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Look inside firefighter families: a qualitative study

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UNIVERSITY OF NORTHERN COLORADO

Greeley, Colorado

The Graduate School

A LOOK INSIDE FIREFIGHTER FAMILIES:
A QUALITATIVE STUDY

A Dissertation Submitted in Partial Fulfillment
of the Requirements for the Degree of
Doctor of Philosophy

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ABSTRACT

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Emergency first responders, such as firefighters and emergency medical technicians (EMTs), face the risk of exposure to potentially dangerous and psychologically traumatic situations during every shift. This phenomenological study, guided by the principles of constructivism, investigated the experience of being in a firefighter family and explored the meaning the family members and the firefighter created in this unique situation. Five families participated in semi-structured interviews. Findings revealed themes that were overarching, as well as themes unique to the firefighters, spouses, and children. The findings are discussed in the context of constructivist self development theory and from a family resilience approach.

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To the brave, resilient families who invited me into your homes to discuss your experiences – I appreciate this more than you can know. You are the reason this study exists and I am certain that your participation will help other firefighter families. Thank you.

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CHAPTER 1

INTRODUCTION

“You know the joke around here – every firefighter has at least two divorces and two truck payments.” I first heard this comment during an internship with the local fire department when I was an undergraduate student. During long days of waiting to respond to emergencies in order to counsel the families of deceased individuals, I got to know many of the firefighters well and could not help but wonder if and why this group of people was more susceptible to divorce than others. As I learned about the lifestyle of the firefighters, I realized that a number of factors could make it difficult to be married to a first responder. Long, unusual shifts, absence from their families, and the risk of psychological and physical trauma as part of the job are some of the stresses affecting a first responder marriage.

Throughout the study I will refer to firefighters and emergency medical technicians (EMTs) interchangeably as “first responders” or “emergency service personnel.” Most of the participants in the study work as both firefighters and EMTs at their current jobs, and both roles fit into the first responder category.

Statement of the Problem

A connection between first responders and an increased risk of posttraumatic stress disorder is now a generally accepted theme in much of the literature concerning emergency service personnel (McFarlane, 1988; Bryant & Harvey, 1996; Marmar et al., 1999; Regehr, Hill, & Glancy, 2000). Research also confirms that family support is

imperative to handling the stress of emergency service work (Regehr, Dimitropoulos, Bright, George, & Henderson, 2005). Despite the research concerning the high occurrence of posttraumatic stress disorder in emergency personnel and research confirming the importance of family and social support to aid distressed emergency personnel, there has been little literature produced concerning the families of first responders (Regehr et al., 2005). Although research concerning stress and trauma is extensive, there is a noticeable lack of research relating to the ways in which occupational stress of emergency workers influences their marriages and families. Those in first responder families must face a number of challenges that other families do not face.

Purpose of the Study

The purpose of this qualitative study was to explore the impact on-the-job trauma has upon the firefighter and his family. The methodology of the study was guided by phenomenology, which seeks to identify the “essence or essences to shared experience” (Patton, 1990, p. 70). The unique experiences of the individuals were expressed during semi-structured interviews with each member of the family including the children. The goal of the study was to identify the participants’ shared essence of being in a family in which one member is employed as a firefighter.

Prior to the family’s participating in the first interview, the firefighter and his spouse completed two instruments to assess their amount of trauma exposure as well as the presence and degree of posttraumatic stress symptoms. The Traumatic Events Questionnaire – Revised (TEQ-R; Vrana & Lauterbach, 1994) and the Purdue Posttraumatic Stress Disorder Scale – Revised (PPTSD-R, Lauterbach & Vrana, 1996)

were administered to gather quantitative data about the number and type of traumatic events the firefighters and spouses had been exposed to and the development of posttraumatic stress symptoms in response to these events. This data was gathered solely for qualitative research purposes and was be used to assess or diagnose the participants with PTSD. The firefighter, his or her spouse or partner, and the couple's children were interviewed separately to learn about their experiences of having a firefighter in the family. The parents and children decided whether the children would be comfortable interviewing alone or whether a parent needed to be present. No children asked for a parent to be present, and all the children were interviewed alone or with their siblings. The interviews were transcribed, and the data was analyzed for themes. The themes that emerged from interviews with all of the participants were compared as the shared essence of being in a firefighter family was sought. During a second interview with the participants, the emerging themes were discussed and participants were asked for any additional contributions they would like to make to the study. The complete methodology and procedures of the study are discussed in Chapter Three.

Significance of the Study

The current study utilized a methodology that has not been used before to investigate firefighter families. Lowery (2008) suggests that a methodology incorporating separate interviews with firefighters and their spouses would be beneficial to the literature because interviewing spouses separately can result in a clearer understanding of the spouses' independent constructs about being in a firefighter marriage. Other qualitative studies that involved the spouses of first responders did not

include the emergency workers themselves (Pfefferbaum, North, Bunch, Wilson, Tucker, & Schorr, 2002; Regehr et al., 2005).

The effect of having a first responder who is a parent received little attention in the literature prior to 9/11. Following the attacks of September 11, 2001, the children of emergency medical technicians were found to have higher levels of posttraumatic stress disorder than those children with a firefighter, police officer, or no first responder in the family (Duarte et al., 2006). The difference in rates of PTSD in EMT children may have been caused by demographic differences between EMTs and other first responders or the proximity of EMTs to Ground Zero; however, further study is necessary to determine whether this difference persists in other samples. A qualitative study of firefighter families coping after September 11th incorporated children in its design (Linkh, 2006). The children provided valuable information about the influence of parental coping on their own ability to cope with the trauma of September 11th.

Previous studies have investigated the experience of being married to a firefighter through qualitative methodologies, and the responses of firefighters' children to the events of September 11, 2001 have been studied quantitatively and qualitatively. However, a study exploring the everyday experience of having a firefighter in the family and the constructs that develop in response to this experience has yet to be conducted. The current study provided a unique opportunity to create a complete picture of the family life of firefighters by incorporating the views of both spouses and children of firefighters.

Research Questions

This study explored the following question:

H1 What is the experience of being in a family in which one spouse is a firefighter?

Other questions addressed included:

H2 What impact has trauma the firefighter encountered on the job had upon the marriage?

H3 What impact has trauma the firefighter encountered had upon the firefighter?

H4 What impact has trauma the firefighter encountered had upon the spouse?

H5 How does the firefighter's schedule and shift affect the marriage?

H6 How has the firefighter's job impacted his/her role in raising children?

H7 How do children of firefighters experience having a first responder as a parent?

Theoretical Rationale

Constructivist self development theory (CSDT) describes an individual's experience with trauma and the way a person's history and personality as well as the aspects of the traumatic event interact to create adaptive coping strategies (McCann & Pearlman, 1990a). This theory stems from the constructivist movement, which assumes that every individual creates or constructs a unique reality. Therefore, when traumatic events are experienced, the individual creates meaning. Constructivist self development theory views an individual's response to trauma, such as symptoms of posttraumatic stress disorder, as adaptations that allow the self to cope with the threat that the trauma has posed to the individual (Saakvitne, Tennen, & Afflack, 1998).

Constructivist self development theory identifies five areas of the self that may be affected by trauma. Saakvitne et al. (1998) describe these areas as

- 1) *Frame of reference*: one's way of understanding self and world, including spirituality.
- 2) *Self-capacities*: defined as the capacity to recognize, tolerate, and integrate affect and maintain a benevolent inner connection with self and others.
- 3) *Ego resources*: necessary to meet psychological needs in mature ways; specifically, abilities to be self-observing, and use cognitive and social skills to maintain relationships and protect oneself.
- 4) *Central psychological needs*: reflected in disrupted *cognitive schemas* in five areas: safety, trust, control, esteem, and intimacy.
- 5) *Perceptual memory system*: including biological (neurochemical) adaptations and sensory experience. (p. 283)

Following a traumatic event, “the individual must integrate the event and its context and consequences into his or her existing beliefs about self and others” (Saakvitne et al., 1998, p. 283). Several factors affect the extent to which the event will be cognitively processed, including the severity of the event somatically, affectively, and interpersonally. Every individual will respond to traumatic events in a distinct way. That response will be influenced by: the individual's unique worldview, spirituality, psychological capacity, self-capacity, ego resources, and sociocultural context (Saakvitne et al., 1998).

Constructivist self development theory was originally a framework to conceptualize the occurrence of vicarious traumatization of therapists working with

trauma victims (McCann & Pearlman, 1990a). Vicarious trauma is described as “a process through which the therapist’s inner experience is negatively transformed through empathic engagement with clients’ trauma material” (Pearlman & Saakvitne, 1995, p. 279). Vicarious trauma results in changes in the way the helper relates to him or herself, others in his or her life, and the larger world (Pearlman & Mac Ian, 1995). CSDT proposes that vicarious traumatization does not occur following one encounter with a traumatized individual, but accumulates over time with increased contact with traumatized individuals (Pearlman & Mac Ian, 1995). First responders work in a different capacity than therapists, in that they are not expected to engage empathetically with victims, and in fact are discouraged from doing so. However, emergency service personnel’s direct contact with traumatized individuals and the ongoing nature of this contact over the course of the career make constructivist self development theory an appropriate framework to conceptualize the traumatic exposure of first responders.

The spouses of emergency service personnel are also at risk for developing vicarious trauma. The spouses may hear about traumatic events from the first responders or on the news. Constructivist self development theory will guide the conceptualization of the spouses’ experience of being married to first responders.

First responders face the risk of injury or death every day on the job, and they often have to respond to situations in which people are severely injured or killed. Constructivist self development theory guided this study in understanding the way in which first responders integrate the trauma they encountered on the job with his beliefs. CSDT also provided a framework for understanding the ways in which the spouses of first responders coped with the threat of their husbands’ exposure to trauma and risk of

death or injury. Of particular interest were the self-capacities, ego resources, and central psychological needs of the couple and the way in which one spouse's work as a first responder affected these areas. This study investigated the way in which families make meaning out of one spouse's occupation and the challenges that go along with that job, including exposure to traumatic events.

Delimitations

- Participants will be married couples in which one partner is a first responder
- Participants may also be monogamous, cohabitating couples who have been together for at least five years
- Participants must be heterosexual couples
- Participants must have a child over the age of 12 living in the home
- Participants must be willing to take part in a series of interviews

Definition of Terms

- Psychological Trauma: "the unique individual experience of an event or enduring condition, in which: the individual's ability to integrate his/her emotional experience is overwhelmed, or the individual experiences (subjectively) a threat to life, bodily integrity, or sanity" (Pearlman & Saakvitne, 1995, p. 60).
- First Responders: in this study first responders included firefighters and emergency medical technicians. First responders were also referred to as emergency service personnel or emergency service providers.
- Vicarious Trauma: "the transformation that occurs within the therapist [or other trauma worker] as a result of empathic engagement with clients' trauma experiences and their sequelae. Such engagement includes listening to graphic descriptions of horrific events, bearing witness to people's cruelty to one another,

and witnessing and participating in traumatic reenactments” (Pearlman & Mac Ian, 1995, p. 558).

- Shift Work: “refers to a job schedule in which employees work hours other than the standard hours of 8 a.m. to 5 p.m. or a schedule other than the standard workweek – Monday through Friday in the United States” (Grosswald, 2004, p. 414).

Summary

This qualitative study explored the experience of being in a firefighter family and the role that occupational trauma of the firefighter plays in the family. This chapter presented the theoretical rationale, the significance of the study, and the research questions. Constructivist self development theory is the theoretical foundation of the study. The delimitations of the study were included in this chapter, as were definitions of important terms. Chapter Two will review the literature that is relevant to the study.

CHAPTER II

LITERATURE REVIEW

Marriage and family are vital sources of support for firefighters, who are exposed to numerous traumatic events and stresses over the course of their careers (Regehr et al., 2005). Posttraumatic stress disorder (PTSD) has received increased attention in the literature in recent years, and the emergency services have been a focus of PTSD research. However, the crucial support systems in the lives of firefighters – their marriages and families -- have received little of this attention. There are a multitude of stressors which are unique to the marriages of firefighters including long shifts away from the home, the threat of dangerous or traumatic scenes, and the additional pressure of assimilating back into the family system following traumatic calls and long shifts. This study will explore the meaning that firefighters and their families create regarding the first responder's exposure to traumatic events and other challenges of being a firefighter.

A review of the literature will examine PTSD, the unique stressors of a firefighter marriage, how firefighters cope with trauma, and other stresses affecting his or her marriage and children. Studies involving police officers, emergency medical technicians (EMTs), and members of the military are included due to the high level of exposure to traumatic events that each of these populations endures as a result of their occupation.

First, the history of psychological trauma will be discussed. The diagnostic criteria for Posttraumatic Stress Disorder, according to the *Diagnostic and Statistics Manual, Fourth Edition, Text Revision (DSM-IV-TR; APA, 2000)* is included, followed by literature regarding emergency response workers and PTSD. Studies regarding the occurrence of PTSD in professional and volunteer firefighters are reviewed. Next, coping strategies of first responders are explored, as well as the topic of PTSD related to marriage.

Posttraumatic stress disorder can also affect the spouses of firefighters; therefore, I will then explore the prevalence and effects of psychological trauma on the spouses of firefighters. The literature regarding the manner in which PTSD affects parenting will then be reviewed. The stresses of firefighter marriages will be discussed, followed by alcoholism, divorce and violence in first responder marriages. The chapter will conclude with a review of the most current literature regarding dynamics of firefighter marriages.

History of Posttraumatic Stress Disorder

For millennia, exceptional cases have been noted in which war heroes would return from battle suffering from agitation and nightmares (Birmes, Hatton, Burnet, & Schmitt, 2003). Philosophers have speculated on the effects of fear and trauma throughout history. In the late 1800s medical doctors and psychologists began to propose a number of theories regarding the relationship between trauma exposure and behavioral changes. However, these behavioral changes were not fully ascribed to psychological causes for some time (Birmes et al., 2003), and it would be many years before the American Psychological Association would recognize posttraumatic stress disorder in 1980.

Several ancient works of literature contain accounts of psychological trauma, including *The Epic of Gilgamesh* and Homer's *The Iliad* (Birmes et al., 2003). These classic epics recount the heroes' reactions to the traumatic death and destruction of war. The earliest written account of psychological trauma is thought to date back to 2000-2100 BCE in the form of cuneiform tablets describing the death of the Sumerian King Urnamma, the destruction of the city of Ur, and the reaction of the people to those events (Ben-Ezra, 2004). From the description of the people's reactions, Ben-Ezra (2004) makes a comparison with current criteria for acute stress disorder (ASD) in the *Diagnostic and Statistical Manual—Fourth Edition—Text Revision (DSM-IV-TR)* to suggest that the citizens were suffering psychologically due to the recent traumas. This finding is significant because it suggests that long before the modern conceptualization of trauma, there were civilizations that recognized the psychological impact that traumatic events can have upon the individual.

Several millennia after the Sumerian accounts of psychological trauma were recorded, during the nineteenth century of the Common Era, argument existed among physicians regarding the origin of trauma. Many physicians believed that physical trauma affected the biology of an individual and that organic causes were to blame for traumatic reactions (van der Kolk, Weisaeth, & van der Hart, 1996). Despite this popular opinion, a few physicians were beginning to argue that trauma was a psychological phenomenon that affected a person's emotional state.

Those arguing that traumatic reactions were psychological in nature included Herbert Page, British military psychiatrist Charles Samuel Myers, James Putnam, and Pierre Janet at the Salpetriere Hospital in Paris. Page and C.L. Dana, who worked with

patients involved in railway accidents, clearly saw trauma as being psychological in nature and diagnosed them with railway hysteria when there was no damage to the spine, which was thought to be an organic source of traumatic reaction (Gasquoine, 1998). Dana recognized the extent of psychological suffering of those experiencing railway hysteria and described them as being “as much injured as if they had...an actual injury to the cord” (Dana, 1884, p. 620, as cited in Gasquoine, 1998, p. 317). Charles Samuel Myers was crucial in pointing out that “shell-shock,” a term which he first used during World War I, could be observed in soldiers who had never experienced the physical dangers of battle (van der Kolk et al., 1996). This contradicted many organic attributions of trauma and showed that emotional difficulties alone were sufficient to cause traumatic suffering.

The introduction of dynamite to trench warfare during World War I caused a great number of physical and psychological casualties (Weisaeth, 2002). Some soldiers who suffered from traumatic stress as a result of exposure to combat developed traumatic stress symptoms immediately, but others gradually exhibited the psychological and physical effects. Cardiac symptoms were prevalent among soldiers on the front lines, and what had been termed “Soldier’s Heart” or “Irritable Heart” in the American Civil War was now referred to as “Neurocirculatory Asthenia,” “Disorderly Action of the Heart,” and “Effort Syndrome” (Weisaeth, 2002, p. 446). This cardiac condition, which was actually a physiological stress response to the intense trauma encountered on the front lines, was the third most frequent cause of discharge in the British army during World War I (Weisaeth, 2002). The work of Charles Samuel Myers, a psychiatrist in the British military, was crucial to showing that Shell Shock could be caused solely by emotional

disturbances and an organic reason was not to blame for those soldiers who were suffering from traumatic symptoms (van der Kolk et al., 1996). The treatment for soldiers experiencing Shell Shock or Effort Syndrome was removal from their position on the front line; this proved to be unproductive in treatment of traumatic stress (Weisaeth, 2002). Removing a soldier from his combat unit instilled a sense of personal failure and took away the social support and camaraderie gained from the combat unit (Weisaeth, 2002). More effective treatments included creating a positive environment for healing, which reassured the soldier that he would be able to return to duty and fostered a strong patient-doctor relationship (Weisaeth, 2002).

World War II once again brought psychological trauma to the attention of medicine and psychology. Although advances had been made in treating and identifying soldiers suffering from traumatic stress during World War I, it appears that most of these had been forgotten, and a period of rediscovery occurred during the Second World War (van der Kolk et al., 1996). This meant that unsuccessful treatment, such as removal from the front lines, was once again utilized and found to be unproductive in resolving psychological trauma.

Abram Kardiner's work during World War II and in the years following the war proved to be very important to the creation of successful treatment of traumatic stress (van der Kolk et al., 1996). Based on Kardiner's observation of physiological response symptoms after trauma, the first somatic therapies were created. Collaboration between United States and British psychiatrists during the war resulted in the discovery of group therapy, which proved to be very effective for the treatment of traumatic stress resulting from combat and also disasters (van der Kolk et al., 1996). Despite these advances,

traumatic stress would not gain attention from psychologists in the United States for several more decades, when a number of factors would coincide to finally create the diagnostic category of Posttraumatic Stress Disorder.

It was not until 1980 that the American Psychiatric Association created the diagnostic category of Posttraumatic Stress Disorder in the *Diagnostic and Statistical Manual of Mental Disorders* (3rd ed.; *DSM-III*; American Psychiatric Association, 1980). Vietnam War veterans returning to the United States with severe traumatic stress symptoms brought attention to the need for services and treatment. Mental health workers and other advocates lobbied strongly to bring attention to the psychological damage that possibly up to a million Vietnam veterans were experiencing (Lerner & Micale, 2001). Prior to 1974, trauma research had almost exclusively focused on white males (van der Kolk et al., 1996). Until this time, trauma had been studied in areas such as railroads and rail travel, factories, and warfare, all of which were dominated by men (Lerner & Micale, 2001).

The formal study of trauma in women and children did not begin until the mid-1970s, following the burgeoning women's rights movement. Two female researchers, Ann Burgess and Linda Holstrom, were the first to identify "rape trauma syndrome" (p. 61) in 1974 and to equate symptoms of this syndrome, including nightmares and flashbacks, with the symptoms of combat soldiers suffering from traumatic stress as a result of war (van der Kolk et al., 1996). Soon after, researchers began to investigate battered children and trauma that results from violence within families (van der Kolk et al., 1996).

With the attention brought to traumatic stress by the return of Vietnam veterans and the study of trauma in women and children, the American Psychiatric Association began to formulate a diagnostic category for the effects of trauma to be added to the *DSM-III*. This category was very broad and included various traumatic syndromes including, “rape trauma syndrome,” “Vietnam veterans’ syndrome” (van der Kolk et al., 1996, p.61), “battered-child syndrome” (Kempe, Silverman, Steele, Droegmueller, & Silver, 1962, p. 17), and “battered woman syndrome” (Walker, 1979, p. 19). The first categorization of posttraumatic stress disorder appearing in the *DSM-III* was heavily influenced by the work of Abram Kardiner in the 1940s. Kardiner was integral to the process of creating the category (van der Kolk et al., 1996). As the PTSD diagnosis continues to develop, more is learned about the causes, effects and treatment of psychological trauma.

Symptoms of Posttraumatic Stress Disorder

The *DSM-IV-TR* (2000) now includes symptoms of PTSD grouped into three different categories: intrusive, avoidant/numbing, and hyperarousal. An individual must have been exposed to a traumatic event and have symptoms in each of the symptom categories to qualify for a diagnosis of PTSD. The categories and their symptoms are listed below.

Intrusive Symptoms (three or more):

- Recurrent and intrusive distressing recollections of the events in images, thoughts, or perceptions
- Recurrent distressing dreams of the event

- Acting or feeling as if the traumatic event were recurring by experiencing a sense of reliving the experience, illusions, hallucinations, and dissociative flashback episodes
- Intense psychological distress when exposed to internal or external cues that symbolize or resemble an aspect of the traumatic event
- Physiological reactivity when exposed to internal or external cues that symbolize or resemble an aspect of the event (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000)

Avoidance symptoms (three or more):

- Efforts to avoid thoughts, feelings, or conversations associated with the trauma
- Efforts to avoid activities, places, or people that arouse recollections of the trauma
- Inability to recall an important aspect of the trauma
- Markedly diminished interest or participation in significant activities
- Feelings of detachment or estrangement from others
- Restricted range of affect
- A sense of foreshortened future (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000)

Hyperarousal symptoms (two or more):

- Difficulty falling or staying asleep
- Irritability or outbursts of anger
- Difficulty concentrating
- Hypervigilance
- Exaggerated startle response

An individual must experience these symptoms for at least a month following the traumatic exposure (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000).

These symptoms can be very disruptive to an individual's career and home life. Emergency workers are highly susceptible to these symptoms because of their frequent exposure to traumatic events. Current literature lacks sufficient research regarding the effects of traumatic exposure upon the marriages and families of emergency workers (Regehr & Bober, 2005).

PTSD in Emergency Workers

As a result of the increased recognition of PTSD, attention would eventually focus on the occurrence of PTSD in emergency service workers. Emergency workers such as firefighters, police officers, and paramedics were often assumed and expected to be "immune to the effects of trauma" (Regehr & Bober, 2005, p. 67). Firefighters and other emergency service workers are often not expected to show any emotional response to the horrific scenes that they encounter on a daily basis. They often suppress any emotions about a scene because "those who did not suppress reactions were ridiculed and penalized" (Regehr & Bober, 2005, p. 67). The effects of traumatic scenes on emergency workers have been the focus of research over the past several decades. A study by Ehlers and Steil (1995) found that nearly all of the ambulance workers in the study had experienced at least some work-related intrusive memories. Ehlers and Steil's (1995) study found that these intrusive memories were most often caused by accidents involving the loss of a child, loss of an acquaintance, deaths resulting from violence, severe burns, or failed attempts to save the life of the victim. Symptoms of posttraumatic stress

disorder have been shown to be present in police officers involved in shootings (Solomon & Horn 1986; Gersons, 1989). Fullerton, McCarroll, Ursano, and Wright (1992) investigated responses of firefighters to disasters, including a major airline crash. Fullerton et al. found that firefighters had a number of responses to these situations. Themes including identification with the victim, feelings of helplessness and guilt, and fear of the unknown were found to be common responses of firefighters following response to disasters (Fullerton et al., 1992). McFarlane (1988) studied firefighters who had responded to large fires and their subsequent reactions to the destruction and death that occurred during these fires. McFarlane found that delayed-onset and chronic PTSD were a more common reaction than acute PTSD. Regehr and Bober (2005) concluded that exposure to horrific death and destruction can lead to "traumatic stress reactions" (p. 68) in the emergency service personnel who respond to these scenes.

