (GERD), irritable bowel syndrome, constipation, and diarrhea (Rey, Garcia-Alonso, Moreno-Ortega, Almansa, Alvarez-Sanchez, and Diaz-Rubio, 2008).

Again, there are a multitude of medications that aid in these conditions. Individuals can suffer from these conditions without stress being a factor, but as it relates to this study these are common problems that are associated with the effects of stress. One must be sure that a licensed physician determines what the causes and problems are associated with symptoms that one might be feeling.

Alternate Treatments

For those wanting to forego modern medicine, there have been some studies done on other types of therapies that consist of: herbal remedies, the use of exercise/yoga, and even dietary changes in order to reduce, if not eliminate, the effects of stress. It appears that these modes of therapies are on the rise. Per Kessler, Soukup, Foster, Wilkey, Van Rompay, and Eisenberg "Complementary and alternative therapies are used more than conventional therapies by people with self-defined anxiety attacks and severe depression. Most patients visiting conventional mental health providers for these problems also use complementary and alternative

therapies" (Kessler, Soukup, Foster, Wilkey, Van Rampay, & Eisenberg, 2001, p. 289). They predict that as insurance coverage broadens, these types of therapies will be covered and heavily sought after.

With regards to herbal medication, a study conducted by Wheatley (2001) sought to test the effects of Kava and Valerian to alleviate insomnia brought on by stress. The study found that it did aid those with stress induced insomnia, but the researcher also felt that further studies should be done. Mizoguchi, Mitsutoshi, Ishige, Sasaki, and Tabira (2002) conducted a study on the benefits of the herbal medication Saiko-ka-ryukotsu-borei-to in order to treat depression. It found that "saiko-ka-ryukotsu-borei-to is effective against chronic stress-induced abnormality of the neuroendocrine system" (Mizoguchi et al, 2002, p. 67). St. John's wort has been studied for its' effectiveness to treat depression with some positive results. Hannah, Streltzer and Goebert (1999) did a clinical trial to understand the benefits of this herb. The findings revealed that there was somewhat of an effect; but further studies should be done. Passionflower too has been analyzed to treat generalized anxiety disorder (GAD). During a clinical trial performed by a Akhondzadeh, Naghavi, Vazirian, Shayeganpour, Rashidi, and Khani (2001), passionflower was found to be quite an effective way to treat GAD.

Because of the popularity of herbal medications, there have also been studies to address the possible benefits vs. side effects to these types of treatment. Ernst (2002) investigated the risks and benefits for a few of the herbs that have been used to treat an extensive amount of disorders that have been linked to stress, as discussed already here in this paper. The author concluded that there was some positive feedback to treating conditions, but none of them were without adverse effects. Individuals considering taking herbal medications should consult their

physician and outweigh the risk-benefit comparison, just as it is the case with modern medications.

Yoga has also been reviewed to see if it is valuable in the reduction or elimination of stress. Granath, Ingvarsson, Thiele, and Lundberg (2006) showed that "both cognitive behaviour therapy and yoga are promising stress management techniques" (p. 3). Whereas Stein went to the root of one of the main causes of stress, which is work. He did research on the effects of work and found that occupational stress was a high contributing factor to "absenteeism, disease, injury and lowered productivity" (Stein, 2001, p. 235). He also concluded that a "short form of meditation, daily exercise program and the use of heart rate or thermal biofeedback can be helpful to a worker experiencing occupational stress" (Stein, 2001, p. 235). For years we have been told that exercise is good for us in the physical sense, but now researchers are finding that it is also good for mental health as well (Wipfli, Landers, Nagoshi, & Ringenbach, 2009).

According to these researchers multiple meta-analyses on the effects of exercise on depression and anxiety have shown a large reduction in the effects of depression and a small to moderate reduction in the symptoms of anxiety.

Occupation and Stress

According to CNBC, which is a national recognized media service, they too have begun looking at occupational stress. They reported their findings in an article in 2010. Their findings are as follows:

- 1. Firefighter
- 2. Corporate Executive
- 3. Taxi driver
- 4. Surgeon
- 5. Police Officer
- 6. Commercial Pilot

- 7. Highway Patrol Officer
- 8. Public Relations Officer
- 9. Advertising Executive
- 10. Real Estate Agent

These jobs are ranked high for a variety of reasons. Many of these jobs involve long hours, low pay, no respect for the job, the pressure of the job itself, as well as the physical and mental demands placed on the individual working in a particular field. For the purpose of this study, in must be noted that law enforcement officers ranked 5 and 7.