The scenes to which firefighters are exposed can be very disturbing, and it is normal to respond with reactions symptomatic of traumatic stress. However, because such reactions are now viewed as symptoms of a mental disorder, this can cause some emergency service workers to avoid seeking psychological help, due to the shame of being diagnosed with posttraumatic stress disorder (Paton & Violanti, 1996). Paton and Violanti (1996) further suggest that using the term 'disorder' gives the condition a "negative stereotype"(p.19) and can result in the "suppression of problems and hinder the development of a true picture of the nature and extent of work-trauma problems" (p. 19). Emergency workers are reluctant to be labeled with a disorder and will attempt to avoid their feelings and emotions rather than seek treatment for PTSD.

The United States military is currently committed to fighting the stigma of mental health problems within a culture that has a long history of soldiers denying their need for treatment due to fear that being diagnosed and treated for a mental disorder would harm their careers (Dingfelder, 2009). Soldiers exposed to combat are more susceptible to developing posttraumatic stress disorder, as well as other mental health problems, than those not exposed to combat (Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004). However, only 23% to 40% of soldiers who screen positive for a mental health disorder following combat actually seek mental health services (Hoge et al., 2004).

Wright et al. (2009) explored stigma and barriers to receiving care for mental health disorders in a sample of 680 soldiers in combat support units using the Stigma and Barriers to Support Scale, the Patient Health Questionnaire (PHQ), the Posttraumatic Stress Disorder Checklist (PCL), and scales to measure unit cohesion and leader behavior. Leader behavior and cohesion of the unit were significantly negatively related to stigma and perceived barriers to care for mental health disorders (Wright et al., 2009). Therefore, factors within the organization, such as attitude of the leadership and cohesion of the unit can significantly impact the beliefs soldiers have regarding mental health disorders and acceptability of seeking mental health treatment.

The military and firefighter cultures continue to struggle with stigma toward mental health disorders. However, current research indicates that positive leadership and cohesion within units and possibly fire departments can help to create more positive views toward mental health problems and treatment of these disorders (Wright et al., 2009). Within the firefighter culture, it has been suggested the reaction to trauma with difficult emotions be normalized and encouragement be in place to inform emergency

personnel that it is possible to prevent or lessen the effects of traumatic exposure (Patton & Violanti, 1996). For soldiers and firefighters, positive leadership and guidance is a major factor that encourages those struggling with mental health disorders, including PTSD, to receive treatment.

PTSD Prevalence in Professional and Volunteer Firefighters

Current studies report that volunteer and professional emergency workers are susceptible to developing symptoms of PTSD in response to trauma exposure. Guo et al. (2004) studied professional and non-professional, or volunteer, rescue workers after an earthquake in Taiwan. This study indicated that the non-professional workers showed a higher prevalence of PTSD than professional workers. Guo et al. reported that 19.8% of professional and 31.8% of non-professional emergency workers qualified for a diagnosis of Posttraumatic Stress Disorder on the Chinese version of the Davidson Trauma Scale (DTS-C). Four possible explanations were provided regarding the finding that volunteer firefighters were more apt to develop PTSD than professional firefighters. These explanations include that preemployment screening may select individuals who are “likely to be resilient to repeated exposures to stressors” (p.38); individuals may self-select out of firefighting, resulting in those who can cope with stress working as professional firefighters; professional firefighters are trained to deal with stressful situations on the job; professional firefighters have experienced previous stresses that have helped them learn how to deal with accidents and disasters. This study showed that both professional and non-professional emergency workers are at risk of developing symptoms of PTSD in response to emergency response work; however, volunteer

firefighters were more susceptible to developing PTSD after responding to a major disaster.

A study of career/full-time firefighters and auxiliary/part-time firefighters in Australia reported significantly more symptoms of PTSD and psychological distress in the career firefighters (Dean, Gow, Shakespeare-Finch, 2003). Career firefighters (n=75) and auxiliary firefighters (n=67) were administered the Impact of Events Scale-Revised (IES) to assess traumatic stress and the General Health Questionnaire (GHQ-28), which measures overall psychological distress. The career firefighters reported higher rates of posttraumatic stress and extreme PTSD (22.6%) than the auxiliary firefighters (9%) on the IES. Career firefighters also reported significantly higher levels of psychological distress on the GHQ-28 than auxiliary firefighters. However, following further statistical analysis, the findings of the GHQ-28 were not supported. The findings from the IES were supported, and career firefighters were found to experience slightly higher levels of PTSD than auxiliary firefighters. While the career firefighters attended more traumatic events on duty, a number of other factors are thought to have influenced whether a firefighter suffered from traumatic stress. These factors include the background level of stress a firefighter has accumulated during years of experience, number of years of experience, age of the firefighter, and the number of traumatic events witnessed by the firefighter (Dean et al., 2003). Of these variables, only number of years as a firefighter was significantly positively related to an increase in traumatic stress. This study indicates that those who work more years as a firefighter are more likely to develop PTSD, which is supported elsewhere in the literature (Regehr, Hill, Knott, and Sault, 2003; McFarlane, 1988).

These studies propose that both professional and non-professional firefighters are at risk for developing PTSD, which suggests the families of both career and volunteer firefighters may be affected by one spouse's work as a first responder. The risk of PTSD increases with the length of time a firefighter is on the job, which reinforces the need for continued education and support regarding PTSD and mental health care for the firefighter, as well as his or her family, who are important sources of support.

Coping Strategies in Emergency Workers

Social support is critical to coping with traumatic events. A study by Regehr, Hill, Knott, and Sault (2003) compared social support of newly recruited firefighters and experienced firefighters. Regehr et al. administered the Beck Depression Inventory (BDI; Beck & Beamesderfer, 1974), the Impact of Events Scale (IES; Zilberg, Weiss, & Horowitz, 1982), to measure trauma symptomatology, the Self-Efficacy Scale (Sherer & Adams, 1983), to measure expectations of success, and the Social Provisions Scale (SPS; Cutrona & Russell, 1987) to assess social support in six dimensions, as well as global social support. Participants were also asked to rate the level of support they received from family, friends, spouses, colleagues, the union, and their employer. Instruments were administered to a group of new recruits (n=65) prior to training, following training, and also to a group of experience firefighters (n=58). Results indicate that new firefighters had a stronger social support network than experienced firefighters, scoring significantly higher on the Social Provision Scale and reporting higher levels of support from family members and employers. These findings are alarming because the study also showed that lower levels of social support were significantly negatively correlated with symptoms of traumatic stress and depression. As social support decreases, traumatic

stress and depression significantly increase. New recruits also showed significantly higher levels of self-efficacy on the Self-Efficacy Scale than experienced firefighters. Self-efficacy is defined as “a cognitive process that involves expectations that one can solve problems and meet new challenges” (Regehr et al., 2003). New recruits expected that they would be better able to solve problems than did experienced firefighters. The authors suggest that the shift work schedule that experienced firefighters have worked for years may reduce the number of supportive friendships the firefighter is able to maintain (Regehr et al, 2003). Also, new recruits may be experiencing a “honeymoon” (p.192) period, which involves higher levels of camaraderie with other recruits, which results in increased levels of social support in the junior firefighters. Several possible reasons for lower self-efficacy in experienced firefighters were provided, including the hypothesis that higher levels of education in new recruits may result in higher levels of self-efficacy; however, further research is needed to clarify this finding.

The Regehr et al. (2003) study seems to support Paton and Violanti's (1996) suggestion that in addition to the presence of a social support network, the support network must also be able and willing to give the help and support needed when the emergency worker is dealing with a traumatic event. The emergency worker will need support for an extended period of time, and it is imperative that the support system does not deteriorate as the individual is in the process of dealing with a traumatic event. A study of police officers and their spouses found that those police officers who did not disclose the traumatic events that happened on the job to their spouses suffered a number of consequences (Davidson & Moss, 2008). Officers who inhibited discussion of traumatic events with their spouses had higher levels of posttraumatic stress disorder

symptoms as well as higher levels of somatic complaints, anxiety, sleep problems, social problems, and symptoms of severe depression (Davidson & Moss, 2008).

Emergency workers utilize a number of coping strategies to manage the traumatic stress they are exposed to as they work. These strategies are often unique to the individual's personality and circumstance (Paton & Violanti, 1996). Personality characteristics are also important to predicting how an individual will cope with a disturbing scene. Studies suggest that certain personality characteristics are present in individuals who decide to become first responders. A study of those preferring the occupation of firefighter rather than Emergency Medical Technician (EMT) found that these individuals had significantly higher scores on personality characteristics of fearlessness, as measured by a questionnaire created by the authors, and significantly lower scores on characteristics of communion, openness, and agreeableness, as measured by the NEO-Five Factor Inventory (Costa & McCrae, 1991) and a scale adapted from the 100 California Q-Sort items (Vogt & Colvin, 1999; Fannin & Dabbs, 2003). EMTs scored significantly higher in conscientiousness than did firefighters. It appears that certain personality characteristics may be present in those individuals who choose the field of firefighting and other emergency services.

Personality characteristics may be protective in that they provide ways for emergency service personnel to protect themselves from traumatic situations. Many emergency responders deliberately distance themselves emotionally from the traumatic scene they are responding to by using cognitive strategies to reduce the chance of creating an emotional connection (Regehr & Bober, 2005). The emergency workers must not lose their focus by becoming emotionally involved in the scene and, therefore,

becoming less helpful in resolving the situation. In previous research, emergency workers often reported distancing themselves emotionally from the scene so that they did not develop any attachment to the victim or the victim's family (Regehr & Bober, 2005).

Emergency workers also use humor as a way of dealing with trauma and keeping themselves distanced from the trauma they encounter (Regehr & Bober, 2005). These jokes are often gruesome, and the emergency workers do not tell the jokes outside of the workplace, because they know that the jokes would not be well received by those who do not deal directly with such traumatic incidents. Other coping strategies that emergency workers identify include gaining knowledge of why a situation happened, reviewing how an event was handled and learning what could be improved next time, and reframing their lives in a more positive way (Regehr & Bober, 2005).

The type of coping behaviors the emergency worker and his or her spouse or partner possess have also been shown to impact levels of depression, anger, and relationship adjustment (Monnier, Cameron, Hobfoll, & Gribble, 2000). Antisocial coping behavior, which is behavior that meets the person's needs, but may harm those around the person, such as a spouse or children (Monnier et al., 2000, p. 571) was found to be associated with higher levels of depression and anger and poor relationship adjustment. Prosocial coping behavior is defined as "the positive use of social resources in an effort to cope with stressors" (Monnier et al., 2000, p. 571). An emergency worker and his or her partner's ability to handle traumatic events with prosocial coping strategies indicated lower levels of anger and better relationship adjustment (Monnier et al., 2000). The ability of the emergency worker's partner to cope prosocially with stress was related to a higher level of relationship adjustment. This research indicates that the emergency

worker's spouse or partner can greatly impact the way in which an emergency worker handles traumatic stress they encounter while on the job. The current study will further investigate the role that trauma plays in firefighter marriages and how couples cope with trauma one spouse encounters on the job.

All emergency workers continually need a strong social support network throughout their careers. The spouse of the first responder usually provides the closest social support. The spouses of firefighters face a unique situation because their partners face the risk of exposure to traumatic events during every shift. For those firefighters who do develop PTSD, these challenges become increasingly difficult. A discussion of the primary strategy used by fire departments to prevent traumatic reactions, critical incident stress debriefing, follows.

Critical Incident Stress Debriefing

First responders face the risk of being exposed to critical incidents, defined as an event that includes a personal loss or injury, exposure to traumatic stimuli, the failure of a mission, the failure of the responder, responding to multiple stressful situations in a short period of time, responding to the death or injury of a child, or calls that receive an unusual amount of attention from the media (Harris, Baloglu, & Stacks, 2002). In order to mitigate potential consequences, such as PTSD that could develop after responding to these stressful calls, emergency departments may require the first responder to attend a debriefing session. Debriefing sessions are conducted with peers who are also first responders and the structure is similar to a group counseling session that includes information about typical stress responses (Harris et al., 2002). The creators of Critical Incident Stress Debriefing (CISD; Mitchel & Everly, 1996) encourage a structured group

discussion that includes seven components including reviewing the incident, discussing first responders reactions to the incident, and providing education about typical stress reactions. CISD is designed to prevent pathology from developing by promote the natural recovery process through emotional and cognitive strategies, and increased social support (Dyregrov, 1997).

CISD is used throughout North America and across the globe, although there is conflicting information regarding the usefulness of CISD. The creators report positive outcomes that are supported by research (Everly & Mitchell, 2010); however, other authors call into question the usefulness of CISD for preventing PTSD (Harris et al., 2002). Despite the conflicting evidence regarding the effectiveness of CISD, it is noteworthy that emergency service departments have worked to address the potential for traumatic reactions in first responders and most departments have systems to help traumatized emergency personnel. When a responder experiences a traumatic reaction, the effects will also impact his or her home environment. The experience of being in a marriage with a spouse who has PTSD will now be discussed.

PTSD and Marriage/Partner Relationships

Research investigating the prevalence and effects of psychological trauma has primarily focused on the individual and rarely includes the partner or family of the traumatized person (Ray & Vanstone, 2009; Hamilton, Goff, Crow, & Reisbig, 2009). Yet it is impossible to deny the significant impact that an individual's psychological trauma will have upon his or her spouse and family. Recent studies investigating the impact of one partner's trauma on the relationship will be discussed, as well as past research that involved couples struggling with PTSD.

The spouses of military veterans often face the challenge of welcoming home a partner who is battling posttraumatic stress disorder following his or her time in the service. A phenomenological, qualitative study of seven members of the Canadian Forces who had been deployed on peacekeeping missions and subsequently developed PTSD explored the impact PTSD had upon the veteran's family and how these relationships were impacted by healing from trauma (Ray & Vanstone, 2009). Two primary themes emerged from the research, which included "emotional numbing/avoidance and anger negatively impacts familial relationships" (p.842) and "emotional withdrawal from family support creates a struggle with healing from trauma" (p. 843). The authors discuss potential effects of emotional numbing, avoidance, and emotional withdrawal for those experiencing PTSD following military service. This study provides insight to significant struggles of veterans who are working to heal from PTSD within a family environment.

Posttraumatic stress disorder can have a negative impact on the relationship satisfaction of the couple. Traumatic stress and marital satisfaction within a sample of military couples ($n=45$ men; $n=45$ women) was assessed using the Traumatic Events Questionnaire (TEQ), the Purdue Posttraumatic Stress Disorder Scale, Revised (PPSTD-R), the Trauma Symptom Checklist (TSC), and the Dyadic Adjustment Scale (DAS) (Hamilton et al., 2009). All of the spouses who participated in this study were female and all of the soldiers were male, although the study was open to spouses of both genders. This study assessed both spouses' and soldiers' traumatic symptomatology and exposure to traumatic events, which is unique, because previous studies have focused only on the traumatic exposure of the veteran (Hamilton et al., 2009). The results indicate that the

spouses' exposure to traumatic events and trauma symptomatology are negatively correlated with relationship satisfaction of the spouse and the soldier. Female spouses' PTSD symptoms of re-experiencing the traumatic event were significantly, negatively related to female relationship satisfaction, while female arousal symptoms were significantly, negatively correlated with soldier relationship satisfaction (Hamilton et al., 2009). The authors suggest that the relationship between female re-experiencing symptoms and relationship satisfaction may occur as the female partner is reminded of her own traumatic experiences as she witnesses her partner struggling with PTSD. The correlation between female arousal symptoms and partner relationship satisfaction is hypothesized to occur because the soldiers may be most sensitive to their partners' level of arousal, which when high makes the soldier feel the relationship is an unsafe environment. This study emphasizes the importance of considering both partners' traumatic history when treating military couples or conducting research on this population.

PTSD and marital problems have been studied in Vietnam veterans. A study by Jordan et al. (1992) used in-depth interviews with male Vietnam veterans ($n=376$) and their female spouses or partners ($n=376$) to assess the presence of problems in the families, including veterans diagnosed with PTSD, marital problems, parenting problems, family adjustment, and family violence. Those veterans who were diagnosed with PTSD were found to experience more severe marital and parenting problems, as well as increased violence within the family (Jordan et al., 1992). Information about the spouses' feelings about having a nervous breakdown was collected during the interview when spouses were asked, "When problems come up, have you ever felt as if you were going to

have, or were close to having, a nervous breakdown?” (Jordan et al., 1992, p. 919). The spouses of the veterans with PTSD reported significantly higher levels of nonspecific psychological distress, and 54.8% of the spouses or partners of veterans with PTSD have felt that they themselves might experience a nervous breakdown (Jordan et al., 1992). The authors point out that although the families of veterans with PTSD face a number of problems and obstacles, approximately 70% report being at least somewhat satisfied and happy within their marriage. This suggests that many of the couples facing significant challenges are also able to cope and maintain a satisfactory marriage (Jordan et al., 1992).

At times, some couples have experienced traumatic situations together, which is likely to have a significant impact on their relationship. The experience of both members of a couple experiencing the same traumatic experience was investigated in a study of forty Bosnian refugee couples who had relocated to the United States (Spasojevic, Heffer, & Snyder, 2000). The couples were administered the PTSD Symptom Scale-Self Report (PSS-SR), the Behavioral Acculturation Scale (BAS), and the Marital Satisfaction Inventory-Revised (MSI-R); all of the instruments were translated into Bosnian by the lead investigator. Wives' PTSD scores were positively correlated with the Global Distress scale of the MSI-R, which assesses overall marital satisfaction, and were more highly correlated with the communication difficulties and conflict over child rearing. Husbands' PTSD symptomatology was negatively correlated with the Role Orientation scale of the MSI-R, which indicated that PTSD symptoms increased as a male possessed more traditional, inflexible expectations of gender roles within the marriage. There were no significant relationships found between global distress in the marriage and level of acculturation. Intercorrelations between PTSD, acculturation, and marital satisfaction

revealed that husband's PTSD and level of acculturation predicted marital satisfaction of wives most accurately. Therefore, wives were "most distressed when their husbands had more PTSD symptoms and were less acculturated" (p.213). Husbands' level of acculturation was significantly related to his level of PTSD and his wife's level of PTSD, which showed that those men who were less acculturated had higher levels of PTSD, as well as wives with more PTSD symptoms (Spasojevic et al., 2000). The authors suggest that cultural factors may explain the tendency for the wives' PTSD to be related to marital satisfaction, as a cultural value of Bosnian women is the tendency to be particularly "oriented toward others" (p. 214), especially their husbands, and reinforces the patriarchal nature of Bosnian culture (Spasojevic et al., 2000). Individuals who were more acculturated to the United States experienced less PTSD, which is likely the result of less "acculturative stress" (Spasojevic et al., 2000, p. 214) placed on the individual by the dominant culture.

The experience of PTSD can also vary across cultures that are thought to be relatively similar. A 1999 study by Corneil, Beaton, Murphy, Johnson, and Pike compared the rate of PTSD to the amount of trauma that a sample of firefighters from Canada and the United States were exposed to while on duty. Both samples of firefighters endorsed a similar amount of traumatic symptoms on the Impact of Events Scale (IES), despite the fact that United States firefighters were exposed to a much higher number of traumatic events. Corneil et al. (1999) found that marriage was a protective factor against PTSD in the sample from the United States, while the Canadian sample did not show marriage as a factor that prevented posttraumatic stress. This difference may occur because the firefighters from the U.S. witness more traumatic events than their

Canadian counterparts and therefore place more importance on having an “off-shift haven” (Corneal et al., 1999, p. 140) where they feel supported and safe. This is an intriguing difference in the protective factors against PTSD in two samples of firefighters from countries assumed to be geographically and culturally similar countries.

PTSD in Spouses of Firefighters

Posttraumatic stress disorder is not limited to the emergency workers who are directly exposed to trauma. Spouses of emergency workers can also have symptoms of PTSD, especially after particularly traumatic or publicized events. The Oklahoma City bombing in 1995 was a very traumatic incident after which rescue efforts continued for sixteen days (Regehr & Bober, 2005). A study looking at 27 female spouses of male firefighters responding to the Oklahoma City bombing found that one half of the spouses involved in the study were still suffering from one or more PTSD symptoms 42 to 44 months after the tragedy (Pfefferbaum et al., 2002). In this study, 48% of the women stated that there were changes in their relationship with their spouse due to the bombing. These changes were both positive and negative for the relationship. Seven women reported changes in communication, two stating that the changes had been for the worse, while five stated that the changes were an improvement in communication. Three of the women reported an improvement in intimacy and none reported that intimacy had decreased following the bombing. The women in this study coped “relatively well postbombing diagnostically, symptomatically, and functionally” (Pfefferbaum et al., 2002, p. 370) and only one woman in the study met the diagnostic criteria for PTSD. The authors discuss limitations of the study and acknowledge that it is possible that the volunteers for this study were more representative of a “healthy profile” (p.370) than

those who struggled with more severe psychological problems. Exploration of the impact of emergency response work on interpersonal relationships is cited as a direction for future research (Pfefferbaum et al., 2002).

There can be physical consequences for spouses due to the traumatic stress acquired by the emergency worker on the job. A study by Roberts and Levenson (2001) investigated the effect of job stress on the physiological and emotional wellbeing of nineteen married, male police couples over the course of one month. The couples completed a number of assessments including the Marital Adjustment Scale (Locke & Wallace, 1959), the Health Symptoms Checklist-53, and the Wahler Symptom Checklist to assess physical health, a recent life stress instrument, and the police officers completed the Police Stress Survey. The couples also kept a daily stress diary at the end of every day that assessed job related stress, pleasure at work, stress within the marriage, pleasure in the marriage, number of hours worked, and number of hours spent with their spouse each day. The couples were also observed taking part in normal daily conversations at the end of the officer's shift once a week for fifteen minutes. This interaction was observed and assessed to rate the "emotional quality of a couple's marital interaction" (Roberts & Levenson, 2001, p. 1056).

Finally, physiological measures including heart rate, pulse, skin conductance level, and general somatic activity were taken before and during the couple's observed conversations. Roberts and Levenson (2001) found that on the days when police officers experienced high stress levels, the police officer and his spouse would show higher levels of autonomic arousal before and more markedly during conversations. High levels of job stress for the police officer also resulted in lower levels of positive affect in the spouse

and officer, as well as increased levels of negative affect in the police officers (Roberts & Levenson, 2001). Spouses of emergency workers are greatly impacted by the trauma to which their spouse is exposed at work. They are at risk for physical and emotional problems associated with exposure to trauma. In marriages with children, the children are also susceptible to the negative effects of traumatic exposure of a parent, which will be discussed next.

PTSD and Parenting

The family of an individual suffering from PTSD can be affected by their family member's struggle to live with psychological trauma. The literature indicates that PTSD can affect parenting in a number of ways (Jordan et al., 1992; Lauterbach et al., 2007). Vietnam veterans are a primary population in which parenting and PTSD have been investigated (Jordan et al., 1992; Samper, Taft, King, & King, 2004; Gold et al., 2007). Several studies utilize data collected by the congressionally mandated National Vietnam Veterans Readjustment Study (NVVRS), which collected data from a nationally representative sample of Vietnam veterans and their spouses/partners (n=3,016) from November 1986 to May 1988 (Jordan et al., 1992; Samper et al., 2004; Gold et al., 2007). Participants in the study completed 3 to 5 hour interviews, during which information was gathered using assessments and questionnaires regarding PTSD, marital problems, parental problems, family adjustment, socioeconomic status, level of life functioning, family violence, subjective well-being, demoralization, social isolation, alcohol and drug abuse, and participants' feelings that they may have a nervous breakdown. Parents of children age 6-16 also completed the Child Behavior Checklist (CBCL) to assess problematic behavior of the veterans' children.

Jordan et al. (1992) used data from 440 veterans and 376 spouses/partners of veterans who participated in the NVVRS. Those veterans with PTSD reported significantly higher levels of parental problems than those veterans without PTSD. Among veterans with PTSD, 55% reported high levels of parental problems, while 17% of veterans not diagnosed with PTSD reported high levels. The children of veterans with PTSD were reported by the spouses' of the veterans to have significantly more severe behavioral problems than the children of veterans not diagnosed with PTSD. Of veterans with PTSD, 35% of their children were reported to have behavioral problems in the clinical range, whereas only 14% of children of veterans without a diagnosis of PTSD had behavioral problems in the clinical range.

Samper et al. (2004) drew upon the Family Interview component of the NVVRS to study the relationship between PTSD and parental satisfaction. Five self-report items that had been previously created and validated assessed parental satisfaction. Samper et al. report that avoidance and numbing symptoms of PTSD, as well as overall PTSD severity are significantly related to parental satisfaction. Therefore, as PTSD symptomatology increases, parental satisfaction decreases.

Female Vietnam veterans have been studied using the NVVRS data to investigate the relationship between PTSD and parental satisfaction among women veterans, whose spouses also participated in the study (n=89 female veterans, n=89 spouses) (Gold et al., 2007). The female veterans were assessed using five self-report questions, similar to those used by Samper et al. (2004), and their husbands completed the Child Behavior Checklist (CBCL) to assess behavioral problems of the children. A correlation between PTSD symptom severity and scores on the CBCL approached the level of significance

($p=.07$) but was not high enough to allow the researchers to draw a conclusion. Parental satisfaction of the female Vietnam veterans was significantly correlated with PTSD symptom severity, indicating that parental satisfaction decreased as PTSD symptomatology became more severe. The literature supports the use of family and couple's counseling for those men and women suffering from PTSD, due to the negative affects PTSD can have upon the family of the individual, including the children (Gold et al., 2007).

Although much of the research concerning PTSD and parenting has been conducted using a veteran population, Lauterbach, Bak, Reiland, Mason, Lute, and Earls (2007) studied the effect PTSD has upon parent-child relationships using a nationally representative sample of civilian men and women. The study used data gathered from the National Comorbidity Survey (NCS), which uses two part interviews to compile data about the presence of and predisposition to developing Axis I disorders, as well as parent-child relationship quality, marital discord, work-home stress, social support, and conflict tactics (Lauterbach et al., 2007). Participants in the study with PTSD were found to have significantly worse relationships with their children than those without PTSD. Those civilian men and women with PTSD reported lower levels of relationship quality and higher levels of relationship conflict than those without PTSD. Among those participants with PTSD, active avoidance symptoms were predictive of poorer parent-child relationship quality (Lauterbach et al., 2007). Parent-child aggression was significantly predicted by more severe symptoms of numbing and fewer symptoms of reexperiencing. Previous studies found similar results regarding numbing and parenting; however, Lauterbach et al. found this finding to be weaker than previously reported by Samper et

al. (2004). This difference could be due to the inclusion of women, who reported stronger parent-child relationships than men. This study also looked at the civilian population rather than the military population who possibly exhibit more severe symptoms of numbing (Lauterbach et al., 2007).

PTSD has been found to negatively impact the quality of parental relationships in military and civilian samples. It is likely that firefighters with PTSD will also experience negative effects on parenting; however, future research on this topic is needed to explore the effect of PTSD on parenting in firefighter families. Therefore, the current study includes interview questions regarding the effect of trauma experienced on the job upon parenting. Unique stresses of the firefighter marriage will be discussed next.

Unique Stresses of Being Married to a Firefighter

The unusual shifts firefighters work are not typical of most marriages. Many fire departments utilize a 24-hour shift model, which means that the firefighter is on duty for 24 hours and then off duty for 48 hours. A study by Regehr et al. (2005) found that a shift schedule can be beneficial because it allows the firefighter to take care of the children and be at home when not on duty. A shift arrangement also works well for those couples in which the spouse also works on a shift schedule. However, couples who work opposite shifts often spend very little time with each other and feel that they constantly put the children's needs over those of the couple. Many of the firefighters in this study had jobs other than firefighting, which they would fit in on their days off. The presence of a second job often meant that the firefighter spent very little time at home, which leaves the spouse vulnerable to feelings of loneliness (Regehr et al., 2005).

Spouses of firefighters often report that they changed their original plans for their own career so that their spouses could continue theirs as firefighters (Regehr et al., 2005). When a couple has children, and arranging babysitters and work schedules around the spouse's unusual shifts becomes difficult, many, typically female, spouses change plans for their own careers rather than their spouse's.

Firefighters face the risk of injury or death every time they go to work. This is a very difficult and unique concern that spouses of emergency service workers have to deal with. Emergency workers also face fears that the horrific things that they see on the job could also happen to those they love. The spouse of a police officer said that "her husband had told her that if he was ever killed or injured, they would send someone she knew to break the news" (Regehr and Bober, 2005, p. 119-120). The spouse reported that now she is not afraid of every police car she sees on her street; she is only afraid of those in which she recognizes the officers.

Children who lose a parent in the line of duty are greatly impacted by the loss. Williams (1999) reports that these children are forced to deal with the media attention which continually surrounds the death of their parents. This attention can leave children with greater fears of the death of the other parent, fears of dying themselves, and a feeling that they are unprotected.

Emergency workers and their families are at risk of becoming hypervigilant about the situations that could potentially harm their families (McCann and Pearlman, 1990b). Emergency workers often do not fear the risks to which they are exposed because they have confidence in their safety procedures and training; however, they realize that they do not have power over all the risks that their families encounter (Regehr & Bober,

2005). Often emergency personnel are tremendously afraid for the safety of their children and employ safety precautions that other families do not use or even consider. One firefighter came home from a shift during which a child had been fatally injured by a clothes hanger and removed all the clothes hangers from the closets in his own home (Regehr & Bober, 2005). Firefighters and other emergency workers describe themselves as being "overprotective" of their families because they have had to witness terrible things happening to other people.

Alcoholism, Divorce, and Violence in Marriages of Emergency Workers

The rates of alcoholism, divorce, and family violence are elevated in emergency service personnel. PTSD and other stress disorders have been connected with substance abuse in studies by Brown and Wolfe (1994) and Chilcoat & Breslau (1998). Few studies have been conducted to determine the relationship between alcohol use and stress management in emergency workers. However, one study by Boxer and Wild (1993) found that 29% of participants who were urban firefighters showed signs of alcohol abuse and/or dependence. A study by Murphy et al. (1999) found similar statistics relating to alcohol abuse in two urban fire departments. Over a two year period, 30% of the firefighters in the study consistently suffered from problems with alcohol. Regehr and Bober (2005) found substance abuse to be a longer-term reaction to stress encountered by emergency workers. Prior to experiencing traumatic events on the job, only 1.9% of workers in the study identified that they had problems with alcohol. After encountering traumatic events 8.4% reported problems with alcohol.

Divorce rates are often thought to be much higher in emergency responder populations; however, there is conflicting research on divorce rates among emergency

workers. Anecdotal evidence points to a higher divorce rate, especially for those who have been in emergency response work for many years (Regehr & Bober, 2005).

Emergency workers who have been in the same profession for an extended number of years have often been married two or three times. Although it may be assumed that firefighters have higher rates of divorce than the general population, there is no information available regarding the divorce rate specific to first responders. While emergency workers face unique and difficult stressors in their marriages, it is unclear if this stress causes a higher divorce rate among emergency workers.

Research concerning emergency workers indicates a higher rate of violence within emergency responder families. This is attributed to the emergency worker's suffering from PTSD and experiencing symptoms, including anger, as a result (Regehr & Bober, 2005). If the emergency worker improperly handles anger, it may be misdirected toward those who are close to the worker, including family and coworkers. As mentioned earlier, studies have been conducted connecting PTSD in Vietnam veterans with anger and violence toward their family members. Higher rates of violence within families of police officers and veterans seem to support the theory that PTSD increases anger and violence (Lott, 1995). Police officers can be particularly dangerous abusers. The skills and tactics that police officers are taught can become the reason that they are more hazardous and powerful than a civilian abuser (Lott, 1995). Police officers carry a gun, have access to computer systems to track victims, and know how to manipulate the justice system, all contributing to the danger an abusive officer poses to his or her spouse (Lott, 1995). Future research concerning rates of alcoholism, divorce, and family

violence would greatly benefit areas of PTSD research related to emergency workers and effects of the disorder on their families.

Summary

Posttraumatic stress disorder is caused by exposure to traumatic events. Before PTSD was added to the *DSM-III*, symptoms of the disorder were recognized and known as a variety of different disorders. Throughout the late 19th and early 20th centuries, physical causes were sought for the unusual symptoms of those who had experienced traumatic events. However, extensive study of the expression of severe and continuing reactions to trauma in Vietnam veterans led to the labeling of PTSD as a psychological disorder added to the *DSM-III* in 1980.

Emergency workers were often assumed to be unharmed psychologically by the traumatic events to which they respond on the job. Emergency personnel suppress their emotions about traumatic scenes in order to avoid ridicule from their coworkers and superiors. Research indicates that traumatic stress reactions are a normal way of dealing with the traumatizing situations emergency workers encounter on a daily basis. Paton and Violanti (1996) argue that it must be emphasized to emergency workers that their reactions are normal and that it is possible to lessen or prevent the symptoms of PTSD with proper psychological help.

Emergency workers need specific coping strategies to handle the traumatic stress they encounter. A concerned, prosocial support network can greatly reduce the stress emergency workers feel from traumatic events. Social support can consist of coworkers, friends, and family members. An emergency worker's personality can also determine how they handle traumatic situations. Many emergency workers use humor, emotional

distance from the situation, reframing their life in a positive way, and reviewing how a scene was handled as coping strategies after a traumatic event.

PTSD in a spouse has been shown to have a great impact on marriage. As noted earlier, Bosnian war refugees and Vietnam veterans have been shown to have marital distress, parenting problems, and often family violence as a result of their PTSD. Spouses of emergency workers are also susceptible to PTSD and the emotional and physical results of the stress their spouse encounters as an emergency worker.

There are a number of stresses which emergency worker marriages must deal with that do not usually affect other marriages. Emergency workers often work unusual shifts, which can place great stress on the relationship of the couple as a result of spending little time together. Spouses of emergency workers often alter their original career plans to allow their spouses to continue their career. The threat of danger to the emergency worker is often a worry of the spouse, but not usually of the emergency worker themselves. However, the emergency worker can often become very overprotective of his or her family in response to the traumatizing events he or she sees.

Studies show that emergency personnel have higher rates of alcoholism than the general population. Alcoholism has also been shown to increase after emergency workers are exposed to traumatic events. There is conflicting research pertaining to the divorce rates among emergency workers. Anecdotal evidence points to a higher divorce rate, especially for those who have worked in the field for many years. Violence has been shown to be present in many police families. It is suspected that anger caused by PTSD can be misdirected at family members and result in violence in emergency worker

families. However, future research is necessary to prove if there is a connection between PTSD and violence in emergency worker families.

Emergency workers are exposed to very traumatic events that can place the individual under unusual traumatic stress. The families of emergency workers are vicariously exposed to this stress in addition to the unique stresses associated with the life of an emergency worker.

Current Research Concerning Marriages of Firefighters

Although extensive research has been conducted in many areas of stress and trauma in emergency workers, little research has included the families and marriages of emergency workers. Cheryl Regehr has published a number of articles and books concerning trauma to which firefighters are exposed. Her publications include *In the Line of Fire* (Regehr & Bober, 2005) and *Behind the Brotherhood: Rewards and Challenges for Wives of Firefighters* (Regehr, Dimitropoulos, Bright, George, & Henderson, 2005), as well as many other journal articles. Regehr and her colleagues often collect quantitative data from the firefighters involved in their studies; however, data that are collected from the spouses of firefighters are often qualitative and obtained in an interview format.

The majority of research involving trauma to which firefighters are exposed has been conducted in Canada and Australia. Firefighters in large, urban areas are often used in studies, which leaves little research conducted on firefighters from small towns or rural areas. Trauma research would benefit from more information concerning firefighters in the United States, especially outside of urban areas.

The relationship between firefighter and spouse has received little attention in the literature. Current studies involving emergency workers have been centered much more around the occurrence of PTSD in emergency workers and how the symptoms of PTSD affect the firefighter, and even the firefighter's family, but not the relationship between the firefighter and his spouse and the effects on his family life. A recent dissertation utilized a qualitative methodology, interviewing 8 firefighters and their spouses, to investigate the marital satisfaction and resiliency of firefighters and their spouses (Lowry, 2008). This study found that firefighters and their spouses experience stress as they try to balance family life and the occupation of firefighting (Lowry, 2008). Couples experience frustration due to one spouse's being a firefighter and may feel disconnected from each other. They must deal with difficult schedules and often experience stress regarding promotions and sleep difficulties that result in moodiness. To cope with the stresses of one spouse working as a firefighter, the couples emphasize a focus on the positive aspects of the job and avoid thinking of the dangers of the job. To do this firefighters and their spouses maintained perspective by focusing on the bigger picture and identifying the benefits of the job, such as a sense of independence for the spouses, financial stability, and vacation time (Lowry, 2008). Firefighters and their spouses also emphasized the importance of taking advantage of support systems and being purposeful in caring for their marriage. External support networks, such as extended family were mentioned as important, especially for the purpose of childcare. Couples also spoke of the importance of being flexible and making the family a priority (Lowry, 2008).

Pilot Study

The concept for this study was initially conducted during a pilot study with a first responder couple. The pilot study utilized a qualitative methodology and was guided by a constructivist epistemology. Participants took part in thirty to ninety minute interviews. The husband and wife were interviewed separately at the couple's home, which they chose as the interview location. Both were asked about the experience of being in a marriage in which one spouse is an emergency first responder and about the impact that occupational trauma had had upon the marriage. In order to protect the participants' confidentiality, they were referred to by pseudonyms during the data analysis and in the written report. The couple chose the pseudonyms "John" and "Jane." The pilot couple differs from the couples that will participate in this study because John is a volunteer first responder who is on-call 24 hours a day, 7 days a week. Despite this difference, the couple provided valuable insight into first responder marriage and family life. During data analysis three overarching themes of the couple's marriage emerged, with certain themes that were unique to either the wife's or the husband's experiences. This couple had developed a number of coping strategies over the course of their 21-year marriage, during all of which John has been a volunteer first responder. The couple faced the unique challenge of John always being on-call. This was an unusual circumstance, which required the couple to be flexible, communicate clearly, and set boundaries around John's volunteer first responder activities.

Jane coped with having her husband volunteer as a mountain rescuer by maintaining cell phone communication with him during missions, which has improved greatly in recent years due to advanced technology. Although she felt that

communication within the team and with the spouses had increased greatly over the past few years, she thought that a network of spouses could be beneficial especially to those who were newer to the team and struggling with the unusual schedule. Literature supports the idea that a network of spouses of first responders can be beneficial. In the weeks following September 11, 2001, social support between the wives of firefighters who were at the scene of the World Trade Center attacks helped these spouses cope with the terrible events their husbands encountered as they returned to the scene of the attacks day after day to continue the rescue efforts (Menendez, Molloy, & Magaldi, 2006). Having a network of women who were currently experiencing the same situation helped to decrease the women's levels of anxiety, fear, and sadness.

After John returned home from a difficult mission, Jane let him know that she is there to talk if he needs to but does not "keep pushing issues." Previous research has stated that wives of first responders are often aware of the times when their husbands need time to themselves when they return from being on shift (Regehr et al., 2005). Jane acknowledged that parenting was difficult at times, particularly when the couple's daughter was very young. At those times, Jane reported that she had conflicting feelings regarding her husband's involvement with the mountain rescue team. However, Jane's strong level of commitment and dedication appears to have contributed to her ability to adapt to being in a first responder marriage.

John appeared to possess a number of characteristics that contributed to his ability to volunteer as a first responder for 24 years. He was able to maintain emotional distance from difficult calls. He stated, "I have been able to kind of remove myself from the emotional side of it." Many emergency responders deliberately distance themselves

emotionally from the traumatic scene they are responding to by using "cognitive techniques that reduce the risk of developing an emotional connection" (Regehr & Bober, 2005, p. 79). The emergency workers must not lose their focus by becoming emotionally involved in the scene and, therefore, less helpful in relieving the situation. In previous research, emergency workers often reported distancing themselves emotionally from the scene so that they did not develop any attachment to the victim or the victim's family (Regehr & Bober, 2005).

John also reported that he can often find humor during stressful situations. He viewed his ability to see humor and irony in difficult situations as a coping strategy that helps him deal with traumatic calls. The literature supports the use of humor as a coping strategy that first responders often use when encountering traumatic situations. Emergency workers have reported using humor as a way of dealing with trauma and keeping themselves distanced from the situation (Regehr & Bober, 2005). John described himself as seeing "irony in things that a lot of people don't see." He reported learning to avoid calls that are particularly tough for him to deal with, including those involving children. As a mountain rescuer John found a sense of purpose in life and a strong sense of camaraderie with his fellow mountain rescuers.

This couple has developed a number of characteristics over the course of their marriage that could be beneficial to other couples who have a partner who is a first responder. Several of the themes that emerged during the pilot study support previous research involving first responders. However, the couple discussed other aspects of their marriage that the literature currently does not discuss, such as the need to be flexible and the need to set boundaries around emergency work. The findings of the pilot study

suggest that the current study will further develop existing themes in the research and also contribute new information about the experience of being in a firefighter family.

Conclusion

Firefighters and their families experience a number of unique challenges. There has been a dearth of literature regarding the experiences of firefighter families and how the unique challenges of the job and exposure to trauma affect the family. This study will investigate how firefighters and their families make meaning and experience the challenges of having a firefighter in the family. The following chapter discusses the theoretical foundation, methodology, and methods that guided and facilitate the study.

CHAPTER 3

METHODOLOGY

This chapter includes a description of the researcher and the development of the research topic, methodological contributions of the pilot study to the current study, epistemology, theoretical perspective, research methods, and a discussion of standards of rigor used in the study.

Researcher's Stance

Description of the Researcher

I am a female graduate student pursuing a doctoral degree in Counseling Psychology. This is my first career, with my undergraduate and graduate studies both dedicated to studying psychology. Within the field of psychology I am able to wear many hats, allowing me to work in the areas of therapy, psychological assessment, teaching, and research. My knowledge of couple's and family dynamics, trauma assessment, and previous experience conducting research with firefighter couples contributed to the development of this study.

When describing my research interests to others, I am often asked, "Are you married to a firefighter?" or perhaps, "Was one of your parents a firefighter?" I answer "No" to both of these questions and explain that my interest in firefighter marriages is purely from the stance of a psychological researcher. It is not a personal connection that draws me to the topic of firefighter marriages and families; rather, it is my professional experiences working with on-duty firefighters and an interest in researching, treating, and

assessing psychological trauma. I have focused my research on the topic of psychological trauma, beginning with my undergraduate honors thesis and continuing on to this study. I have worked at two Veterans' Administration (VA) hospitals and have conducted psychological assessments and psychotherapy, much of which was trauma related. Psychological trauma is my primary professional interest, and much of my past, current, and future career focus has been and will be PTSD, psychological trauma, and the effects trauma has upon the family of the traumatized. The following section discusses my experiences working with firefighters and how that sparked my interest in the current topic.

Interest in the Research Topic

I was fortunate to discover my passion for psychology during the first semester of my undergraduate education. Introduction to Psychology sparked my interest in a way that I had never before experienced. I spent the next year taking a variety of psychology classes and was fortunate enough to be offered the opportunity to participate in an internship program with the local fire department through the Trauma Intervention Program (TIP). A professor at my college had collaborated with the local fire department to create a program that would allow college students to become involved as "First Responders." As an intern in the Trauma Intervention Program, I answered pager calls from the fire department following the death of a person in the community. I rode with the firefighters and EMTs to the scene and provided crisis counseling to the family of the deceased individual. The firefighters, EMTs, and police officers responding to emergency calls must focus primarily on resolving the incident and keeping the public safe, which does not allow time to support or counsel the shocked and grieving family

members. Because of my presence, family members received support, counseling, and information about community resources that could help them through a traumatic time. My experience in the Trauma Intervention Program was pivotal to my decision to pursue a career in counseling psychology.

During my TIP internship, I knew I would gain experience and learn about people who had experienced physical and psychological trauma. Little did I know that I would become interested in studying the people whose job it is to rescue others from traumatic situations. The more time I spent with the firefighters, the more curious I became about the seemingly ironic contrast between their calm, steady professionalism at work and the sometimes chaotic home lives they spoke to me about. As I gained a more complete understanding of their lives, I saw that many of them encountered devastating situations at work and faced unique challenges at home. Since then I have continued to study the struggles firefighters and other first responders encounter because of their jobs and how this impacts their lives, especially their marriages and family lives.

In my undergraduate honors thesis, I explored in a quantitative study the possible effects occupational trauma could have upon firefighters' marital satisfaction, using the Impact of Events Scale-Revised, the Marital Satisfaction Inventory-Revised, and the Perceived Stress Scale. Although I hypothesized that the effects of trauma would have an impact on marital satisfaction, this was not confirmed in my findings. This could be the result of a small sample, ($n = 36$, 18 couples), or there could be a factor in addition to trauma that influenced the marriages of firefighters. In fact, the only significant finding of my thesis was the correlation between marital satisfaction and perceived stress, indicating that those who report feeling more stress have lower marital satisfaction.

Given the number of stressors that are present in the marriages of firefighters, such as shift work, the challenges of raising children, time away from the family, and difficulty coordinating schedules with spouses, it makes sense that these relationships would encounter additional challenges, which would impact the marriage.

Quantitative investigation can generate a large amount of data about the impact of occupational trauma, other stresses experienced by firefighters and their families, and how families respond to these stresses. However, given the complex nature of the firefighter family and the role that trauma plays in the family, I chose to describe and understand these phenomena through a qualitative methodology. There is still much to learn about the role of psychological trauma in firefighter marriages, and therefore I explored this topic ““from the inside”” (Flick, 2007, p.x) as I strove to gain a deeper understanding. This qualitative study thoroughly explored these factors to create a picture of the lives of firefighter families and explored how firefighters and their spouses and children make meaning of having a family member involved in emergency services.

Pilot Study

Conducting the pilot study with a volunteer mountain responder couple contributed significantly to the development of the current study. This study’s design and findings were discussed in Chapter Two.

Methodological Contributions

The pilot study reinforced the choice of a qualitative methodology to explore first responder marriages. The interviews generated meaningful themes and findings, which suggest that the current study will also lead to promising directions for future research as well as useful information for first responder families and clinicians who work with these

families. The pilot study led to the development of a useful, efficient way of coding themes, which was employed in the current study. During the pilot study, I interviewed each member of the couple once, individually. Following data analysis it would have been helpful to conduct a second round of interviews with the participants to discuss the emerging findings and gather any further information the participants have thought of to contribute to the study. Therefore, the current study utilized member checking to discuss emerging findings and obtain any additional thoughts about the study from the participants.