A study by Schieman, Whitestone, and Van Gundy (2006), looked at the stress that can be associated with those who work in a position of higher status. The main purpose was to see if there was a relationship between this type of work and at home conflict. This form of conflict raises stress levels even more based on the perceived stress that is felt at work, and then added to that felt at home.

Law Enforcement and Stress

Law enforcement is an occupation that services the community, and the individuals involved work long hours and under difficult situations. Law enforcement personnel witness horrific scenes, maintain order in the midst of chaos, and put their lives on the line on a daily basis. With all these surmounting demands, one might imagine the strain put on outside relationships, such as marriage.

In this day and age, there are reports on local media showcasing murder-suicides, domestic violence, charges of coercion, DUI's, etc. in regards to members of the law enforcement community. Although these issues are not limited to this occupation, they make the late night news because law enforcement personnel are involved. Take the recent case of Florida Highway Patrol Trooper Eddie Silcox in Citrus County, Florida. Trooper Silcox shot his wife of

29 years and himself (FHP veteran, 2010). Little information is available as to why such a tragedy occurred, except that they had recently separated (FHP veteran, 2010). This is not to say that all law enforcement persons' marriages end in such violence, but merely to illustrate that such extreme cases do exists.

Many studies have been conducted in regards to the stressful effects of working in law enforcement. Issues such as PTSD (Carlier, Lamberts, & Gersons, 1997), aggression, suicides (McCafferty, McCafferty, & McCafferty, 1992), and high percentages of divorce (Niederhoffer & Niederhoffer, 1978) have been cited in several studies. For instance, McCafferty and McCafferty (1992) reported that a Chicago police officer was five times more likely to commit suicide; and New York officers committed suicide at a rate of 23.3 per 100,000. The difficulty in this type of research is said best by Abdollahi (2002), "In essence, police stress is a complex formula that has many different contributory factors" (p. 3).

It was hypothesized that there would be significant stress on conjugal relationships, which again for the purpose of this research is to include those married, cohabitating and in a civil union. It has been shown that law enforcement is considered a highly stressful occupation, and therefore it was theorized that eventually this would cause a significant amount of stress on any conjugal relationship. The present research differs in the style of datum collected because it has extended conjugal relationships to include those cohabitating and in a civil union; and focusing specifically on the officer and their spouses' perceived stress level exerted on them because of said occupation. In a study done by Maynard, Maynard, Mccubbin and Shao (1980), they studied specifically law enforcement officers' wives and their coping skills in regards to the stress of their husbands' occupation.

METHOD

Participants

The participants in this study consisted of both the law enforcement officers and their respective partner. Marital status included those that are legally married, cohabitating in a relationship, or those in a civil union. The sample consisted of 51 participants (31.4% females and 68.6% males) with ages ranging from 23 to 64 years (M = 36.6, SD = 9.36). Providing data were 35 males between the ages of 23 and 64 years (M = 38.5, SD = 10.31) and 16 females between 24 and 49 years (M = 38.3, SD= 7.41), which included both the law enforcement officers and spouses. Participants were predominantly Caucasian (88.2%), followed by African American (5.8%), Hispanic (1.9%), Native American (1.9%), and other race not listed (1.9%). Sixty percent of the respondents were listed as being married, 17% divorced, 12% cohabitating, 2% in a civil union and 10% single. None of the participants listed themselves as separated. In regards to the law enforcement officer spouses, 93.75% did not complete the survey. Eighteen percent of participants have been working in law enforcement for 7 to 10 years, with 24% working 11 to 17 years; yet the largest proportion was 40% for over 18 years of law enforcement service. Of those who listed themselves as being married, 47% have been married for over 10 years.

Most of those surveyed were listed as officers (58.8%), followed by sergeants (27.4%); with detectives (3.9%), lieutenants (7.8%), and captains (1.9%) appearing randomly. The general position with the department was recorded as patrol (60.8%), however there were some specialized areas reported (i.e., cold case) (1.9%), prisoner transport (1.9%), code enforcement (1.9%), training division (3.9%), CID (7.8%), traffic (7.8%), SWAT (7.8%), support bureau

(1.9%), administration (1.9%), Internal Affairs (1.9%), hostage negotiator (1.9%), special operations (1.9%), special investigations (1.9%), and unknown (1.9%).

With regards to mental disorders, 61% documented that they have never been diagnosed with any disorders; yet 39% have suffered from anxiety, post-traumatic stress disorder (PTSD), depression, and as being manic depressive. This leads to the numbers indicating that 80% of participants did feel that law enforcement work is/was stressful on them and/or their spouse. According to the results of the anonymous survey, 61% do not feel that the department gives enough support to the individual officer or their spouse. Surprisingly, 56% have never sought counseling for anything, but 25% have for their relationship and 19% for their occupation.