The participants in the pilot study suggested several times that they felt their daughter would be able to give a very interesting perspective on having a parent who is a first responder. This suggestion led to children of the first responder being included in the current study, which is a significant addition to the methodology. The pilot study and the input of its participants were a major influence on the methodology and methods of the current research.

Research Model and Paradigm

Crotty (1998) has outlined four elements to guide the research process. These elements include the epistemology, theoretical perspective, methodology, and methods that guide the ontology, philosophy, process, and procedures of the study (Crotty, 1998).

Figure 1 displays these elements of the current study.

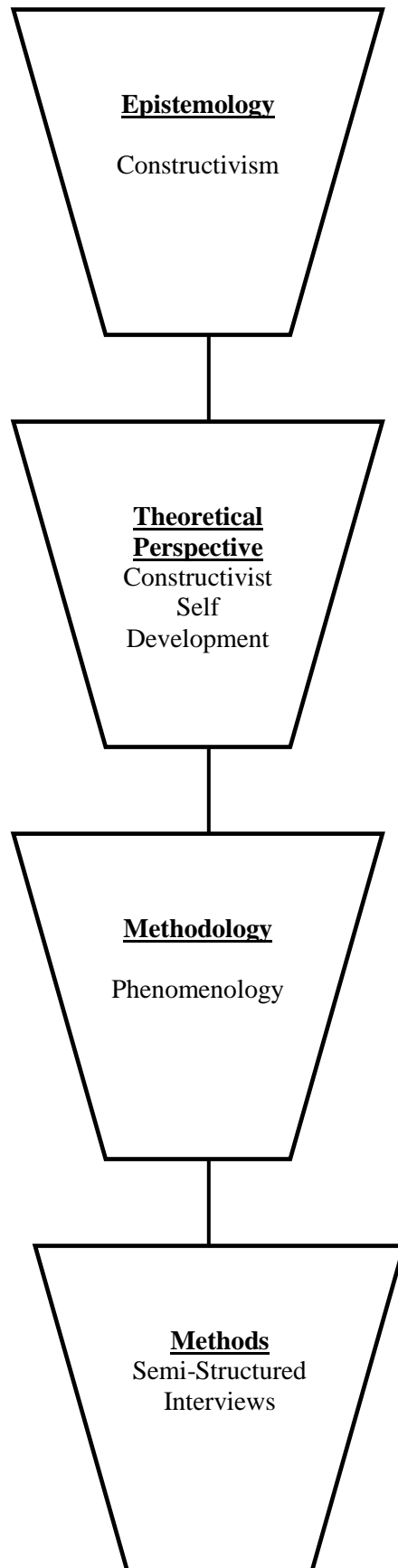


Figure 1. Elements of Research. Adapted from Crotty, 1998.

Epistemology

The epistemology of a study is the theory of knowledge that the theoretical perspective is based on. The epistemology describes what is known and how this knowledge comes to be (Crotty, 1998). Constructivism is the epistemological foundation of the current study. Constructivist theory asserts that knowledge is gathered as every individual constructs unique meaning based upon experiences and the interactions with other humans (Crotty, 1998). Each individual experiences the world in a different way and therefore creates a completely distinct sense of the world (Crotty, 1998). Constructivism asserts that this unique set of knowledge and meaning is equally valid and every individual's constructs deserve the same degree of respect.

There are two related schools of epistemology: *constructivist* and *constructionist*. They differ in their emphasis on the relative influence of the greater social world upon individual meaning-making, with constructionism giving primacy to the impact of societal constructions, while constructivism gives precedence to the individual's process of creating meaning (Crotty, 1998). Social constructionism is a dominant epistemology sharing many assumptions with constructivism, but also emphasizing the role that culture plays upon the meaning that humans construct. Social constructionism asserts that human knowledge is a product of culture, rather than culture being a product of humankind (Crotty, 1998). Social constructionism emphasizes that culture, language, traditions, and customs are socially created constructs that have great influence upon the knowledge and meaning that individuals develop. This differs from constructivism, which focuses on the meaning-making activities of the individual and "the unique

experience of each of us” (Crotty, 1998, p. 58) and is not concerned with the broader constructions of society.

This study investigated the meaning that first responders and their spouses and children have created regarding the unique challenges they encounter due to one spouse’s career. Each participant expressed distinctive meaning and experiences that contributed to the study. As the researcher, I gave equal weight to the meaning each of my participants constructed as he or she has worked as a firefighter or been in a firefighter family. Constructivist epistemology guided me during the process of gathering each participant’s meaning about the experience of being in a firefighter family.

Constructivism is the root of the theoretical perspective of the study, constructivist self development theory, which is discussed next.

Theoretical Perspective

Constructivist self development theory (CSDT) addresses the impact of psychological trauma on an individual’s self. Psychological trauma is defined as “a unique individual experience, associated with an event or enduring conditions, in which (1) the individual’s ability to integrate affective experience is overwhelmed or (2) the individual experiences a threat to life or bodily integrity” (Pearlman & Saakvitne, 1995, p. 60-61). The trauma the individual experiences has a profound effect on the organizing systems of the self. The self is composed of self capacities, ego resources, psychological needs, and cognitive schemas (McCann & Pearlman, 1990a). The authors of CSDT acknowledge that the concept of the self is often an ambiguous term in psychology, and they clarify by defining the self as “the psychological foundation of the individual” which is comprised of:

(1) basic capacities whose function is to maintain an inner sense of identity and self-esteem; (2) ego resources, which serve to regulate and enhance one's interactions with the world outside oneself; (3) psychological needs, which motivate behavior; and (4) cognitive schemas which are beliefs, assumptions, and expectations, both conscious and unconscious, through which individuals interpret their experience (McCann & Pearlman, 1990a, p. 16-17).

Table 1 displays the systems of the self and functions and components of these systems.

Table 1

Systems and Functions of the Self

| System of the Self | Function | Components |
|----------------------------|---------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Self Capacities | Regulate self-esteem | <ul style="list-style-type: none"> • Ability to tolerate strong affect • Ability to be alone without being lonely • Ability to calm oneself • Ability to regulate self-loathing |
| Ego Resources | Regulate interactions with others | <ul style="list-style-type: none"> • Intelligence • Ability to introspect • Willpower • Initiative • Ability to strive for personal growth • Awareness of psychological needs • Ability to take perspective • Empathy • Ability to foresee consequences • Ability to establish mature relations with others • Ability to establish boundaries • Ability to make self-protective judgments |
| Psychological Needs | Motivate behavior | <ul style="list-style-type: none"> • Frame of reference (worldview, spirituality, identity) • Safety • Trust/dependency • Esteem • Independence • Power • Intimacy |
| Cognitive Schemas | Organize experience of self and world | <ul style="list-style-type: none"> • Beliefs • Assumptions • Expectation related to psychological needs |

Note. From McCann & Pearlman, 1990a, p. 17 and Pearlman & Saakvitne, 1995.

Constructivist self development theory is a developmental theory that assumes that all individuals continue to grow and change over the course of the lifetime. CSDT draws on object relations theory (Mahler, Pine, & Bergman, 1975, as cited in McCann & Pearlman, 1990a), self psychology (Kohut, 1971, 1977, as cited in McCann & Pearlman, 1990a), cognitive development theory (Piaget, 1971, as cited in McCann & Pearlman, 1990a) and social learning theory (Rotter, 1954, as cited in McCann & Pearlman, 1990a). As the four systems of the self, outlined in Table 1, develop during the lifespan, these schemas incorporate increasing amounts of the individual's environment and create "experience or conceptual frameworks" (McCann & Pearlman, 1990a, p. 7). Object relations theory refers to these schemas as "mental representations of the self and others" (p. 7). Changes to these schemas occur through the processes of accommodation and assimilation, which Piaget developed (Piaget, 1971, as cited in McCann & Pearlman, 1990a). Often new information can be assimilated with the existing schemas; however, when this is not possible, accommodation takes place and existing schemas are changed to accommodate the new information. Traumatic events require that new information be assimilated into current schemas or accommodated, as the meaning of trauma changes existing schemas or creates new schemas. This is a difficult process that interrupts the growth of the individual (McCann & Pearlman, 1990a).

Constructivist self development theory emphasizes the importance of understanding the social and cultural environment in which the trauma took place (McCann & Pearlman, 1990a). The individual's environment, as well as his or her history, provides important information about the schemas the individual has developed over the lifetime and how these schemas have been altered by trauma. Each individual's

experience of trauma is unique, and it is important to understand the person's interpretation of the trauma and the subsequent meaning of trauma in his or her life. Constructivist self development theory provides a guide for identifying possible areas in which an individual may have been affected by trauma, yet acknowledges that most individuals will vary in the manner in which they respond to trauma (Pearlman & Saakvitne, 1995). Variation in response to trauma can also include positive changes to an individual's schemas (McCann & Pearlman, 1990a). While many affected by psychological trauma develop schemas that are "pervasive, generalized, and negative" (McCann & Pearlman, 1990a, p. 62), some individuals will be able to construct a more positive view of the world and themselves. Positive adaptations of schemas may lead an individual to become aware of the limits of his or her assumptions about the world and his or her self and may also contribute to reassessing priorities and values (McCann & Pearlman, 1990a).

Constructivist self development theory incorporates the changes that occur within the memory of the traumatized person. Trauma has a profound effect upon memory, and often spurs the recurrence of intrusive memories of the traumatic event (Pearlman & McCann, 1990a). The memory system of the individual is composed of five facets of perception that hold representations of the traumatic event (Pearlman & Saakvitne, 1995). The five facets of memory include the verbal memory, imagery, affect, bodily or somatic memory, and interpersonal memory. The verbal memory is "the cognitive narrative" (p. 73) of the traumatic event and is composed of the order in which specific events occurred before, during, and after the trauma. The imagery of the traumatic event is the visual images that the individual sees in reference to the trauma. The individual also has an

affective memory of the trauma, which contains the emotions prior to, during, and following the event. Physical sensations representative of the trauma are contained in the bodily or somatic memory. Interpersonal memory contains interpersonal patterns of behavior from abusive or traumatic relationships that reemerge and affect current relationships (Pearlman & Saakvitne, 1995). When the facets of a memory are fragmented and incomplete, such as somatic memory without the verbal memory to accompany it, the somatic memory can be disruptive to the individual and lead to a response in the individual that does not make sense, such as a flashback (Pearlman & Saakvitne, 1995).

An individual does not have to directly experience a traumatic event to suffer the effects of psychological trauma, as “vicarious trauma” can impact those who are exposed to others’ traumatic experiences and traumatic memories (McCann & Pearlman, 1990b, p.133). Those who are in the helping professions, such as counselors, are at risk of developing vicarious trauma, as they are exposed to their clients’ stories of traumatic events (McCann & Pearlman, 1990b). Firefighters respond to traumatic scenes and may also be affected by the suffering and harm they witness in others’ lives. Vicarious traumatization occurs as the individual working with the trauma victim is confronted with the victim’s traumatic experience and must reconcile this experience with his or her existing schemas (McCann & Pearlman, 1990b). The extent of the helper’s vicarious traumatization depends on how discrepant the trauma is from the helper’s existing schemas, such as those schemas of psychological needs (see Table 1) including dependency/trust, safety, power, independence, intimacy, and frame of reference (McCann & Pearlman, 1990b). The memory system of the helping individual may also

be altered in much the same way as the trauma victim's, with fragmented images of the trauma returning as flashbacks or intrusive thoughts. McCann and Pearlman (1990b) made several recommendations to guide professionals in coping with and preventing vicarious trauma, including becoming aware of one's own psychological needs and maintaining a balance between personal and professional life.

In this study, constructivist self development theory guided the conceptualization of the trauma to which firefighters and their families are exposed. Interview questions explored the meaning that the participants had created regarding those events. I also investigated the way in which the systems of the self have adapted and changed as a result of being a firefighter or having a firefighter in the family. Guided by a constructivist epistemology and constructivist self development theory, I sought to learn about each individual's unique experience of being in a firefighter family. This task was facilitated through data collection and analysis according to a phenomenological methodology. A discussion of this approach follows.

Methodology

I utilized phenomenology as the methodology for this research. Phenomenological methodology is rooted in a number of philosophical viewpoints, including those of transcendental phenomenology described by Edmund Husserl (1859-1938), the existential phenomenology of Maurice Merleau-Ponty (1908-1961) and Jean-Paul Sartre (1905-1980) and hermeneutic phenomenology proposed by Martin Heidegger (1889-1976; Schwandt, 2007). Phenomenology seeks to identify the everyday experience of phenomena such as deciding, feeling, hearing, and seeing, and to describe the way in which individuals perceive these events (Schwandt, 2007). Individuals experience the

world subjectively, and phenomenology seeks to identify and describe the way in which this takes place (Schwandt, 2007). In order for a researcher to describe others' experiences of phenomena, it is necessary to attempt to put aside, as much as possible, previous beliefs and knowledge of the phenomena of interest and "revisit" (Crotty, 1998, p.78) the phenomena in order to find new meaning in familiar phenomena or to confirm and improve upon previous meaning. I used reflexive bracketing to identify my values and experiences and determine how this could affect the study. Reflexive bracketing is discussed later in this chapter in the Research Methods section.

The key assumption of phenomenological methodology is that there is "an essence or essences to shared experience" (Patton, 1990, p.70) which the researcher seeks to identify and understand. The essence of an experience is the "core meanings" which those who experience the phenomenon share (Patton, 1990, p.70). Phenomenology aims to "reduce individual experiences with a phenomenon to a description of the universal essence" (Creswell, 2007, p. 58); therefore, I am explaining the essence of the experience of being in a firefighter family.

Constructivist epistemology and constructivist self development theory guided me as I explored the meaning each participant had constructed about being in a firefighter family, and phenomenology was used to capture the common experiences and meaning that these participants expressed. The methods of phenomenology include bracketing the researcher's experience, analyzing the data, and comparing the data to identify the essence of the participants' common experience (Patton, 1990). These methods will be discussed in the following section.

Research Methods

This section discusses the methods of the study, including the participants, instruments administered and the findings of these instruments, the study's procedures, data collection and analysis, and the process of reflexive bracketing. The chapter will end with a discussion of rigor in qualitative research and how this study's trustworthiness is enhanced through the use of credibility, transferability, dependability, and confirmability.

Participants

The participants were five volunteer families solicited from two fire departments. The number of families participating in the study was determined by saturation of the data. Bowen (2008) defines saturation as "bringing new participants continually into the study until the data set is complete, as indicated by data replication or redundancy" (p. 140). Data were continually analyzed following interviews, which contributed to determining the point at which the data became redundant. Following the addition of the fifth family, no new themes emerged regarding the overall experience of being in a firefighter family. The fifth family was a blended family and related this unique experience, but not additional or unique themes related to being in a firefighter family. For this reason, following completion of data analysis of the fifth family, no additional participants were sought.

To be in the study participants had to be in a heterosexual marriage in which one partner was a firefighter. The couples had to have a child over the age of twelve whom they allowed to participate in the study. Stepchildren were included in the study if the child spent at least 50% of their time with the firefighter family.

Each of the five families consisted of a husband who worked fulltime as a firefighter, a wife, and between two and three children. The couples' marriages ranged from 2.5 years to 20 years, with a median length of 19 years married. Two of the families lived outside of or in the suburbs of a major metropolitan area in a large southern state. These firefighters worked at stations in an urban area with significant poverty, primarily composed of minority residents. This metropolitan fire department was large, with 55 stations and 1,600 personnel. The other three families lived in small or medium size towns in a Rocky Mountain state, and these departments were smaller. One of the departments had five stations and 85 personnel, and the other department had three stations and 46 personnel. All of the firefighters currently or within the past year have worked a shift schedule consisting of working 24-hours on, 48-hours off. Two of the firefighters had recently been promoted to administrative positions and were transitioning to working a typical 9:00AM to 5:00PM schedule. All of the firefighters were also certified Emergency Medical Technicians (EMTs) and worked, or had previously worked, as both EMTs and firefighters. The firefighters careers ranged in length from 6 to 30 years, with a median length of 17 years.

In order to protect participants who were asked to discuss past traumatic events, I was prepared to exclude those individuals who demonstrated significant psychological distress when exploring this topic and provide them a referral for psychological services. None of the firefighters or spouses in the study exhibited significant psychological distress when discussing past traumatic scenes, and none asked to avoid the topic of trauma. It is likely that those firefighters who volunteered were willing to discuss traumatic calls, as the recruitment procedures informed potential participants that this was

a topic of the study. The limitations of recruiting only those individuals comfortable with talking about traumatic calls are explored in the limitations of the study in Chapter VI. No families were excluded from the study due to difficulty discussing traumatic events.

Those participants who volunteered and met selection criteria were informed of their right to volunteer or not, measures taken to protect their confidentiality, and the activities required for participation in the study through the informed consent document which was reviewed and signed prior to participation.

Participating families.

The demographics of the families who participated will be discussed next, including age, occupation, place of residence, and ages of the children. The genograms of the families in the study are displayed in Appendix A. A genogram is a visual representation of a family's members and structure. They can be created to trace a multitude of family patterns and histories. Genograms are useful because they are “tangible and graphic representations of complex family patterns” (p.1) that enable the viewer to “grasp quickly a large amount of information about a family” (McGoldrick, Gerson, & Shellenberger, 1999, p. 1). The genograms created to display the following families represent the family members' ages, sexes, and position in the family.

The Julian family. Ted, age 41, and Linda, age 39, were preparing to celebrate their twentieth wedding anniversary at the time of our interviews. The couple has three children: a daughter, Hayden, age 18; a son, James, age 15; and a younger daughter, Maddie, age 10. Their only son, James, is diagnosed with muscular dystrophy and is no longer able to ambulate independently. He relies on a motorized wheelchair. The couple's oldest daughter, Hayden, moved out of the family home several months before

the interview, but continues to live in the same town and returns home to visit her family and have meals. She is taking community college courses and working part time. Ted Julian has been a firefighter for six years; this is his second professional career, after being an electrician for 13 years. Mr. Julian works at a fire department in a major metropolitan city an hour from the small town where the family lives. Mrs. Julian works part time as a substitute teacher for the local school district. Her work schedule is flexible, which allows her to meet her son's medical needs. Mr. Julian reported that he does not work a second job, so that he can spend as much time as possible helping care for his son. The family is Caucasian. Both Mr. and Mrs. Julian have attended some college.

The Smith family. Bill, age 48, and Jane, age 47, have been married 15 years. This is Mr. Smith's first marriage and Mrs. Smith's second. The Smiths are a blended family with three adult children from Mrs. Smith's previous marriage: a daughter, age 27; a son, age 23; and a son, age 19. The couple also has one biological son, Peter, age 13. The couple's two granddaughters, Savannah, age 2, and Jenny, age 7, were living with the couple at the time of the interview. They are Mrs. Smith's daughter's children; the girls' biological parents were not living in the home. Mrs. Smith recently completed an associate's degree in criminal justice and works part-time as a police dispatcher. Mr. Smith attended one semester of college following high school and then chose to pursue firefighting as a career. He has been a firefighter for 30 years, was recently promoted to an administrative position, and no longer works a 24-hour shift schedule. The couple lives in a suburb 30 minutes outside of a major metropolitan area in a southern state. In addition to his work as a firefighter, Mr. Smith works for part-time for a food distribution

company. He is able to do this job in his leisure time because the hours are flexible. The family is African American.

The Jones family. Ben, age 42, and Samantha, age 39, had been married for 19 years at the time of our interviews. The couple has three children: a son, Tom, age 16; a daughter, Jessica, age 13; and a son, Ben, age 10. The family lives in a town of 50,000 in a Rocky Mountain state. Mr. and Mrs. Jones both completed associate's degrees, and Mr. Jones completed an additional certification as an emergency medical technician. Mrs. Jones has not worked fulltime since the birth of her first child. She currently substitute teaches part-time. Mr. Jones has worked as a firefighter and EMT for 19 years. Before moving to his current fire department, where he has worked for 15 years, he worked for the privately-owned ambulance service in the family's town. The family is Caucasian.

The Robertson family. Mark, age 47, and Sue, age 42, have been married for 19 years and have two children, a daughter, 17-year-old Heather, and a son, 13-year-old Jack. The family lives in a small town, population 30,000, in a Rocky Mountain state. Mr. Robertson has worked at the local fire department for 17 years. He has a bachelor's degree in education, and his wife has a bachelor's degree in speech therapy. Mr. Robertson worked as a teacher at a residential treatment center prior to becoming a firefighter. Mrs. Robertson works fulltime at an area non-profit agency; she has worked fulltime for the duration of the couple's marriage. In the past year, Mr. Robertson has been promoted to an administrative position and is no longer working a 24-hour shift schedule. The family is Caucasian.

The Hill family. John, age 47, and Sarah, age 40, have been together four and a half years and have been married for two and a half years. They are a blended family. Mr. Hill's two sons from a previous marriage, 13-year-old Tye and 11-year-old Max, and Mrs. Hill's two daughters from a previous marriage, 8-year-old Holly and 6-year-old Megan, all live with the couple. The couple has full custody of both girls as well as Tye, and Max splits his time evenly between his father's and mother's homes. The family lives in a small town, population 30,000, in a Rocky Mountain state. Mr. Hill has a bachelor's degree in education, and Mrs. Hill has completed some college course work. Mr. Hill has worked for the local fire department for 17 years. Mrs. Hill does not work outside the home. As a part-time job, the couple owns and manages apartments in their town. The family is Caucasian.

Instruments

The Traumatic Events Questionnaire – Revised (TEQ-R; Vrana & Lauterbach, 1994) and the Purdue Posttraumatic Stress Disorder Scale – Revised (PPTSD-R, Lauterbach & Vrana, 1996) serve to identify and assess psychological trauma. In this study, the TEQ-R and PPTSD-R were given only to gather quantitative data, not to diagnose or assess trauma in the firefighters or their spouses. The TEQ-R provided valuable information about the number and type of traumatic events firefighters and their spouses have been exposed to over their lifetimes. The PPTSD-R was then administered to determine whether the participant had developed PTSD symptomatology as well as the severity of any PTSD symptoms.

The TEQ-R asks about exposure to nine specific traumatic events that may have occurred during or before working as or being married to a firefighter, and includes

“other event” and “event can’t tell” categories to assess other trauma and traumatic events the respondent does not wish to discuss (Vrana & Lauterbach, 1994). The nine categories that are assessed include: industrial accident or large fire/explosion, natural disaster, violent crime (rape, robbery, or assault), physical or sexual abuse, unwanted sexual experience, adult abusive relationships, witnessing someone who was mutilated, seriously injured, or violently killed, danger of losing your life or being seriously injured, and the violent or unexpected death of a loved one. If the participant had indicated on the trauma assessments or at any other point in the study that they were struggling with significant PTSD and wanted to pursue counseling, I was prepared to provide a referral to an area clinician. Firefighters or family members who were struggling with severe Posttraumatic Stress Disorder would have been excluded from the study and encouraged to seek treatment; however, no participants were excluded from this study due to severe PTSD symptoms.

After a participant completed the TEQ-R, they were asked to complete the PPTSD-R in reference to the event that they had stated was the most traumatic they had experienced. The PPTSD-R is composed of 17 questions that assess the diagnostic criteria of PTSD (Lauterbach & Vrana, 1996). Each question is rated on a scale from 1-5 and assesses the symptom severity from 1-not at all to 5-often. Scores on the PPTSD-R total scale range from 17 to 85, and higher scores indicate the likelihood of PTSD symptomatology (Lauterbach & Vrana, 1996). The PPTSD-R also generates three scales which correspond to PTSD diagnostic criteria of reexperiencing, avoidance, and arousal.

Vrana and Lauterbach (1994 as cited in Vrana & Lauterbach, 1996) reported the reliability information of the TEQ-R. The TEQ-R was found over a two week test-retest

period to reliably assess the number of traumatic events ($r = 0.91$) as well as the specific events experienced ranging from $r = 0.72$ for life-threatening situations to $r = 1.0$ for child abuse, which resulted in a mean of $r = 0.80$ (Lauterbach & Vrana, 1996).

The PPTSD-R is shown to have convergent and discriminant validity as a measure to assess PTSD symptomatology (Lauterbach & Vrana, 1996). The PPTSD-R is correlated strongly with other measures of traumatic stress symptomatology, such as the Impact of Events Scale, $r = 0.66$ and the civilian version of the Mississippi Scale for PTSD, $r = 0.50$ (Lauterbach & Vrana, 1996). The PPTSD-R also demonstrates discriminant validity with closely related, but not identical, diagnostic instruments for anxiety and depression. The PPTSD-R is weakly correlated with the T scale of the State-Trait Anxiety Inventory, $r = 0.37$ and the Beck Depression Inventory, $r = 0.39$, which indicates the PPTSD-R's ability to discriminate among disorders with symptoms similar to those of PTSD (Lauterbach & Vrana, 1996).

The PPTSD-R also demonstrates test-retest reliability following a two week interval, and the Total PPTSD-R score is the most highly correlated scale after this interval, $r = 0.71$ (Lauterbach & Vrana, 1996). The Reexperiencing scale was shown to correlate at a significant level, $r = 0.48$, as was the Avoidance scale, $r = 0.67$, and the Arousal scale, $r = 0.71$ (Lauterbach & Vrana, 1996). Lauterbach and Vrana (1996) also report that, in a sample of students seeking treatment at a university counseling center, the PPTSD-R was able to discriminate between those clients who were seeking treatment for a traumatic event and who were seeking treatment for other reasons. Those who were seeking treatment for other reasons reported levels of trauma similar to those of a nonclinical sample; the highest levels of trauma were found in those currently in

treatment for psychological trauma. Therefore, the PPTSD-R is sensitive to various levels of traumatic symptomatology following a traumatic event.

The TEQ-R and PPTSD-R are designed to be used in conjunction with each other, and several previous studies have utilized this methodology. Hamilton et al. (2009) investigated the relationship between relationship satisfaction, trauma exposure, and symptoms in a sample of female partners of members of the military using the TEQ-R and PPTSD-R. Relationship satisfaction and trauma, assessed by the TEQ-R and PPTSD-R were also investigated in a sample of Army soldiers who had recently returned from service in Iraq and Afghanistan (Nelson, Crow, Reisbig, & Hamilton, 2007). Elwood, Williams, Olatunji, and Lohr (2007) used the TEQ-R and PPTSD-R in a study comparing the way in which victims and non-victims of trauma perceived interpersonally threatening situations. When administered together, the TEQ-R and PPTSD-R assess the type of trauma an individual has been exposed to and the level of symptom severity that has resulted from this trauma. This information is gathered through self-report, making the TEQ-R and PPTSD-R an efficient way of collecting data about trauma exposure and symptom severity.

The information gathered by the TEQ-R and PPTSD-R is broader than other trauma instruments, such as the Impact of Events Scale-Revised (IES-R, Weiss & Marmar, 1996) or PTSD Checklist (PCL, Weathers, Litz, Herman, Huska, & Keane, 1993), which obtain information about an individual's level of symptoms of PTSD, but not information about exposure to specific traumatic events. The TEQ-R and PPTSD-R are quicker and easier to administer than the comprehensive Clinician-Administered PTSD scale (CAPS, Blake et al., 1995), which must be administered by a trained mental

health professional. Because of the comprehensive information that is gathered by the TEQ-R and PPTSD-R, the convenience of administering the instruments, and the reliability and validity of the instruments, I chose to utilize both the TEQ-R and PPTSD-R.

Instrument findings. On the TEQ-R, each firefighter and all but one spouse reported experiencing or witnessing at least one traumatic event throughout their lifetime. The types of traumatic events reported ranged from those experienced on the job by the firefighters, such as witnessing fatal car wrecks, house fires, or being injured in a fire, to those traumatic events experienced earlier in life, such as the death of a parent and sexual abuse as a child. Traumatic events endorsed by the spouses of the firefighters included car wrecks, natural disasters including hurricanes and tornadoes, the death of friends and family, rape, and being severely ill to the point of fearing for her life.

If an individual reported a significant traumatic event on the TEQ-R, they then were administered the PPTSD-R. The PPTSD-R can be dichotomously scored to indicate those individuals who are considered to qualify for a PTSD diagnosis and those who do not qualify (McCormick, 2007). Individuals endorsing one or more reexperiencing symptoms, three or more avoidance/numbing symptoms, and two or more hyperarousal symptoms are considered to qualify for a diagnosis of PTSD (McCormick, 2007). In this study, one firefighter, Mr. Robertson, qualified for a diagnosis of PTSD and one spouse, Mrs. Julian, qualified for a diagnosis of PTSD. Mrs. Julian did not describe experiencing active symptoms of PTSD during her interview, and this diagnosis does not appear to have affected the way she experiences being in a firefighter family. However, Mr. Robertson appears to be more significantly affected by the symptoms he reported. He

admitted that he has seen himself withdraw from social settings and friendships, particularly since the events of September 11, 2001. Mr. Robertson was not directly involved in 9/11; however, he described strongly identifying with the firefighters at the New York site. On the TEQ-R, Mr. Robertson cited his most significant trauma as falling through the floor of a burning building. Since a thorough PTSD evaluation was not conducted, it is unclear whether Mr. Robertson is experiencing PTSD resulting from an accident on the job or whether he could possibly be suffering from secondary trauma in response to 9/11, or a combination of symptoms from both events. However, given the results from the TEQ-R and PPTSD-R, as well as information gathered during the clinical interview regarding the changes he has seen in himself, such as avoidance of social situations and hypervigilance when in social situations, it does appear likely that Mr. Robertson is experiencing a reaction to traumatic stress.

Procedures

Participants were contacted through the fire departments by which they are currently employed. I first contacted fire department leadership to obtain permission to recruit participants for the study through the department. To obtain participants, I visited the fire stations to discuss the study and handed out a letter explaining the purpose and requirements of the study. I also provided information about the right to stop participation at any time and the way confidentiality would be maintained. The letter asked the participants to contact me privately if they and their spouse and child wished to be part of the study. My contact information was included in the letter.

Before participating in the interview or completing the trauma assessments, the participants signed the informed consent form and chose a pseudonym by which they are

identified in the transcripts and written results. Prior to conducting interviews, the firefighters and spouses completed the Traumatic Event Questionnaire-Civilian (TEQ) and the Purdue PTSD Questionnaire-Revised (PPTSD)-R to assess exposure and reactions to traumatic events. The participants were interviewed for approximately 60-90 minutes. Following the interviews, data were transcribed and analyzed for themes. I contacted participants for a second time to conduct member checking (Guba & Lincoln, 1989). We discussed emerging themes in the data and gathered any additional information they wished to contribute.

Interviews took place in the participants' homes, which were the locations all of the families chose. Children were given a choice whether they wanted their parents or siblings present during the interview. None of the children asked to have their parents present at the interview. The children in the Julian and Robertson families were interviewed together, and the other children chose to be interviewed separately.

Data Collection

This was a semi-structured interview study (Merriam, 1998) with five firefighter families. An interview was conducted, and following transcription and data analysis, participants were provided with the initial findings and asked for any further information they wished to contribute to the study.

I interviewed both partners separately and the children separate from their parents. Merriam (1998) describes a semi-structured interview as being composed of questions that are "flexibly worded" (pg. 74) or as a "mix of more and less structured questions" (p. 74). Using the semi-structured interview allowed me more freedom to

respond to and pursue topics and ideas that were not in the list of research questions that I took to the interview.

Interviews were recorded on a handheld digital audio recorder, which was stored in a locked cabinet until transcription was complete. In order to protect the participants' confidentiality, the participants were only referred to by pseudonyms during the data analysis and in the written report.

These procedures were reviewed and approved by the University of Northern Colorado Institutional Review Board (IRB). A copy of IRB approval is included in Appendix F.

Data Analysis

Data analysis was guided by Moustaka's (1994) phenomenological method of data analysis, which is a variation of van Kaam's (1959, 1966, as cited in Moustaka, 1994) procedures for analyzing phenomenological data. Interviews were transcribed, and those transcripts were utilized for data analysis. Moustaka (1994) has outlined the following steps of phenomenological data analysis:

1. *Listing and Preliminary Grouping*: List every expression relevant to the experience
2. *Reduction and Elimination*: To determine the Invariant Constituents: Test each expression for two requirements:
 - a. Does it contain a moment of the experience that is a necessary and sufficient constituent for understanding it?
 - b. Is it possible to abstract and label it? If so, it is a horizon of the experience. Expressions not meeting the above requirement are eliminated. Overlapping, repetitive, and vague expressions are also eliminated or presented in more exact descriptive terms. The horizons that remain are the invariant constituents of the experience.

3. *Clustering and Thematizing the Invariant Constituents*: Cluster the related invariant constituents of the experience into a thematic label. The clustered and labeled constituents are the core themes of the experience.
4. *Final Identification of the Invariant Constituents and Themes by Application Validation*: Check the invariant constituents and their accompanying theme against the complete record of the co-researcher. (1) Are they expressed explicitly in the complete transcription? (2) Are they compatible if not explicitly expressed? (3) If they are not explicit or compatible, they are not relevant to the co-researcher's experience and should be deleted.
5. Using the relevant, validated invariant constituents and themes, construct for each [participant] an *Individual Textural Description* of the experience. Include verbatim examples from the transcribed interviews.
6. Construct for each [participant] an *Individual Structural Description* of the experience based on the Individual Textural Description and the Imaginative Variation.
7. Construct for each research participant a *Textural-Structural Description* of the meanings and essences of the experience, incorporating the invariant constituents and themes. (p. 120-121)

Following this process, the researcher uses the Individual Textural-Structural Descriptions to create a Composite Description of the group's meanings and essences of the experience (Moustaka, 1994).

Chapter 4 includes each participant's Individual Structural Description of being in a firefighter family. This description includes verbatim excerpts from the interview transcripts to support the researcher's portrayal of each individual's experience. Each participant's experience incorporates meaning that the individual has created regarding being in a firefighter family. Finally, in Chapter 5, all participants' Individual Structural Descriptions were synthesized to create the Composite Description that describes the "universal essence" (Creswell, 2007, p. 58) of being in a firefighter family.

Reflexive Bracketing

In order to keep my experience of firefighter marriages from interfering with the analysis of data, I used journaling to bracket my experience and attempted to analyze the data from the most objective viewpoint possible. Creswell describes bracketing as a process in which “investigators set aside their experiences, as much as possible, to take a fresh perspective toward the phenomenon under investigation” (Creswell, 2007, p. 59-60).

I used reflexive bracketing, which aims to “make transparent, overt, and apparent the researcher’s personal values, background and cultural suppositions” (Gearing, 2004, p.1445) that could have an effect on the study. In an effort to be transparent regarding my values, experience, and beliefs regarding firefighters and the role that trauma plays in the family, I began this chapter with a description of myself as a researcher. I have also included information about previous studies I have conducted with firefighter couples and the results of those studies, which are experiences I must bracket in order to maintain awareness of how that experience influences the current study. By maintaining a journal throughout the study, I recorded my expectations and reactions to the interviews and emerging themes of the study. This journal allowed me to track and record my personal process and maintain awareness of the interaction of my values, experience, and beliefs with the study.

Reflexive bracketing does not strive to create a bias-free individual, but rather acknowledges that this is impossible and that the researcher’s history, culture, and values will inevitably impact the study. It is not removing any possible bias from the researcher, but being aware of how the researcher’s inherent beliefs, values, and experiences will

affect the study (Gearing, 2004). Therefore, the researcher is required to become aware of and identify his or her personal beliefs and to develop “a thoughtful, conscious self-awareness” (Finlay, 2002, p.532), which allows the researcher to “reduce the influence of his or her lived experience on the phenomenon under investigation” (Gearing, 2004, p.1445). Throughout the study I constantly strove to be aware of how my past experience working with and researching firefighter families was possibly influencing this study and recorded this in my journal. I was guided by Ahern’s (1999) article exploring tips for the process of maintaining a reflexive journal. I recorded my reactions to and feelings about the families I interviewed. These immediate impressions were important to note in order to be aware of potential biases that could affect data analysis and the report of the findings.

Trustworthiness

Criteria for the standards of rigorous qualitative research are outlined in Lincoln and Guba (1985) and Guba and Lincoln (1989). Guba and Lincoln have established these criteria, which parallel positivist research concepts of reliability and validity, and are therefore referred to by the authors as “the parallel criteria” or “trustworthiness” (Guba & Lincoln, 1989, p. 233). Those researchers define the parallel criteria to assess the following concepts: internal validity, external validity, reliability, and objectivity. The following sections will discuss the trustworthiness criteria of credibility, dependability, confirmability, and transferability and the way that this study meets these standards.

Table 2 displays the parallel criteria for standards of rigorous qualitative research and the methods used in this study to achieve rigor.

Table 2

Parallel Criteria of Rigorous Qualitative Research

| Positivist Criteria | Parallel Criteria (Guba & Lincoln, 1989) | Purpose of Parallel Criteria | Methods Used |
|----------------------------------------|-----------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------|
| Internal Validity | Credibility | Accurately reconstruct the realities of the participants | Peer debriefing Member Checks Triangulation |
| External Validity/ Generalizability | Transferability | Provide the reader with the most information possible regarding the context of the study, allow the reader to make judgments about the applicability of the study to their situations | Thick Description |
| Reliability | Dependability | Track and record changes to the methodology and research questions | Dependability Trail/Audit Trail |
| Objectivity | Confirmability | Ensure findings are based upon the data collected in the study | Confirmability Trail/ Audit Trail |

Note. Based on Guba & Lincoln, 1989.

Credibility

To assure credibility, the researcher seeks to accurately reconstruct and represent the participants' constructions of reality (Guba & Lincoln, 1989). The participants' constructs have been gathered in the form of personal stories, values, beliefs, and experiences during data collection. Through collaboration with colleagues, fellow researchers, and the participants themselves, the researcher seeks to create a true representation of the participants' constructs. In this study, credibility will be increased by the use of peer debriefing, member checks, and triangulation.

Peer debriefing involves collaborating with a “disinterested peer” (Guba & Lincoln, 1989, p.237) to discuss emerging themes, the analysis process, conclusions, and problems or stresses of the study. Merriam (1998) refers to this process as peer examination and states that it includes “asking colleagues to comment on findings as they emerge” (p. 204). I conducted peer debriefing with a doctoral student at the University of Wyoming, John Moring, who has taken qualitative courses, contributed to qualitative research studies, and is knowledgeable in qualitative research design. This colleague is currently working on the analysis of his quantitative dissertation and has no significant interests in my study.

I conducted member checks following data analysis of the interviews. Member checks are described as “taking data and tentative interpretations back to the people from whom they were derived and asking them if the results are plausible” (Merriam, 1998, p. 204). Guba and Lincoln (1989) define member checks as “[t]he process of testing hypotheses, data, preliminary categories, and interpretations” (p. 238) with the participants of the study. I used member checks to ensure that I was accurately representing the information that the participants provided, which served to increase the credibility of the study. The participants provided feedback regarding the emerging themes and ensured the accuracy of the findings.

Member checks took place through phone contact with four of the families and in person with one family. The participants were emailed copies of their interview transcripts, lists of emerging themes, and the composite experiences of the firefighters, spouses, and children. Participants were asked to respond to the following questions, which are adapted from those used by Callahan, Maldonado, and Efinger (2003):

1. Upon reflection, do you believe the transcript is accurate?
2. Does the information clearly convey your message?
3. Are there any changes, additions, or deletions?
4. Do you have any suggestions to make your story clearer?

Overall, most participants reported that they did not have additional data to contribute to the study. The participants reported that they felt their experiences of being in a firefighter family had been accurately portrayed by their individual themes and the composite experiences.

Triangulation also strengthens the credibility of this study. Creswell (2007) defines triangulation as a process involving “corroborating evidence from different sources to shed light on a theme or perspective” (208). Interviewing multiple families and corroborating themes between the families provided triangulation. Triangulation was also increased through the use of multiple investigators, including John Moring, peer reviewer, and Dr. Mary Sean O’Halloran, research advisor, who is an expert in qualitative research and methodology. Both Dr. O’Halloran and John Moring read all or part of the transcripts to verify existing and identify additional codes and themes in the data. Having these sources of triangulation increase the credibility of this study.

Transferability

A transferable study seeks to provide readers with a full understanding of the study’s findings, which allows the audience to determine to what extent the study is applicable to their own situation (Guba & Lincoln, 1989). To ensure a transferable study the researcher provides a detailed description of the setting, context, and culture in which the study took place (Guba & Lincoln, 1989). Producing a study that is transferable to

the reader is achieved through rich or thick description in the written results of the study. Thick description is used throughout the study, particularly in the presentation of the findings. Merriam (1998) describes rich, thick description as “providing enough description so that readers will be able to determine how closely their situations match the research situation, and hence, whether findings can be transferred” (p. 211). It is my goal that through rich, thick description this study is transferable to the lives of the readers and that the results are found useful and salient to emergency responders and their families, fellow researchers, clinicians who work with first responders, and others who have been exposed to, work with, or study psychological trauma.

Dependability

Dependability is achieved by ensuring that the methods used to collect data were consistent throughout the study (Guba & Lincoln, 1989). However, in qualitative inquiry the methodology and hypotheses of the study are expected to change as the study develops (Guba & Lincoln, 1989). Given the developmental nature of qualitative research, it is crucial to track and record changes that occur in the research questions and methodology. Dependability in this study was assured by keeping a detailed “audit trail” (Merriam, 1998, p. 207) or “dependability audit” (Guba & Lincoln, 1989, p. 242). An audit trail is necessary because the researcher has a responsibility to detail the manner in which data were collected, how themes and data coding were executed, and the way that other decisions were made during the study (Merriam, 1998). This detailed written record was kept to allow those reading the study to “explore the process, judge the decisions that were made, and understand what salient factors in the context led the evaluator to the decisions and interpretations made” (Guba & Lincoln, 1989, p.242)

throughout the research project. Changes that were made after the initial research proposal were tracked in the audit trail. The most significant change to the methodology of the study was the decision to forego a second round of interviews with the participants, as the data from the first interviews was comprehensive and initial member checks did not reveal additional themes that the participants wished to share. Other methodological processes tracked in the audit trail include the addition of a question regarding the stress of being stationed on the ambulance versus the fire truck, which was a strong theme in the first two firefighters' interviews. Also, the initial proposal for the study stated that participants would be compensated with a \$25.00 gift card to a local movie theater; however, this was changed to \$25.00 in cash due to the varying sizes and locations of the towns the participants live in.

Confirmability

Confirmability in qualitative research ensures that the findings of the study “are rooted in the data themselves” (p. 243) to avoid undue influence of the researcher’s biases, values, or motives (Guba & Lincoln, 1989). Confirmability is achieved through the use of the “confirmability audit” (Guba & Lincoln, 1989, p. 243). Guba and Lincoln recommend that this process be conducted simultaneously with the dependability audit. Therefore, I tracked any changes to the methodology, new and evolving hypotheses, and the processes and product of data analysis in one location, which is referred to as the audit trail. This audit trail increases the dependability and confirmability of the study by allowing the reader to have knowledge of any changes and the data analysis processes that took place during the study. The previous section explored the changes made to the

methodology and research process. The audit trail tracking dependability and confirmability was reviewed by Dr. Mary Sean O'Halloran, research advisor.

Summary

This qualitative study utilized a constructivist epistemology and constructivist self development theory to gain a deep understanding of each participant's experience of being in a firefighter family. Each individual's unique meaning constructed regarding trauma the firefighter has experienced on the job was explored. A phenomenological methodology was utilized to identify and describe the "universal essence" (Creswell, 2007, p. 58) that these participants share as members of firefighter families. This is done through reflexive bracketing of the researcher's values and experience, analysis of the data, and comparison of the data to identify the essence of being in a firefighter family.

CHAPTER IV

FINDINGS: THE FAMILIES' EXPERIENCES

The current study explores the experience of being in a firefighter family. The study was theoretically guided by constructivist self development theory, which serves to conceptualize the trauma to which firefighters and their families are exposed. Through semi-structured interviews the study explored the meaning the participants have created regarding the traumatic events the firefighter experiences. Also explored was the way in which the individual has adapted and changed as a result of being a firefighter or having a firefighter in the family.

The methodology guiding the study was phenomenology, which is based on the premise that every individual experiences the world in a unique, subjective way (Schwandt, 2007). Phenomenological methodology seeks to identify and describe as much as possible about the way in which a person experiences a phenomenon by investigating the everyday experiences associated with it (Schwandt, 2007). This chapter describes each participant's experience of being in a firefighter family. In accordance with Moustaka's (1994) phenomenological method of data analysis a textural-structural description consisting of each participant's themes that emerged from the interview is created. This chapter contains the textural-structural description for each participant. Guided by a constructivist epistemology, phenomenological methodology, and constructivist self development theory, I sought to learn about each individuals' unique experience of being in a firefighter family. This chapter outlines the individual themes of

each participant from the firefighter families, including the firefighter, his spouse, and the children in the family.

The Julian Family

Immediately upon entering the Julian family's home it was apparent that this is a family that embraces each other, life, and new friends. They were warm and inviting, and I was immediately welcomed to sit with them in the family room, where they were when I arrived. Ted and Linda Julian were approaching the celebration of their twentieth wedding anniversary the week following our first interview. Mr. Julian whispered to me during our interview that he had a surprise trip planned, so "shh, she doesn't know." Ted, 41 years old, and Linda, 39 years old, both discussed the event that has led them to celebrate life to its fullest – the diagnosis of their only son with muscular dystrophy. I met James, 15 years old, as he was seated in his electric wheel chair, watching television with his older sister, Hayden, 18 years old, and younger sister Maddie, 10 years old. The family is Caucasian. This was a typical evening in the Julian household: everyone gathered in the family room to watch TV, eat dinner, and do homework. The activities were not as important to this family as spending their evenings together. The Julians live an hour outside of the major metropolitan area where Mr. Julian is a firefighter. They have chosen small-town life with family and old friends close by and live next door to Mr. Julian's parents. Mrs. Julian works part-time as a substitute teacher in the local school district, which allows her the time and flexibility to help care for their son and attend to his medical needs. Mr. Julian works in the city and commutes an hour to his firefighting job every third day to work a 24-hour shift. Hayden, the family's oldest child, had recently moved out of the home and into her own apartment as she began

college courses at the local community college. She often returned home to eat meals and spend time with her family. Mr. Julian had previously worked as an electrician for 13 years; however, he chose to change careers and pursue firefighting in order to be able to spend more time with James, following his diagnosis. Mr. Julian had been a firefighter for six years, all of which were at his current fire department.

Mr. Julian's Experience

Job themes. Mr. Julian described themes related to his job including the benefits of the shift schedule, being able to help people, frustrations of the job, fatigue following long shifts, changes he has seen in himself, and the misuse of the ambulance service. Overall, he related that the benefits of his career far outweigh the negatives for him and his family.

Benefits of the schedule. Mr. Julian described the significant change that becoming a firefighter had been in his and his family's life. As an electrician, Mr. Julian had worked long hours, often leaving the house as early as 6:00AM and returning at 5:30PM. He worked as much overtime as possible and would frequently work Saturdays. Needless to say, time with his family was limited. Becoming a firefighter has allowed him more time with his family, as he works a 24-hour shift every third day and is home with his family for two days between shifts. He also described the shift schedule at his fire department as "flexible," as he is able to swap shifts when necessary due to family obligations. The amount of time off the job and flexible schedule are significant benefits of the job to Mr. Julian, as this allows him to share childcare responsibilities with his wife, particularly to help care for his chronically ill child.