Materials

A brief questionnaire specifically designed for the present study was employed (see Appendix B). The questionnaire was completely anonymous and delivered via kwiksurveys.com. The questionnaire required approximately 5 to 10 minutes to complete.

Procedure

The link to the questionnaire was sent to each department's contact person. Each contact person then forwarded the link to all law enforcement personnel within their respective department; each law enforcement officer was then instructed to share the link with their partner (this design further ensured anonymity of the respondents to the researcher). This survey was sent out to 14 departments, with only one giving written authorization and responding. This procedure maintained the confidentiality of the participants. The law enforcement officer and their partner then completed the anonymous online questionnaire. The survey was preceded with an Explanation of Research in lieu of a signed consent form. Respondents were instructed to

complete the survey in private. The survey was available for 2 weeks and 51 responses were given.

RESULTS

Overall, in Analysis A, 25 of the total participants felt a higher level of stress on their relationship, whereas 26 did not feel as stressed. In Analysis B, 27 felt that law enforcement had created more stress and 24 felt it did not. These results were based on 10 point scale where \leq 5 showed an average to lower stress level, whereas \geq 6 showed a higher level than the average level of stress.

For Analysis A (see appendix C) a one-way between subjects ANOVA was conducted to compare the effect of stress on the individual in regards to their conjugal relationship. There was no significant effect with regard to the amount of stress on the relationship, F(1, 48) = 0.99, p = 0.32 (corresponds to question 11 of survey).

A one-way between subjects ANOVA was conducted for Analysis B (see appendix C) to compare the effects of the law enforcement occupation on stress. There was no significant effect on stress as it pertained to the law enforcement occupation, F(1, 48) = 1.62, p = 0.21 (corresponds to question 10 of survey).

DISCUSSION

The purpose of the present study was to examine possible differences between occupational stresses as a function of conjugal relationship in law enforcement personnel. It was hypothesized that there would be a significant stress on conjugal relationships. The present data do not support the research hypothesis. Optimally the researcher wanted to look at the types of relationships within the law enforcement occupation because this was a critical function of this study; however there was insufficient data collected from spouses which did not allow for a more complex evaluation of these conjugal typologies.

Past research (Abdollahi, 2002; Carlier, Lamberts, & Gersons, 1997; McCafferty, McCafferty, & McCafferty, 1992; Niederhoffer & Niederhoffer, 1978), has shown that there is a higher level of stress amongst law enforcement officers and their spouses, but unlike past studies this one included those who were in civil unions and cohabitating. Maynard, Maynard, McCubbin and Shao (1980) noted "the stressors of life-threatening events, armed conflict, and other risks associated with the police profession also impact upon family life" (p. 495).

Abdollahi (2002) presented several situations that have been associated with the increased stress of the law enforcement occupation, such as: crime scenes, long work hours, public scrutiny and the media, officer involved shootings, dealing with victims, encountering high risk situations, and dealing with the judicial system.

Although levels of stress were shown within this study, there was no clear significance to previous studies. This may have been due to the low rate of individuals that were able to take the questionnaire. A mixed design between marital-cohabitating-civil union was not done based on the need for more participants. Only one respondent was listed in a civil union, which would

have caused this calculation to collapse the levels of relative main effect. In future studies, this should be taken into account for statistical purposes on the different types of conjugal relationships that exist.

In both analysis conducted the data paralleled one another, thus showing that stress was felt daily and the participants felt that the law enforcement occupation did weigh higher on the stress scale. However, the level of expressed stress did not significantly affect their relationship.

This study was not without its' limitations. As previously mentioned, the sample size was rather small and predominantly male. Also, few spouses participated in the study so the main data pool consisted of the law enforcement officers themselves.

The current study does not show a significant difference between the stressors of the law enforcement officer occupation in conjunction to their conjugal relationship; however based on the past studies, further studies should be done. Because other studies have shown a great significance in stress as it relates to marital relations and this particular profession (Abdollahi, 2002; Carlier et al, 1997; McCafferty et al, 1992; Niederhoffer & Niederhoffer, 1978), and even in this current study which showed that 61% of the participants did not feel that they were given sufficient aid for their spouse and themselves; it is in the researchers opinion that further assistance is needed for the law enforcement officers and their families. In future studies the researcher should extend the area from which they sample, and increase the number of spouses that participate as well. Also another suggestion is that they include those cohabitating and are in civil union relations, because these forms of relationships are increasing at the present time.