Helping people. Although he is grateful for the time with his family that being a firefighter allows, Mr. Julian stated that the aspect of his job he values most and the reason he entered the profession was to help people. When questioned about the part of the job that continues to motivate him, he stated, “It is going to sound cliché, but helping people. I mean it really is that.”

Unnecessary calls. Mr. Julian’s fire station is located in a low-income area of a major metropolitan area. He described the frustration felt by him and other firefighters due to the high volume of calls to the fire department that seem unnecessary; these calls cause the first responders to believe they are being used merely as a source of transportation to the hospital for minor conditions. He stated, “Eighty percent of our runs are BS [bullshit]. They don’t need us; we’re just a taxi.” During these calls, Mr. Julian struggles to maintain his patience and keep in mind the reason he entered the field – to help people, saying, “It’s those fifteen to twenty percent of those runs where you are actually helping people that you think, hey, I am a fireman!”

Fatigue. Mr. Julian stated that while he loves his job, there are more stressful aspects, such as shifts when he is stationed on the ambulance rather than the fire truck. He described the ambulance as receiving a significantly higher volume of calls, many of which are calls that seem unnecessary because the injuries or illness are not severe enough to warrant emergency services. He stated that on shifts during which he is on the ambulance he will often not sleep over the course of the 24-hour shift, as the ambulance will be out all night responding to calls. This can often lead to exhaustion and fatigue by the end of the shift.

Changes in himself. Over the six years since Mr. Julian became a firefighter, he has noticed several changes within himself, both positive and negative. Due to the abuses of the fire and rescue services, Mr. Julian stated that he has seen himself become “jaded” in his view toward humanity. Working at a station in an impoverished area of a large city, Mr. Julian also responded to a high number of drug and violence-related calls, which he cited as an additional reason that he has seen himself become jaded over the past six years. He described the effects of this change in attitude outside the fire station, including assuming more negative characteristics about strangers and being increasingly aware of evil in the world.

He also cited positive changes in himself since becoming a firefighter, including becoming more physically healthy and strong, as he exercises regularly and also maintains a healthy diet. He discussed the importance of maintaining his physical condition in order to perform his job well. Mr. Julian stated that his spiritual faith has become stronger since becoming a firefighter as well. He relies on his faith to cope during challenging calls and said that difficult call have increased his faith in God.

Mr. Julian stated that he believes he is “an overall happier person” since joining the fire service, as he has more time with his family and finds the schedule less stressful than that of his previous career. He also cited his parenting skills as having improved as well, as he is more patient.

Benefits outweigh the negatives. Mr. Julian openly described the positive and negative elements that he has experienced since becoming a firefighter. While he recognizes the negative aspects of his job, such as being exhausted following a shift riding the ambulance and developing a more negative view of humanity, an attitude he

describes as “jaded,” he stated that for him and his family, “the benefits far outweigh the negatives.” He expressed passion and enthusiasm for being able to work in a career in which he helps others, fulfills a lifelong dream, and is able to spend a greater amount of time with his family.

Parenting and marriage themes. Mr. Julian expressed the following themes regarding parenting and marriage: the positive effects his job has had upon parenting, protecting his children from the danger of his job, and the importance of communication with his children.

Positive effects on parenting. Due to the increased amount of time Mr. Julian is able to spend with his children and wife and his decreased level of work-related stress, he has seen himself become more patient and “less grumpy” with his children. He has also been able to take on a more active role in parenting his children, which he values.

Dangers of the job. Mr. Julian stated that he has not discussed the dangers of his job with his children. While he believes the older children, 18-year-old Hayden and 15-year-old James, know more about the dangers of his job due to movies they have seen and watching the news, he has not purposely discussed these dangers with them. He stated that he wants to protect his children from worrying about him every time he goes to work. It is a balance between protecting a child from unnecessary worry and fostering their increasing awareness of the danger as they age. Mr. Julian described his use of scenes he has responded to at work as a teaching tool for his oldest daughter, who drives and lives on her own. He stated that he will often tell her about car wrecks or drinking and driving accidents in an effort to educate her about the dangers of the world and encourage her to use caution.

Communication. The importance of communication was a theme that Mr. Julian mentioned repeatedly, stating, “Communication. That is the key. I think for marriages, for getting along at the fire station, [with] your kids.” He described his efforts to communicate “humbly” and “openly” with his children, as well as the emphasis he places on communication in his marriage. While his wife is a primary source of support for him following difficult calls, he also discussed the importance of routine communication between the couple. He stated that their son’s illness has taught him that he “cannot go through everything alone” and must rely on discussing his feelings with others to stay healthy. While Mr. Julian also tries to protect his wife from hearing about too many frightening or gruesome details of his job, he does make a habit of discussing the events of his shifts with her. He began the couple’s process of beginning to talk about his work, by asking her, “Do you want to hear the gruesome stuff? What do you want to hear?” Mr. Julian communication is the key to maintaining healthy family relationships, as well as healthy relationships with coworkers at the fire department, which he also emphasized.

Trauma-related themes. Themes emerged regarding the most challenging types of calls Mr. Julian responds to, the way in which he copes with traumatic calls, and the effect that witnessing trauma has had upon him when he is not on the job.

Most challenging calls. Mr. Julian stated that the most challenging calls he responds to involve the death or injury of a child. He also related that calls involving burnt bodies are very difficult, “as you can’t forget that smell.” While he described himself as typically not having an emotional reaction during calls, he does experience anger at the scenes of child abuse or assault. Following calls that involve the death or

injury of a child, Mr. Julian stated he recognizes himself feeling and acting increasingly “grumpy” toward his family after he returns home. He stated that he has a shorter temper until he is able to relax for a while after the shift and utilize a coping strategy, such as discussing the event with his wife.

Coping strategies. Mr. Julian related multiple coping strategies when faced with traumatic scenes on the job. These included using humor, creating emotional distance, analyzing calls, maintaining healthy cognitions, and utilizing social support.

Humor. Mr. Julian described a number of coping strategies he utilizes during and after tough calls. He described firefighters’ tendency to use humor during calls that are particularly gruesome. He emphasized the fact that they do not use this humor to be disrespectful of the victims or the family, but stated that “it is a coping strategy, really.”

Emotional distance. During calls Mr. Julian stated that he rarely has an emotional reaction, as he is focused on getting the job done. He has found this ability to remain unemotional about the work at hand got easier after being a firefighter for a period of time, stating, “I have seen more and it doesn’t excite me as much, for lack of a better word.” He told a story about a supervisor at the beginning of his career telling him to act as if the “bad runs” are a movie he is in, and “when you are done with the call—turn the movie off.” This strategy has helped Mr. Julian maintain emotional distance from the victims, which enables him to do his job to the best of his abilities.

Analyzing calls. Following calls in which there was a death or complication with a rescue or medical procedure, Mr. Julian described analyzing the protocol used during the call to identify any mistakes or areas of inefficiency. He stated that this is an important part of processing these difficult calls, and he often goes through this process

with other firefighters. He asks himself questions including “What could I have done better?” and “Could I have done anything to stop it?” These questions allow him time to process the events of the call and come to terms with the outcome.

Healthy cognitions. Mr. Julian also described several healthy cognitions he maintains when going to and returning from difficult calls. These cognitions include thoughts such as “I am here to do a job,” “I do my best every run,” and “Ultimately, it is up to God what happens.” These types of cognitions help him maintain emotional distance and avoid taking on an irrational amount of responsibility if an individual cannot be saved. He discussed the importance of using these cognitions to maintain emotional distance and prevent burn out, stating “Usually I will work through it.”

Social support. Prior to becoming a full time firefighter, Mr. Julian worked as a volunteer fireman at the local department in his hometown. He stated that during this time he had to “cut lots of people out of their vehicles” after crashes on the interstate. Following these calls he and the other volunteer firemen made a habit of discussing the events with each other. The act of talking about difficult calls helped to reinforce the benefit that received when reaching out for social support regarding his son’s medical condition. As a full time fireman, Mr. Julian continues to discuss the calls with other firefighters on shift and also talks to friends who are volunteer firefighters about challenging scenes he has responded to. He also utilizes his wife as social support following calls. Mr. Julian encourages other firefighters to discuss calls and reach out for social support if they are struggling to deal with a call. He discussed the attitude he has observed in other firefighters, particularly those who have been on the job for a longer period of time, stating, “They try to cowboy it. ‘I don’t need to talk about it.’” He

particularly tried to encourage those who are new to the job to find ways to deal with the stress of the job in the best way.

Staying calm. Mr. Julian has noticed that, due his repeated exposure to crisis scenes in the past six years, he responds more calmly to crises in his personal life. He described an incident when his 18-year-old daughter was in a car wreck while he was on shift. He said, “Before I was on the fire department, I would have gone from here 100 miles per hour home. There is nothing I can do. . . . I was worried, but it’s not going to excite me to the point that I just go stupid and I’m not thinking about what I am doing.” He has seen himself utilize his firefighter training as he reacts slowly and deliberately to accidents at home.

Mrs. Julian’s Experience

Parenting and marriage themes. In interviewing Mrs. Julian themes regarding parenting and marriage emerged, which included the positive effects of her husband’s job on parenting, how her husband’s job as a firefighter has affected parenting roles in the family, and how the family handles discussing the dangers of the job with the children.

Positive effects on parenting. Mrs. Julian related her husband’s increased patience and involvement with the children since he has become a firefighter. She also stated that she believes her husband has a “greater appreciation” for their children due to the scenes he responds to involving children living in poor conditions.

Sharing parenting responsibilities. Mrs. Julian discussed her struggle to transition from being the primary parent, while her husband worked as an electrician and attended paramedic school, to equally sharing the parenting roles after he became a firefighter. She described her frustration, stating

“Even the little things, taking the kids to school, I would be like ‘You are not doing this right. You are not leaving at the right time. You are not driving the right route.’ That caused a lot of stress. Because I was so used to doing it all and doing it my way.”

In order to transition to co-parenting, Mrs. Julian stated that she had to let go of the exclusive control she had felt about parenting duties and allow her husband to help. Currently, the couple equally shares parenting, including medical care of their son, and she is happy to share these duties with her husband, despite the difficult transition.

Transitioning after shift. Mrs. Julian described her husband’s routines after coming home following a 24-hour shift. She stated that his transition back into the home is generally easy if the children are in school and he is able to sleep for several hours if necessary. However, in the summer or on weekends this transition can be more challenging for the couple, as the children are excited to see their father and he has more trouble finding time to sleep. Mrs. Julian tries to keep the children sleeping and eating breakfast long enough for her husband to get some rest before beginning their day together.

Dangers of the job. Mrs. Julian also described a desire to protect her children from worrying about the potential dangers of her husband’s job while at the same time realizing that as they age the children are exposed to more of this reality. She stated, “I don’t remember worrying about my dad as a kid, and I don’t want them to either.” However, the family has a habit of watching the local news together every night, and they see news stories covering area firefighters. When they see these stories, the children ask their mother if their father was at this scene or if this incident was in his district. She stated that once they know he is not at the scene they “are fine,” but the family remains tense until they speak to Mr. Julian following calls of which they are aware. Mrs. Julian

also stated that the older children, particularly Hayden are more aware of the dangers. In particular, Mr. Julian talks to Hayden more about his job than he does to the younger two children.

Schedule and shift work themes. Mrs. Julian discussed the way in which her family has adjusted to the shift schedule and the positive impact this schedule has had on her family.

Living by the shift schedule. Mrs. Julian described her family's routine as revolving around the shift schedule of the fire department. She refers to each day as "A shift, B shift, or C shift" and admitted that she has a difficult time remembering what day of the week it is, particularly in the summer when the kids are out of school. She and her husband split the child care and household duties based on the shift. She described the couple's schedule of taking care of their son. Since her husband is an "A shifter," the couple splits care duties accordingly. "I do A shift morning care, A shift night and B shift morning care. Then he gets home and he does B shift night care, C shift morning and C shift night care." The couple's splitting of the household duties based on the shift schedule has allowed the children to be able to predictably depend on which parent will be caring for them on any given day.

The family celebrates holidays at the fire station when Mr. Julian is working over Thanksgiving or Christmas, and she stated the family "really hasn't been phased" regarding the change in their holiday routine. Mrs. Julian described the fire station as "a family," and values the atmosphere and friendships made during visits.

Natural transition. Mrs. Julian stated that the couple transitioned to their current system of splitting housework based on the shift over the course of the first six months

her husband worked as a firefighter. Rather than a deliberate switch, she stated that this system “just kind of happened” and worked well for the family, so they have maintained it. The shift work schedule has also been a transition for the couple’s extended family and friends. Mrs. Julian stated that it took quite a while for their parents and siblings to adjust to Mr. Julian’s new schedule, and they were frequently forgetting that he would not be available every evening or weekend.

Effects on friendships. Shift work has also affected the couple’s friendships, as Mrs. Julian has noticed that most of the couple’s friends are currently people who also have rotating shift schedules as a first responder or, in the case of one friend as a nurse. The couple lost some friendships after Mr. Julian began a shift work schedule. Mrs. Julian stated, “Somewhere along the lines the majority of our friends have become A, B, C shifters.” She described the mutual understanding among their current friends who work shifts, as they know that schedules will not always be compatible and are more patient about this.

Benefits for the firefighter. Mrs. Julian discussed her husband’s increased happiness since joining the fire service. She attributed this positive change in the amount of time he is able to spend with their children, particularly to care for his son with muscular dystrophy.

Mrs. Julian stated that the transition to being married to a shift worker was particularly difficult for her and her family, since the couple had been married for 14 years prior to Mr. Julian working as a firefighter. One particularly difficult aspect of shift work for Mrs. Julian was becoming accustomed to sleeping alone when her husband is at work. She slept poorly for the first several months, as she adjusted. She speculated that

the transition to shift work would have perhaps been easier if he had worked this schedule their entire marriage. Prior to becoming employed as a firefighter/paramedic, Mr. Julian attended paramedic school in addition to working as an electrician. During this time he saw very little of his family, and this was a stressful time for the family especially Mrs. Julian who was responsible for all of the household chores and child care. Despite the challenges of this transition, the family has adjusted well and values the shift schedule for the additional time it allows them together.

Trauma-related themes. Mrs. Julian's observations regarding the trauma her husband has seen on the job revealed themes regarding his behavior after a tough shift, the most challenging type of call to responds to, how she helps him cope with exposure to traumatic events, and her role as gate keeper should he ever be injured on the job.

Helping him cope. Mrs. Julian stated that she can "tell when he has had a rough shift" and may have gone on a call involving a child, which is particularly difficult for him. She notices that he is grumpier or "crankier" following these calls. She stated that she "gives him space and time" when he is in this mood and also lets him know that she is there to talk if he would like. Mrs. Julian developed this routine about six months into her husband's firefighting job. Until this point the couple had not talked about the more challenging calls he responded to, but this changed following a difficult call when Mr. Julian asked his wife if he could talk to her for support. The couple had a conversation around what she was willing to hear, and he currently tells her about calls but leaves the more gruesome and graphic details out of the conversation.

Mrs. Julian related that she is not bothered by hearing about these incidents, as "I am not the one that saw it and had to be there, he is." If she is becoming uncomfortable

hearing about a call, then she tells her husband and makes sure he is aware of how much she can handle hearing. Mrs. Julian said that these discussions with her husband help him emotionally process the more difficult calls, “so he can put it up in that little box in his head and move on.”

Mrs. Julian described her role as acting as a gatekeeper of information regarding the scenes her husband responds to and any injuries he might sustain. She stated that she does not always tell the entire family about minor injuries, as she believes this “just worries them.”

The Julian Children’s Experience

The Julian children chose to complete their interviews in a group. The oldest child, 18-year-old Hayden seemed to act as the spokesperson for the group. Her brother, 15-year-old James often agreed with her and even stated, "She literally said just what I was going to say." The youngest child, Maddie, 10-years-old, was quiet for much of the interview, but exclaimed that the best part of her father's job was having a dad who could save the children in the event of an accident.

Positive aspects of firefighting job. The Julian children discussed a number of positive aspects of their father’s job as a firefighter. The older children remember when he worked as an electrician and compare the advantages of his firefighting job with his previous career. The children reported that they were proud of their father for “saving people and doing the best he can for people.” The older two children also related their father’s love of his job. Hayden stated, “He’s doing what he loves, so I am happy for him.” The children stated that their father is less stressed, gets to spend more time with the family, is not as tired, and is in turn happier as a person since becoming a firefighter.

Hayden described this, stating, “He is a lot happier because he is doing something that he has fun at. It is something he absolutely loves to do and is thrilled to go and do.” The youngest child, Maddie, stated that the best part of her father being a firefighter was that “he can save us!” in the event of an accident. Overall the children’s impressions of their father’s career were primarily positive, especially when they compare this career to his previous career as an electrician.

Dangers of the job. Hayden and James discussed their fear that their father could be hurt on the job. Hayden stated, “The scariest part for me would be him going into a fire and not coming out. That’s a huge deal for me.” The children stated that watching movies and the news about September 11th have increased their fears. The movie *Ladder 49* was particularly tough for the children to watch as it shows the deaths of firefighters. However, the children stated that they have adjusted to living with the threat of their father’s potential harm. Hayden stated that “You get used to it and you live with it.” She cited several coping strategies that help to make living with this threat easier, including praying for her father’s safety, having confidence in his skills, and knowing he will try his hardest to come home safe to his family.

Knowledge of the job. The children stated that they often discuss their father’s work with him, and ask about the events of each shift when he returns home. Hayden expressed awareness that he filters the severity of the calls he talks to the children about, stating, “He keeps the bad stuff, or the really bad stuff definitely under wraps. He keeps it PG, I guess you could say.” Despite this censorship, the children stated that they feel they understand what his duties at work are and what he is doing while he is away from the home. When their father is at work the children continue to communicate with their

father by phone, Hayden stated, “But even when he is gone we talk to him. He will call us; we will talk to him. He will text, call, anything like that.”

Environment in the home. The children stated that maintaining communication with their father when he is at work contributes to a consistent home environment. After six years of their father working shift work, the children are accustomed to his absence and return. James said, “I don’t really feel like there has ever been differences, because I am so used to it by now.”

The Smith Family

Bill and Jane Smith had been married 15 years at the time of our first interview. The marriage was Mr. Smith’s first and Mrs. Smith’s second. The couple has one biological child together, Peter, who is 13 years old, and Mrs. Smith has three children from her previous marriage, a 19-year-old son, a 23-year-old son, and a 27-year-old daughter. Mr. Smith, 48-years-old, and Mrs. Smith, 47-years-old, are African American. In addition to the couple’s 13 and 19-year-old sons, their 2-year-old granddaughter, Savannah, and 7-year-old granddaughter, Jenny, live with them. Both girls are the biological children of Mrs. Smith’s 27-year-old daughter. Mrs. Smith works part-time as a police dispatcher and recently completed her associate’s degree in criminal justice. Mr. Smith has been a fulltime firefighter for 30 years and works at a major metropolitan city fire department. Mr. Smith worked shift work, 24-hours on and 48-hours off, for his entire career, until recently being promoted to lieutenant, at which time he was moved to a position at the 9-1-1 call center and currently works a 9:00am to 5:00pm schedule. The couple lives in a suburban area 30 minutes outside of the city.

The atmosphere at the family's home is busy and energetic, with 4 children ensuring a lively pace. A television set in the background was a steady constant during out interviews, although the family appeared accustomed to this level of noise and activity. There was a stream of interruptions by the younger children during my interviews with Mr. and Mrs. Smith, which occasionally led to lost trains of thought. Following interviews with Mr. and Mrs. Smith, I interviewed Peter, the couple's biological son, as well as Jenny, the couple's granddaughter, who was eager to talk to the stranger in the house.

Mr. and Mrs. Smith both discussed the marital problems they had experienced several years before. The couple attributed these problems to the stress Mr. Smith was experiencing on the job and his lack of coping skills at that time. Of the families participating in this study, this couple was the most upfront about their history of marital problems and provided insight into how they worked to overcome these difficulties to arrive at a healthier place in their marriage, as well as in Mr. Smith's career.

Mr. Smith's Experience

Job themes. Mr. Smith explored several themes related to his job as a fireman including the negative effects the job had on his health and relationships and how he overcame these challenges. He also discussed the stressors of the job, the aspects of the job he values, the reason he became a firefighter, and the pros and cons of shift work.

Negative effects of the job. Mr. Smith related several negative effects on his physical and emotional health, as well as his marriage, which occurred during the years he was riding the ambulance. He stated that at this time he was experiencing poor sleep and constant exhaustion both on and off shift, which contributed to feeling "grumpy" and

irritable around his wife and children. He described his history of sleep deprivation, stating, “I literally missed thousands and thousands of hours of sleep that I will never get back in my life. You can never get that time back.” He stated that his emotional state at this time negatively affected his marriage and that he and his wife started to have problems due to the stresses of his job and their negative effects. At this time, Mr. Smith was not communicating with his wife about the stresses he was experiencing at work.

Positive changes. After Mr. Smith was reassigned to another position and no longer rode the ambulance every shift, he began to experience positive changes in his health and mood. He stated that he was less irritable and not as grumpy with his family. He also began to get better sleep while on and off shift. These changes did not occur immediately, which he described: “When I finally got off the ambulance, it took me a while before I could, we [first responders] call it deprogram yourself.” As these positive changes occurred, Mr. Smith began to have energy to do more with his son and grandchildren, which was rewarding.

Stressors of the work environment. Some stressors have remained, despite Mr. Smith’s new position. He described the challenge of working in an impoverished area of a major metropolitan city. He stated that often a physician or other medical provider will only see a patient in the hospital and away from their living circumstances, which firefighters see on a daily basis. He cited working in this area of town and seeing the types of crimes and accidents that occur, as well as the poor living conditions of the patients, was a significant stressor of his work, which he continues to deal with.

Reasons for becoming a firefighter. Mr. Smith attended one semester of college prior to deciding to seek a job. When asked about his reasons for pursuing firefighting,

he stated, “You know as a kid that’s one of the jobs you always want to have. You know everyone wants fireman, astronaut, sports star.” He also stated that in a practical sense he chose firefighting, because “I needed a job.”

Aspects he values. Mr. Smith stated that he values the tradition of the fire service, getting to help people, and the camaraderie with fellow firefighters. He described the camaraderie among firefighters, stating, “We spend a third of our lives together and you get to know people. You are going to see how people live; they are going to see how you live. You gain a bond with them that you can’t with any other person ever. You put your life on the line with them, and they put their life on the line with you, and it draws you closer.”

Pros and cons of shift work. Mr. Smith described the pros and cons he has experienced regarding shift work over the years. The negative effects upon his sleep are a primary problem of the shift schedule for Mr. Smith. He also discussed the occasions when he missed his son’s and grandchildren’s games or school activities, because he was on shift. However, he has also been able to attend functions during the school day, which other parents working a traditional schedule are unable to attend. He also stated that while he is aware that his wife prefers him to be home, that occasionally it is beneficial to have a break from the family, stating, “Sometimes getting away is better.”

Marriage themes. Mr. Smith discussed his marriage and related themes regarding getting married 15 years into his career, learning to communicate with his wife about his job, and maintaining empathy for his spouse despite his stressful job.

From single to family of five. Mr. Smith was married after being a fireman for 15 years, during which time he was single. He stated that when he was single, his routine

following shifts -- to “turn it off,” referring to stress from the job -- included coming home and sleeping and spending time alone. When he got married and moved into a house with three children, he did not consider how he would cope with stress from the job. He described this stating, “I didn’t realize that turning it off back then was I can go to sleep. And I can’t do that now. I have to find other ways to turn it off.” After getting married, Mr. Smith faced the challenge of learning “how to deal with my job, deal with my family, and make it all come together.” However, he had not anticipated this challenge prior to the marriage and took several years to find helpful coping strategies.

Learning to talk. For approximately the first ten years of his marriage, Mr. Smith did not share the events of his job with his wife, to which he attributes some of the couple’s marital problems. He described himself as being quiet by nature, stating, “I am a very quiet, shy person, so I didn’t like to come home and talk and stuff to my wife. And maybe if I would have talked about it more at the beginning maybe we wouldn’t have had some problems.” He stated that some of his hesitation regarding communicating with his wife was also due to the difficulty of describing the scenes he sees at work to his wife, who has not witnessed this type of traumatic events, such as a person being shot. Over time and with his wife’s encouragement, Mr. Smith began to share more about his job with his wife and has experienced improvement in the marriage and in his personal well-being since.

Empathy for his spouse. Mr. Smith stated that he believes it is easy for firefighters to become “so caught up in our own lives, that we can forget that our partner is going through issues also.” He described the tendency for firefighters to often compare the acute, critical activities of their job with typical daily activities of a family and view

them as mundane. He stated that while firefighters are risking their lives going into fires, “your partner or spouse is dealing with, maybe not life-threatening issues, but issues that are just as important or involved or stressful as you may be.” He stated that an important piece of advice that he would give to fellow firefighters is “to realize that your partner is going through things as well.”

Parenting themes. Themes regarding parenting emerged as Mr. Smith discussed his desire to shield his children from the dangers of his job when they are young, as well as his process of telling the children more about these dangers as they get older.

Protecting from the dangers. Mr. Smith related his desire to protect his children and grandchildren from knowledge of the dangers of his job when they are younger, stating, “I don’t want to tell them anything when they are younger.” However, as the children get older and become aware of the dangers of the job as they watch the news, Mr. Smith begins to tell them more about his job and also involves them more at the fire station. His stepsons and 13-year-old son have spent the night at the fire station and accompanied him on ride-outs, in which they respond to scenes with him in the fire truck. He also discusses the activities of his shifts more with the older children in the family when he comes home from work.

Trauma-related themes. Over his 30 years as a firefighter, Mr. Smith has noticed the trauma he sees on the job affect him in various ways. He discussed themes relating to the changes he has seen in himself as a result of being exposed to traumatic situation and the coping strategies he has developed to deal with his career in a healthy manner.

Subtle changes. Mr. Smith stated that he has realized in his later years of being a firefighter that he has been slowly affected by the trauma he has witnessed and stress he has experienced on the job. He described this change, saying, “The change is so subtle. It’s kind of like a weight that’s just slowly pressing down on you. You get that shoulder slumped down. It’s like another ounce everyday getting on you.” He stated that part of the subtle change he has experienced in addition to the mounting pressure from the stress of the job is also slowly becoming “desensitized” by the job. He stated that as he has become more desensitized, he is less emotionally affected by traumatic calls and has seen himself develop an “uncaring” attitude at times. Injuries and deaths on and off the job are less concerning to him.

Recognizing a problem. Mr. Smith discussed the importance of accepting that he was being negatively affected by his work as a firefighter, describing it as “realizing to yourself that I’m going through some things and it is affecting me.” He stated that this was an important step to changing the way he was coping with work stress.

Behavior after tough calls. Although for many years Mr. Smith did not believe he acted differently following difficult calls, as he began to communicate with his wife she pointed out times when he would act “grumpier” or be more withdrawn following tough calls, such as calls involving children. He said, “You know at first my wife used to tell me I was different. And I said no, I didn’t believe her. But then I started to think about it, and I guess I did.” This was an example of the important feedback and insight Mr. Smith has gained by communicating more with his wife regarding the stressors of his job.

Calls involving children. Mr. Smith stated that calls involving the death or injury of a child are the most difficult for him to cope with. “If a kid gets hurt or somebody hurts a kid, I do have trouble. I don’t ever get really upset emotionally, but when I see something happened to a kid ... I feel it inside.” Despite his outward expression of emotion, Mr. Smith stated that he continues to think longer afterward about calls involving children than those with adults and that he often needs additional support following these calls. He recalled that the first call he ever spoke to his wife about involved a two-year-old child who had been stabbed. He stated, “That one probably affected me more, that’s why I told her.”

Following calls that involve children, Mr. Smith related that he is eager to talk to his wife and check on her wellbeing and particularly that of his son. He stated that he will often call home to tell Peter he loves him during a shift that there has been a scene involving a child. Once he returns home following a child call he has a special routine with his son. He stated, “We kind of have a little routine where we wrestle around. I won’t tell him what happened, but I will give him a kiss and stuff like that.” Calls involving children make him more appreciative of his son and thankful for his wellbeing.

Coping strategies. In addition to beginning to utilize his wife and family as support, Mr. Smith described a number of coping strategies. He described maintaining emotional distance from the scenes he responds to, stating that he does not typically have an emotional reaction, except for calls involving children, to which he often does have a silent emotional reaction. On a typical scene he described his duties: “take a step back and making sure they are being safe, make sure that everything we bring in is taken out. So I try to keep a step back from the situation. I think that helps me now also, so I don’t

actually get drawn into the situation.” He stated that this allows him to maintain an even temper and “a calm demeanor” on scene. Mr. Smith also described using humor, discussing the example of a particularly gruesome call, “I mean it’s tragic, but it’s kind of funny, [my partner and I] were kind of laughing.”

Healthy cognitions. Mr. Smith related several cognitive strategies that help him to maintain emotional distance from calls. He stated that he has “always had the attitude that people are going to die every day. Simple as that.” He maintains a realistic view about his ability to save people and the fact that he will respond to calls in which people die, regardless of the help provided. Mr. Smith also stated that one strategy is “realizing that it wasn’t me” who caused the accident. He considers the situation and in many cases believes that “people bring certain things on themselves,” such as individuals who die in drug-related accidents. In the case of a death of an older adult, he thinks, “hopefully they lived a good lifestyle. Lived a good life.” These cognitions help to maintain a realistic perspective on the limits of a firefighter’s responsibility during calls involving death.

Mrs. Smith’s Experience

Marriage themes. Themes related to the couple’s marital problems due to the job and their dedication to learning to communicate and improve the marriage emerged.

Marital problems due to the job. Mrs. Smith openly discussed the marital problems the couple had experienced during the fifth through tenth years of their marriage. She attributes these marital problems to the stress that her husband experienced on the job during the time that he was stationed on the ambulance, stating, “I think it was the job, I really think it was the job.” She said, “We pretty much just went through the motions of being in the same house. Like totally distant, because he had such

a short temper. Until I just wanted calmness. You can say, just give him calmness, because I think he was just dealing with too much stress.” Mrs. Smith described her husband as being “grumpy,” irritable, and easily frustrated during the time that he was stationed on the ambulance. She stated that the marriage improved significantly once Mr. Smith was taken off the ambulance and when Mrs. Smith decided to work to improve the marriage by increasing communication between the couple.

Communication. After five years of living in a tense marriage, Mrs. Smith “decided that it wasn’t fair to me to live that way, and so we started talking about it a whole lot more.” To learn about communication techniques, Mrs. Smith went on the Internet and researched strategies to improve communication. The couple utilized several different techniques that Mrs. Smith found online and began to incorporate these into their daily routine, including giving each other one compliment per day. They also began to talk about areas of concern for each spouse, including finances, feelings of insecurity, and traumatic scenes Mr. Smith sees on the job. An area of concern for Mrs. Smith was infidelity, as the couple spent 24 hours apart every third day and had no way of verifying each other’s activities during this time. Mrs. Smith described the positive effect that increasing communication had for the couple’s relationship. She stated that since the couple began working to improve communication during their tenth year of marriage, the relationship is “a whole lot better, a whole lot better. We confide in each other when something is going on with us. I got him to open up and start talking.” By opening the lines of communication between the couple, an increased sense of trust has developed, which has reduced Mrs. Smith’s concerns about infidelity and provided her a sense of confidence in the marriage.

Job themes. Mrs. Smith related themes regarding her husband's career as a firefighter including his health problems due to stress and the subsequent relief he found for these problems. She also expressed empathy for the stressful nature of his work and explored the aspects of his job she values.

Improved Health. As Mr. Smith had described, Mrs. Smith also discussed her husband's health problems, which she considered occurring secondary to stress he experienced while riding the ambulance. She stated that during the years he rode the ambulance he developed sleep apnea, high blood pressure, and Bell's Palsy. When he developed Bell's Palsy, the fire department decided to reassign him to a fire truck. Mrs. Smith stated that shortly after he stopped working on the ambulance, these health problems resolved and he began to experience improved sleep. She also stated that his mood improved at home, which helped improve the couple's relationship, in addition to the increased communication.

Empathy for the firefighter. Mrs. Smith expressed empathy for the stressful work environment her husband is exposed to every third day. She described this, stating,

You're not dealing with happy, fine people who just want to see you and shake your hand and tell you 'good job.' You are dealing with the ones who are freaking out because their kid just had a wreck and they are yelling and screaming at you like it's your fault! It's got to be stressful!

In addition to the stressful environment of the job, Mrs. Smith discussed the traumatic scenes her husband was exposed to, particularly when he was working in a very impoverished part of the city, noting that "he saw people getting shot and babies drowning and you know a lot of graphic stuff no ordinary person should see on a daily

basis.” Mrs. Smith recognized these work conditions as challenging for her husband and empathized with him regarding the tough calls he responded to.

Aspects of the job she values. Although Mr. Smith has struggled to cope with the stress of the job at various points in his career, which has negatively affected his home life, Mrs. Smith conveyed a positive attitude toward his career as a firefighter. She stated, “So many good things. You know he’s out there saving lives, helping people. He has so many titles in my eyes.” Mrs. Smith discussed her admiration for her husband due to the selfless nature of his work and the charity work the fire department is involved with each year.

Parenting themes. Themes regarding parenting were identified, including the children’s adjustment to shift work, Mr. and Mrs. Smith’s allocation of parenting duties, and protecting the children from the potential dangers of the job.

Accustomed to shift work. Mrs. Smith stated that her children are accustomed to her husband being away from the home every third day. Each day begins with her son checking in with her about whether his father is at home or at work that day. She stated that once her son knows if Mr. Smith is working, then he is able to know who will care for him that day, as the couple shares childcare responsibilities based on the shift schedule.

Sharing responsibilities. Mrs. Smith described the couple’s routine for childcare when her husband is working a shift schedule. She stated that while Mr. Smith is away from the home at the fire station she is responsible for all the household and childcare duties. Once Mr. Smith returns home from the fire station, he helps with cooking,

cleaning, and caring for the couple's son, and Mrs. Smith is able to take a break from these duties.

Discipline. The couple also shares discipline duties, and Mrs. Smith stated that each spouse is "viewed as an authority figure" by the children in the home. Discipline of the children is a topic about which the couple has increased communication. This has improved the consistency of discipline in the household and reduced stress between the couple regarding discipline.

Dangers of the job. Mrs. Smith discussed her desire to balance talking about the reality of the dangers of the job with protecting her children from unnecessary worry about Mr. Smith. She stated that she talks about the safety precautions Mr. Smith takes at work with the children, in order to ease their worry. The family also prays for Mr. Smith's safety each Sunday at church. Mrs. Smith stated that the media is a source of information for the children regarding the dangers of Mr. Smith's job, and that the children understand more as they age and she is more open with the children as they get older.

Trauma-related themes. Mrs. Smith expressed themes related to her husband's behavior after tough calls, the challenging nature of calls involving children, as well as the couple's increased communication about the difficult scenes he responds to at work.

Behavior after tough calls. Mrs. Smith stated that she was able to tell whether her husband responded to a difficult call, based on his behavior during and after the shift. She reported that Mr. Smith talked more about challenging calls than about unremarkable calls and that he will also talk about challenging calls for a longer period of time

following the call. In the past, Mr. Smith has experienced poor sleep following a traumatic call and will check on the children during the night.

Child calls are the toughest. Mrs. Smith stated that calls involving the death or injury of a child were the toughest for Mr. Smith to deal with once he was home. While Mr. Smith was on shift at the fire station he would call home to check on the couple's son, which cued Mrs. Smith that he had responded to a particularly difficult call involving a child.

Communication about calls. Mrs. Smith described the increased communication the couple has worked to achieve, including increasing communication about the stressful, potentially traumatic calls Mr. Smith responded to on the job. Although Mr. Smith does not provide graphic details, talking about the calls is beneficial for both partners, as it helps Mrs. Smith feel involved in his life and provided Mr. Smith with support.

The Smith Children's Experience

Mr. and Mrs. Smith's 13-year-old son, Peter, participated in an individual interview, as did the couple's granddaughter, 7-year-old Jenny. Although Jenny is younger than the age of children recruited to participate, Mr. Smith asked if I could talk to her also since, "It would kill her to not talk to the new person in the house." I gladly interviewed Jenny, who was eager to participate, and contributed valuable information to the study, including echoing Maddie Julian's statement that the best part of having a granddad that is a firefighter was that he could help the family in the event of an accident or fire.

Positive view of firefighting job. Mr. and Mrs. Smith's son Peter, and their older granddaughter, Jenny, both expressed positive impressions of Mr. Smith's job as a firefighter. When asked about her thoughts regarding his job, Jenny exclaimed, "Cool!" Both children cited his ability to save lives as a positive aspect of the job, including his ability to save their lives if there were an accident. Jenny stated, "If we ever have a fire, we have a firefighter!" Peter cited time that Mr. Smith is able to spend with the family as a benefit of his firefighting job. Peter also expressed his pride in his father, and the pride that the entire family feels, stating, "I'm pretty sure he's proud of himself. His dad is proud of him, and I'm proud of him."

Dangers of the job. Both children expressed awareness of the dangers of firefighting. When Jenny stated that she did not want to be a firefighter when she grew up, she cited the dangers of the job, saying, "Because a lot of firefighters die whenever they get caught in a fire." Peter said that the more he thinks about the risks of the job, the more upsetting it is; however, he strives to avoid these thoughts and focus on more positive thoughts. He stated, "If I think about it hard, it is really scary. But I think he will come home the same person he was yesterday." He stated that this type of positive thoughts minimizes the risk he worries about or "keeps it something that doesn't make me feel bad." Peter also stated that he views his father as brave, since he "actually works up the nerve and will to go there every day. To risk the fact of he might get into something terrible, but he will do it anyway."

Knowledge of the job. Both children stated that they frequently discuss Mr. Smith's job with him, including talking about calls he responds to as well as the challenges of the job and how Mr. Smith copes with these challenges. Peter stated, "He

tells me it is a difficult job, but when it gets down to it, he can get things done. And if you don't think about it too much, you can relax." Jenny, the younger of the participating children, feels that she is fully informed about her grandfather's job, saying, "He tells me everything, like what he does and things like that." The children also discussed their positive experiences visiting the fire station where Mr. Smith worked and riding on the fire truck with him. Their experiences talking to Mr. Smith about his job and visiting the station have helped the Smith children feel involved and informed about their father/grandfather's job as a firefighter.

Home environment. The Smith children cited several differences within the home when their father/grandfather is at work, rather than at home. Peter stated that he is sometimes left alone after school when both his parents are at work, which is not as much fun as when the family is home. Jenny stated that she notices differences in her little sister's behavior, as she is more active and rambunctious with Mr. Smith at home. Jenny said, "When he's here she yells and screams at him. She plays around! But when he isn't here she doesn't do that." Both children expressed a preference for the time when Mr. Smith is home and spending time with the family. Jenny stated that she feels safer in the home when her grandfather is home. The children also cited the drawback of the firefighting job as the times when Mr. Smith must miss a family or school activity because he is on shift.

The Jones Family

Walking into the Jones family's immaculate house, it is apparent that the neat appearance was not hastily created for company, but that this home is neat and orderly on a daily basis. There were no piles of papers or mail, yet to be attended to. No closets

with a shoelace or sock sticking out. I quickly assumed that this was an organized, tidy family. My assumption was confirmed by both Mr. and Mrs. Jones who spoke of Mr. Jones's desire to feel in control of his home, which meant keeping it clean and organized. None of the children were home when I arrived, and the house was absolutely quiet and still. As the children arrived home from school during my interview with Mr. Jones, they quietly and respectfully went to the basement while I continued to meet with their father. The look on Mr. Jones's face when his daughter arrived home was one that can only be described by the word *joy*. A quick smile and glance conveyed the close relationship between the two that his wife spoke of during our interview.

Ben, 42 years old, and Samantha, 39 years old, have been married for 19 years and have three children, 16-year-old Tom, 13-year-old Jessica, and 10-year-old Ben. The family lives in a medium sized town in a Rocky Mountain state. Mr. Jones has worked as a full time paramedic and firefighter for 19 years. He was previously employed by the private ambulance service in his town, and currently works for the fire department, where he has been employed for 15 years. Mr. Jones completed his associate's degree and certification as an emergency medical technician, and Mrs. Jones also has an associate's degree. She works part-time as a substitute teacher and made the choice to stop working full-time when the couple's first child was born. The couple is Caucasian.

Mr. Jones's Experience

Job themes. Mr. Jones related a number of themes related to his job as a firefighter including the reason he became a firefighter, the aspects of the job he values, the benefits of shift work, the challenging nature of the ambulance, the sense of readiness

he feels at work, and how the job has become easier over the years. Mr. Jones also discussed the difference between working as a firefighter in a city versus a small town.

Becoming a firefighter. Mr. Jones stated that he had been interested in becoming a firefighter since he was a child and from a young age noticed a desire to help when passing accident scenes. Speaking with a friend whose father was a firefighter provided him with the information and encouragement to begin paramedic school and pursue firefighting as a career.

Aspects of the job he values. Mr. Jones stated that he values the stability of his job as a firefighter, as well as being employed in the field he studied in school. Mr. Jones also values the camaraderie with the other firefighters at the department and the sense of accomplishment he feels when helping others.

Pros of shift work. Mr. Jones spoke favorably about the shift work schedule, reporting that the predictable schedule makes it easy for the family to plan ahead for vacations and other events, which means that there are “no surprises” when it comes to their schedule.

Challenging nature of the ambulance. Mr. Jones reported that he felt more fatigued and exhausted when he was working for the ambulance service in his current town. He stated that this job was more stressful, as they received a higher volume of calls and more calls over night.

Sense of readiness. While the ambulance was more stressful to work on, Mr. Jones reported a constant sense of readiness when he is at work. He stated that he gets poorer sleep at work, as he is “always aware” that the alarm for a call could go off at any minute. He stated that, for new firefighters, this is one challenging aspect of the job, as

firefighters must be ready to experience boredom between calls and immediately transition to being aware and alert to respond to a call. He described this, stating, “There is a lot of boredom when you are not running calls, so you got to be mentally able to deal with a lot of downtime and go a whole day without doing a darn thing and then suddenly get called out. Wake up and perk up and go to work.”

Easier with time. Mr. Jones stated that firefighting gets easier over time, as the firefighter gains more experience. He described having a stronger emotional reaction during the beginning years of firefighting and experiencing more excitement when receiving a call. He stated that, as he gained more experience he was better able to handle the rush of excitement when a call came in and learned to “approach it like a job.”

Small town vs. city. Mr. Jones stated that he believes there are several important differences between being a firefighter in a large city rather than in a small town. He compared his current job with his internship in a large U.S. city and stated that working in a smaller town is probably a less stressful job for the firefighter. He cited the increased volume of calls and more violent or traumatic calls as stressors in cities. Given the increased stress, Mr. Jones hypothesized that firefighters in large cities might be more prone to getting “burned out quicker.”

Changes since working as a firefighter. Since becoming a firefighter, Mr. Jones has noticed several changes in himself, describing himself as “more cynical about the way you view life.” He stated that the calls he responds to at work have affected his worldview, and given him increased exposure to others’ experiences, stating, “You know, you see the reality in life sometimes.”

Mr. Jones also reported that he has noticed himself becoming “less emotional” or “emotionally detached” from situations in his daily life. As an example, he stated, “You know little minor problems or accidents and injuries that happen around the home. Some people really overreact on things. I tend to be the one that doesn’t react much.” He stated that other people often view this as a negative characteristic, while he sees it as part of being a firefighter, because part of his job is not to overreact to emergency situations.

Chaos. Mr. Jones stated that he often feels that he has little control on the job, such as control over the calls he receives and responds to, and what happens during these calls. He described many calls as “chaotic,” which can be stressful.

Family and marriage themes. Themes emerged related to the way in which Mr. Jones’s career has impacted his family life, including his desire to have control, tendency to be overprotective, transitioning home after being on shift, and the positive impact his job has had on his family life.

Controlling chaos. Due to the chaotic calls he responds to on the job, Mr. Jones stated that this causes him to seek control at home, as he wants to “make more of an effort that that kind of thing doesn’t happen here.” He described himself as “a little anal retentive when it comes to things at home.” His desire for control and a calm environment at home leads him to be particular about the physical appearance of his home, as well as the activities of his loved ones.

Overprotective. In addition to keeping his home calm and orderly, Mr. Jones also wants to ensure that none of the accidents he has responded to occur in his home. He stated, “I’m very safety conscious and that’s absolutely based on what I see at work. I’m

very safety conscious, maybe a little too protective sometimes.” Mr. Jones strives to create a safe, peaceful environment at his home, as he has seen the consequences of a situation getting out of control when responding to calls on the job.

Transition to home. Mr. Jones stated that he has never noticed himself having a problem when transitioning back into the home after being on shift. He stated that the formal shift-change at work allows him to let go of his responsibility and “hand off the reins to the next guy. Say ‘See you later.’” He expressed his eagerness for coming home, stating “I love coming home; very relaxing to come home.” Mr. Jones stated that as he comes home he no longer experiences the constant sense of “readiness” that he experiences at work, and is therefore able to enjoy his time home with his family.

No negatives. Mr. Jones reported very few negative aspects of his work as a firefighter, outside of his time working on the ambulance. He stated that he is able to naturally separate his work-life from his home-life and this has prevented his job from having any negative effects at home. He stated, “I’ve never really had that problem, where it keeps me up at night or has any ill effect at home or on my health or anything.”

All we know. Shift work is the only schedule his family has known, since Mr. Jones has worked as a firefighter/paramedic since he was married. He stated that because this is the only schedule the family has had, it has been easy for the family to live by the shift schedule. He said, “That’s just how it is, as far as the schedule and the hours and what I do.” He did admit that the shift schedule was likely a bigger challenge for his wife, as he is the spouse out of the house for 24 hours, while she remains with the children and maintains the family’s routine.

Parenting themes. Themes related to parenting included the benefits of shift work, maintaining communication with his children while at work, and his hesitation to discuss the potential dangers of the job with his children.

Shift work allows time. Mr. Jones discussed the benefit he has experienced while working shift work, as he has been able to spend frequent, extended periods of time with his family. He described this stating, “I think, almost ironically, I have more time at home really.” He expressed his preference for his current shift work schedule, rather than a traditional 9:00am to 5:00pm schedule, as he would not get to spend as much quality time with his family as he does currently.

Constant communication. When Mr. Jones is on shift at the fire station, he continues to keep in contact with his family through several phone calls home. He stated, “Everyone knows where I work, and they contact me, call me, or do whatever.” His family will also visit the fire station while he is working, which serves as another form of keeping in contact while he is on shift.