APPENDIX A

APPENDIX A: IRB APPROVAL LETTER



University of Central Florida Institutional Review Board Office of Research & Commercialization 12201 Research Parkway, Suite 501 Orlando, Florida 32826-3246

Telephone: 407-823-2901 or 407-882-2276 www.research.ucf.edu/compliance/irb.html

Approval of Exempt Human Research

From: UCF Institutional Review Board #1

FWA00000351, IRB00001138

To: Homer Edward Fouty and Co-PI: Patricia S. Peace

Date: February 04, 2011

Dear Researcher:

On 2/4/2011, the IRB approved the following activity as human participant research that is exempt from regulation:

Type of Review: Exempt Determination

Project Title: Does the Stress Associated with Law Enforcement Work Affect

Conjugal Relationships?

Investigator: Homer Edward Fouty, Ph.D.

IRB Number: SBE-11-07442

Funding Agency: Grant Title:

Research ID: N/A

This determination applies only to the activities described in the IRB submission and does not apply should any changes be made. If changes are made and there are questions about whether these changes affect the exempt status of the human research, please contact the IRB. When you have completed your research, please submit a Study Closure request in iRIS so that IRB records will be accurate.

In the conduct of this research, you are responsible to follow the requirements of the Investigator Manual.

On behalf of Joseph Bielitzki, DVM, UCF IRB Chair, this letter is signed by:

Signature applied by Joanne Muratori on 02/04/2011 03:57:10 PM EST

IRB Coordinator

Joanne puratori

APPENDIX B

APPENDIX B: QUESTIONAIRE

Police Work and their conjugal relationships

This is a brief survey that will take about 5-10 minutes to complete. It is completely anonymous and will be used in my research project for undergraduate studies. The purpose of the survey is to find out if officers and their partners believe that the stress of police work effects marriages and/or unions. I appreciate your support and help and would like to thank you for taking time out of your busy day to support me.

* 1.	Are you?
0	A law enforcement officer
\circ	Partner of a law enforcement officer
2. A	re you male or female?
	Male
	Female
3. A	re you currently?
	Married
	Divorced
	Cohabitating
	Civil Union
	Separated
	Single low long have you been a law enforcement officer OR How long have been the partner of a enforcement officer?
	1-3 years
	4-6 years
	7-10 years
	10-13 years

	14-17 years
	18+ years
5. H	ow long have you been married (or were married if currently divorced)?
	1-3 years
	4-6 years
	7-10 years
	10-13 years
	14-17 years
	18+ years
	That is your current position within the department OR what is your partner's current position in the department? (LT., SGT., etc.)
	That area within the department do you work in OR What area within the department does a partner work in (homicide, bomb squad, traffic, etc.)?
8. H	ave you ever been diagnosed with a mental disorder or addiction?
	Anxiety
	PTSD
	Alcoholism
	Drug Addiction
	Bipolar
	Depression
	None of the Above
	Other
	Do you feel that law enforcement work is/was stressful on you and/or your spouse (even if are divorced)?
0	Yes
\circ	No

				now stress	sed do yo	u feel on a	a daily ba	sis? (one b	peing no e	effect and
	eing de 1	epiy an 2		4	5	6	7	8	9	10
								0		
11. On a scale of one to ten, how do you feel that law enforcement work has affected your relationship? (one being no effect and ten being deeply affected)										
	1	2	3	4	5	6	7	8	9	10
12. FOR SPOUSES ONLY: On a scale of one to ten, what level of stress do you feel that you significant other (law enforcement officer) feels. (one being no affect and ten being deeply affected)										
	1		3	4	5	6	7	8		10
	Oo you frtment? Yes		t there is o	enough su	ipport for	you and y	our partn	er given tl	hrough th	e
0	° No									
	lave yourelation		sought co	unseling f	or any iss	sues direct	tly related	to this oc	cupation	and or
	occupa	tion								
	relationship									
	never									

APPENDIX C

APPENDIX C: F Tables

Analysis A- included those in a relationship vs. not in a relationship and how they felt stress effected their conjugal relationship in regards to the law enforcement profession (see question 11 of survey in appendix B).

Source	SS	df	MS	F	р
Between Groups	4.892807	1	4.892807	0.990417	0.324631
Within Groups	237.1272	48	4.94015		
Total	242.02	49			

Analysis B – included those in a relationship vs. not in a relationship and how much stress they felt from the law enforcement occupation (see question 10 of survey in appendix B).

Source					
	SS	df	MS	F	p
Between Groups	11.22964912	1	11.22965	1.6241	0.208656
Within Groups	331.8903509	48	6.914382		
Total	343.12	49			

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