Dangers of the job. Mr. Jones stated that he has never discussed the potential dangers of his job with his children. He stated, that while the children are likely aware of some element of danger, he is not sure what they know. He stated that he has not been focused on helping them understand the dangers of the job, since “to me, it is really no more dangerous than any job. I mean anyone who works can be killed doing just about anything.” Since the firefighter is not concerned with the threat of injury or death during his job, he sees little reason to discuss these risks with his children.

Trauma-related themes. Themes related to the potentially psychologically traumatic calls Mr. Jones responds to included: his ability to cope with trauma through

strategies such as creating emotional distance, maintaining healthy cognitions, and analyzing calls, and the challenging nature of calls involving children.

Coping with traumatic exposure. Mr. Jones described himself as someone who has been able to “deal with” the exposure to traumatic scenes on the job. He stated that he makes a “conscious effort” not to let these scenes negatively impact his home life. He described a number of coping strategies, including maintaining emotional distance at work, maintaining balanced cognitions, and taking care of himself off the job.

Creating emotional distance. Mr. Jones stated that he has been able to maintain emotional distance from the scenes he witnesses at work, which helps him to cope well with traumatic calls. He stated, “I’m pretty good at detaching myself emotionally from what I see and do at work and what happens at home.” In order to maintain emotional distance at work, Mr. Jones uses a number of coping cognitions on the job and following traumatic calls.

Coping cognitions. Mr. Jones stated that he consciously reminds himself that he is at a traumatic scene because “It’s my job” to be there. He also thinks thoughts such as “I didn’t cause the call. It’s not my fault,” and “It’s their emergency, not mine.” He stated he relies on his training to maintain emotional distance in order to continue to perform his job in stressful situations. He stated, “When I look at it as a job, and it’s not my fault things are occurring the way they are occurring, it just doesn’t bother me. And it really doesn’t.” Mr. Jones’s coping cognitions help him avoid developing an unnecessary and incorrect sense of responsibility when responding to calls, which allows him to maintain emotional distance, and in turn, his own emotional health, as he is not being affected on an emotional level by most traumatic calls.

Analyzing calls. Mr. Jones also related his tendency to analyze his response to calls, as he will question if he could have done more to prevent the outcome. He stated that a negative outcome of a call “makes you go back through the call and make sure you did everything you could.” He stated that the risk of feeling as if he made a mistake or did not do everything he could have makes it important to “understand that you did do everything you can” during the call.

Calls involving children. Calls involving serious injury to or the death of children are the most difficult for Mr. Jones to cope with. He stated that these calls are particularly difficult because of “the whole unfairness of the situations,” which causes him to ask himself “Why?” following the call. He stated that he has an emotional reaction to calls involving children, particularly when he sees the family react to the death. He stated, “You’re in the ER when the family comes in and gets the news, and it’s difficult to see. You know, sad.” Calls involving children are the only type of call to which Mr. Jones related having an emotional response.

Mrs. Jones’s Experience

Job themes. Mrs. Jones discussed themes related to her husband’s job as a firefighter, including the family’s routine when coming home after a shift and staying in touch with her husband while he is on shift by visiting him at the station. Themes regarding the aspects of the job she values, the challenges she observed while her husband worked on them ambulance, and benefits of working for the fire department are also explored.

The routine. Following a shift at the fire station, Mrs. Jones stated that the family has a “little morning routine” as Mr. Jones returns home. She stated that his routine

involves coming in and putting away his lunch box, taking off his uniform, and having breakfast with her or the children if they are not at school. She stated that the most crucial piece of this routine is for Mr. Jones to change out of his uniform, as “he can’t stand to be in his uniform when he’s not at work. So that’s the first thing he changes.” Mrs. Jones reported that the family’s morning routine was “easier” when the children were young and not in school. However, now that the children attend three different schools, mornings are “just craziness!”

Another aspect of her husband’s routine when getting off shift is coming home and discussing calls that happened on the previous shift. Mrs. Jones stated that she or one of the children will often ask him about any interesting calls he responded to, and he will discuss them with the family. She also stated that Mr. Jones’s extended family, such as his parents and siblings, ask to hear about any “crazy calls” to which he has responded.

Visiting the station. Mrs. Jones stated that the family regularly visits the station while Mr. Jones is on shift. She stated that the station is not far from the house, so on summer days or on Sundays she and the children will walk the dog up to visit Mr. Jones. She expressed her appreciation that “families are always welcome to say hi to him.” The practice of visiting the fire station began when the couple’s children were very young and had more trouble adjusting to their father being gone for 24 hours at a time. To reduce the stress of Mr. Jones being out of the house, the family began visiting the station during his shifts, which made his absence less disruptive for the children.

Values about the job. Mrs. Jones stated that she values her husband’s discipline and dedication to being good at his job. She also values his pride for being a firefighter.

Challenges of working on the ambulance. Mrs. Jones discussed the more challenging aspects of working on the ambulance. She stated that the higher call volume and little sleep that her husband got while working full time on the ambulance contributed to him being grumpier at home, as he was constantly exhausted. Mr. Jones was working for the ambulance company when the couple's children were very young, and Mrs. Jones states that this was a "very stressful" time in their family.

Pros of working at the fire department. As working on the ambulance was causing too much stress within the family, Mr. Jones went to work for the local fire department. Mrs. Jones cited a number of positive aspects of her husband's current job including the predictable schedule, few overtime hours, and the flexibility to swap shifts in order to be with the family for important events. She also stated that his job as a firefighter has been a stable job and she sees the shift schedule as a positive thing for their family.

Benefits outweigh the negatives. Mrs. Jones stated that the benefits of the shift work schedule, including her husband being able to spend significant amounts of time with the family and being able to share housework and parenting responsibilities, outweigh any negatives of this schedule.

Family and marriage themes. Themes emerged related to family and marriage, which included the couple's shared duties around the house, time the couple spends together, Mr. Jones's desire for control of his environment, as well as flexibility and communication.

Helping around the house. Mrs. Jones discussed the couple's sharing of domestic responsibilities. As Mr. Jones is home for extended periods of time, during his

48 hours off, he is able to help out around the house, which Mrs. Jones appreciates. She stated that for a brief period during training, Mr. Jones worked a traditional schedule, and it was very stressful for her because she became responsible for a greater share of the parenting and household duties.

Time together. In addition to Mr. Jones helping with chores around the house, Mrs. Jones cited the amount of time the couple is able to spend together as a benefit of the shift work schedule. She stated that she believes the couple's relationship is better because of the amount of time they have together when the firefighter is off-shift. She stated that they like to spend time together and on Mr. Jones's days off the couple will go shopping together and eat lunch together. She stated that this was a significant benefit of the shift schedule, for which she is grateful.

Controlling the home. Mrs. Jones reported that over the 19-years her husband has been a firefighter, she has noticed him become increasingly controlling of the family's home environment, such as the cleanliness of the house or the physical condition of their property. She attributed this controlling nature to her husband's sense of being out of control at the job, as he encounters chaotic situations regularly. She described this, stating, "When he's on his job he can't control a lot of stuff, and they'll go into a lot of homes where it's just really nasty. And just a lot of weird calls where they'll go to a house at 2:00am and there are kids running around and crying, stuff like that. And when he comes home I think he feels this is the only place he can control. So he will be very particular." Mrs. Jones stated that her husband was aware of this tendency, and she will often remind him that she has had other important things to focus on, rather than "getting to that ding in the wall."

Flexibility and communication. Mrs. Jones stated that flexibility and communication are the two most important features of her marriage and that these factors have contributed to the family's success and happiness while her husband has been a firefighter. She stated that particularly when her children were little, she had to be flexible as she worked to combine her husband's shift schedule with the routines of the children. Mrs. Jones also discussed the couple's use of communication to ensure a steady, consistent schedule in the house, which helps the children as well as the couple to know what to expect at home.

Parenting themes. Mrs. Jones related themes including protecting her children from the dangers of their father's job, the influence of the media on their perception of firefighting, how shift work affects parenting roles, and her husband's use of emergency calls as teaching tools for the kids.

Dangers of the job. Mrs. Jones stated that she and her husband have not talked to the children about the potential dangers of her husband's job. She stated that, "I would not want to burden them with that." Mr. and Mrs. Jones have openly discussed the dangers of the job with each other and "have a plan" in case Mr. Jones were harmed at work. However, the couple does not discuss the dangers with their children, and Mrs. Jones stated that she does not believe the children are worried or fearful about their father being hurt.

Influence of the media. Mrs. Jones discussed the influence of the media as a source of knowledge about the dangers of firefighting. She stated that the family recently watched a documentary about the events of September 11, 2001, which she believed might have caused her youngest son to become aware of some dangers he was not

previously aware of. She stated that she intends to discuss this documentary with the children, in case it did cause them to become fearful of their father's safety.

Explaining the shift. When Mrs. Jones's children were young, she had more difficulty explaining the shift schedule to them and helping them understand that their father would be gone for a day. When her children were young she would notice changes in their behavior when their father was gone. She stated that "my oldest son would start acting up, and it was because Dad wasn't here." As the children have gotten older, they have grown accustomed to the shift schedule and are able to understand when and for how long their dad will be out of the home. Mrs. Jones expressed appreciation for the predictability of the shift schedule and stated that at their current ages, the children know the schedule and when to expect their father to be at work or home.

The important things. The predictability of the shift schedule also lets the children and spouse know when Mr. Jones will be home for important events, such as birthdays or school plays. This set schedule also allows Mr. Jones to take a vacation day, when he is able, to be home for these events. Mrs. Jones stated that the children are "very understanding" of the fact that he cannot always take off of work for important events, but he tries his best to be there.

Mom is the steady parent. Mrs. Jones stated that although her husband may be away from the house for extended periods of time or might miss an occasional sporting event or school concert, "Mom will be there. It's a given!" Her steady presence has given the children a strong sense of stability in their family life. She stated, "I was the constant in their family, and he's like the bonus one." She described the children's

excitement when both of their parents are able to attend events or be home for their birthdays or holidays.

Difficult transitions. Mrs. Jones stated that the most challenging time for husband to reenter the home was when the children were infants. She stated that she had a schedule with the children when they were young, which helped the household run smoothly; however, when Mr. Jones would return after being gone for 24 hours, “It throws it off.” She described the tendency for her children’s enthusiasm at their father’s return to throw off the schedule. Mrs. Jones described the importance of increasing her flexibility at this time, and not being as regimented about the schedule, as it was bound to change as her husband left the home and returned.

Teaching tool. Mrs. Jones stated that her husband uses calls he has responded to as educational tools for the children, particularly to educate their oldest son, who recently started driving, about the dangers of driving. She stated that Mr. Jones will discuss drunk driving calls with their son to increase his awareness of the danger of this behavior.

Shift work themes. Themes including Mrs. Jones’s struggle to become comfortable with her husband away for 24 hours and her increased comfort when he is home were explored.

Challenging transition. Although Mrs. Jones currently spoke positively about the shift work schedule, she did acknowledge a period of transition to the schedule at the beginning of the couple’s marriage. She stated it was “really hard to stay by myself at night, to get used to it.” She stated that she noticed her husband being away at night was more challenging during significant periods of change in the couple’s life, such as when she was pregnant or when they had recently moved into a new house.

Aware of danger. Mrs. Jones stated that she is more aware of potential dangers when her husband is at work. She stated that she role plays in her mind what she would do if an intruder were to enter the house and also has a habit of checking and rechecking the doors to make sure they are locked.

Able to relax. When her husband is home, Mrs. Jones stated that she is much more relaxed than when he is at work. She attributed this to knowing that “he will take care of everything.” She does not have the heightened sense of danger and is able to be more comfortable in the family home when Mr. Jones is there.

Trauma themes. Mrs. Jones discussed the potentially traumatic calls her husband responds to at work and related themes including: the challenging nature of calls involving children, her husband’s strategies for coping with trauma, her role in helping him cope, empathy she feels for the firefighter, and her observation that he has become “desensitized” because of the trauma he has seen.

Children’s calls the toughest. Mrs. Jones stated that the most challenging calls for her husband are “anytime kids are involved.” She believes that these calls are more likely to bother him as they are more personal, since he has children and is more likely to think “What if that was my kid?” While she stated he has never been “traumatized by it,” she is able to see that calls involving children affect him more deeply than other calls.

Emotional separation. Overall, Mrs. Jones described her husband as able to “separate himself from the situations” he encounters on the job. She stated that he does not become “emotionally caught up” in calls he responds to.

Talking about it. In the event that Mr. Jones is bothered by a call he responded to, Mrs. Jones stated that he will talk about this call with her. She stated that she has

often been a source of support for her husband as he has spoken with her about challenging calls.

Behavior after tough calls. Mrs. Jones stated that she has noticed differences in Mr. Jones's behavior following tough calls. She stated that he will talk about more traumatic calls repeatedly, whereas he will likely only mention routine calls once. She has also seen him reading obituaries following calls that involve a fatality.

Too much detail. As Mr. Jones is in the habit of discussing calls he responds to with his family, he will sometimes go into more detail than the family wants to hear. She stated that her oldest son "doesn't do good with blood and guts," so if the family is uncomfortable with the information the firefighter is sharing, they will ask him to leave out the more gruesome details.

Desensitized. Mrs. Jones stated that she has noticed her husband become "desensitized" to traumatic or upsetting events because he is a firefighter. She stated, "They do become desensitized. Because he sees too many and puts up with so many things." Mrs. Jones will point this out to her husband when she notices him having what she considers to be a desensitized reaction to a situation.

Empathy for the firefighter. Mrs. Jones expressed empathy for the challenging calls her husband has to respond to as a part of his job. She stated, "There are sad calls. You know young people, young parents, or kids." Mrs. Jones discussed how she has learned more about what her husband does at work, which has increased her empathy for him and her understanding of why he might be tired after work or need to talk to her about his previous shift.

The Jones Children's Experience

The Jones children chose to interview separately, without a parent present. The three children had trickled in from school, and I took turns meeting with 16-year-old Tom, 13-year-old Jessica, and eventually 10-year-old Ben, once he returned home from football practice. The Jones children related themes regarding the benefits of having a father who is a firefighter, the constant communication they keep with their father, hearing about their father's emergency calls, being accustomed to the shift schedule, the disadvantages of shift work, and their desire to possibly be a firefighter when they grow up.

Benefits of firefighting. The Jones children spoke positively of their father's job as a firefighter, citing his days off as a benefit of the job, since he gets to spend time with the children. Ben stated that his dad's ability to provide a nice living for the family is also a benefit of the job. Meanwhile, Jessica stated that being able to visit the station was a "cool" aspect of having a father that is a firefighter.

Constant communication. The children stated that even though their father is out of the house for 24 out of every 72 hours, they maintain communication with him on the job. Jessica stated that her father typically calls at night and talks with the children before they go to bed, which makes her happy.

Talking about calls. Mr. Jones will often talk about calls with the children, and while Jessica said, "It's gross" to hear about some calls, she and her brothers expressed interest in hearing about their father's work. The children emphasized their knowledge of the "weird" calls. Ben stated that the weirdest call his dad has been on "was a lady

falling off her bed at the nursing home and not being able to get back up.” Ben also stated that his father “tells us all the calls he has been on” when he returns from a shift.

Used to it. The Jones children stated that they do not notice a difference in the home when their father is gone. They discussed the fact that their father has worked as a firefighter their entire lives, which has made them “used to it.”

Negatives of shift work. The children cited their father’s absence on holidays or weekends as a negative aspect of having a father who is a firefighter. Jessica stated that her father has missed some of her orchestra recitals, which has made her feel “sad;” however, she expressed awareness that sometimes he will be able to get off work, but sometimes his schedule cannot be “flexible.”

Considering firefighting. The Jones’s youngest son, Ben, stated that he wants to be a firefighter when he grows up. When asked why he would like to be a firefighter, Ben stated, “Because that is what my dad is and that is what I want to be.” He also stated that he thinks it would be “cool” to go on calls responding to fires.

The Robertson Family

The first members of the Robertson family to meet me were two eager Brittany spaniels standing up against the glass of the front door, having sensed the approaching visitor. I was quickly welcomed into the home by the dogs, Mrs. Robertson and the children. Mr. Robertson greeted me after Mrs. Robertson and the children, as he was busy painting a hallway. The Robertson’s live on the outskirts of a medium-size town in the Rocky Mountain region. The lot sizes increase as you drive to their house, and neighbors have outbuildings that are sure to house chickens or horses. Mrs. Robertson’s parents as well as her sister and her family live in the neighborhood. The Robertson’s home has a large,

open floor plan, but felt cozy – decorated with mementos from hunting trips and family pictures.

Mr. and Mrs. Robertson have been married for 19 years. Mr. Robertson has been a firefighter for 17 years at the local department. He has a bachelor's degree in education and worked at an area residential treatment center, prior to changing careers and joining the fire department. Mr. Robertson worked a shift work schedule for approximately 16 years of his time at the fire department. He was recently promoted to an administrative position and has since worked a traditional 8:00 am to 5:00 pm schedule. Mrs. Robertson has a bachelor's degree and works full-time at an area non-profit agency. The couple has two children, a son, 13-year-old Jack, and a daughter, 17-year-old Heather. The family is Caucasian.

Mr. Robertson's Experience

Job-related themes. Mr. Robertson related several themes regarding his experience as a firefighter, including: his reason for becoming a firefighter, the aspects of the job he values, pros and cons of shift work and of the job, and also the need for firefighters to maintain mental and physical health, and reasons for reluctance regarding professional mental health services.

Becoming a firefighter. Mr. Robertson had enjoyed his previous career at the residential treatment center, but he wanted a more exciting job. He recalled that becoming a firefighter had been a childhood fantasy, saying that “every little boy wants to be a fireman.”

Aspects he values. Mr. Robertson described the aspects of his career that he values most, beginning with the camaraderie he shares with his fellow firefighters. To

Mr. Robertson the fire department is “just like a family,” and he concluded that “the best part is, it’s just such good people to work with.” Mr. Robertson described firefighting as “an honorable profession,” and also stated that he “thrives on that adrenaline” that is stimulated by responding to calls. An important aspect that he also values is being able to help people in need, reflecting that one of the best parts of the job was “knowing every day that you can help somebody.” He continued, saying “Every time we go on a call we are going because they want us to be there. And that is your opportunity to make somebody’s day a little better than it had been.” He spoke positively of his 17-year career as a firefighter, emphasizing that “I have just been thankful every day, for 17 years.”

Frustrations of the job. Despite his passion for his career and his overall positive attitude toward firefighting, he acknowledged a negative aspect of his job, which is the abuse of the firefighting system by unnecessary calls. He admitted, “It’s frustrating. It’s hard to maintain your patience. I’ve had calls where they have called 911, said they need help and you get there and all they wanted- they are basically lonely- was to put pizza back in their refrigerator because it’s sitting on their table and they don’t want to get up, they can’t get up.” At Mr. Robertson’s fire department, the firefighters are also EMT’s who alternate shifts between the ambulance and fire truck; however, the ambulance receives more of the calls that can be seen as unnecessary. He stated that the most frustrating aspect of these seemingly frivolous calls is that the “ambulance might be helping someone else that really needs it at that point.”

Pros and cons of shift work. Mr. Robertson stated that during the years when he worked a 24-hour shift every third day, the most challenging part of the schedule was not

being present for family events. He stated, “You miss a lot of stuff, whether it’s your kids or your wife. You miss a third of what’s going on in their life.” Since beginning to work a traditional schedule, Mr. Robertson has noticed a number of positive changes, such as eating dinner nightly with his family and being able to communicate more regularly with his children about the events of their day. He has also been able to attend more of his children’s school functions and sporting events. Mr. Robertson also related being more relaxed since he has quit working a 24-hour shift. He explained that being on the same schedule as his wife and children has allowed him to feel that he does not need to “jam so much in those two days to get everything done.”

Despite the positive changes he has noticed since working a traditional schedule, Mr. Robertson repeatedly mentioned how much he misses the type of work he did as an active-duty fireman. He stated that as an administrative officer, “you feel pretty far away from being a fireman. You know, I miss that excitement. I miss the calls.”

Need to control his environment. Mr. Robertson described his tendency to desire a sense of control at home, as he does on the job. While on the job, he reflected, “I need to control my environment. It’s like in the emergency call you are so focused on controlling your environment. I need to control this. I need to keep it from getting worse.” Mr. Robertson went on to state that while desiring control is perhaps part of his personality, he also believes that this personality trait is exaggerated by the necessity of being in control on the job.

Fear of vulnerability. Mr. Robertson described his reluctance to discuss the tougher parts of his job with most people, including his wife and children. He stated that one reason he does not talk about the tough calls is also common to other firefighters. “I

think if we, we're always afraid as firemen, if we talk about it, we show our emotions, we show our vulnerable sides, we weaken ourselves." So rather than feeling vulnerable and emotionally exposed, Mr. Robertson works to "hide it" from his family if he is stressed or struggling.

Underutilized resources. Mr. Robertson stated that, while he is aware of the resources such as counseling that are available to help firefighters deal with challenging calls, he has not utilized these resources because of what he sees as common characteristics of firefighters, including "too much ego" and "independence." He explained, "We're all independent; we all think we can do anything; anything comes at us, we can handle it. We can handle the big stuff no one else wants to do." Mr. Robertson cites this sense of pride as a reason that counseling services are rarely used by firefighters, and why he himself has never sought this help.

Getting comfortable. As a firefighter, Mr. Robertson has noticed that he became more comfortable with the activities of the job as time went by. In his first years of being a firefighter, he was more excited by calls and put more thought into performing correctly on the job. However, with time he saw himself "get more comfortable; as you get more comfortable with your role and confident, you aren't as stressed, as nervous on every call." He also stated that over time he learned to leave more of the stress of the job at work, rather than bringing this stress home and letting it affect his family. Overall, Mr. Robertson became more able to cope with his job as a firefighter and saw himself become more calm and confident.

Emphasis on recuperation. When he worked 24-hour shifts, Mr. Robertson was aware of the importance of allowing himself to physically and mentally recuperate. He

stated, "I always figured that that first day is a physical recuperation and that second one is a mental." He related that when he worked an overtime shift, for 48-hours, he had a harder time being physically and mentally ready to return to work after only 24- hours at home. Mr. Robertson cited hobbies or enjoyable activities as crucial to maintaining mental health as a firefighter. He stated that having an enjoyable hobby at home allows a firefighter to "take your mind off what you might have seen two days ago or a day ago."

Family and marriage themes. Themes related to Mr. Robertson's family include: his desire to protect his family from the stresses of his job, how tough calls affect his behavior around his family, the personal sacrifices he has made to have a schedule similar to his wife and children, and his appreciation for his spouse, as well as dedication to the family.

Protecting his family. Mr. Robertson described his desire to hide the stresses of his job from his family in order to protect them from the difficult things he sees at work. "You see so much stuff on the job and you don't bring it home, you don't want them to hear about it, you don't want them to know about it." He stated that although he is aware that his wife would like him to talk more about his work, "I don't want her to worry. I don't want her to think about it." He went on to say, "I hide it. I don't want them worrying about what's going on down on the Interstate or a roof caved in. I don't want them to know that. It's stressful enough knowing that they know what I am doing."

Behavior when stressed. When he is stressed or exhausted, Mr. Robertson believes he acts in a different manner with his children and wife. He stated that he tries to be aware of times when his "temper might be a little shorter, my responses might be a

little sterner” so that he could prevent himself from acting poorly around his family. He stated that “unfortunately, the ones you kind of take it out on are the ones you love.”

Working on the marriage. Mr. Robertson emphasized the importance of continually working to improve his marriage. He stated that firefighter marriages “are like any marriage; if you want it to work, you have to work at it.” Despite “ups and downs,” he has realized “what’s important, and it’s worth fighting for and working at it.”

Appreciative of spouse. Mr. Robertson expressed his gratitude for his wife’s support during his career as a firefighter. He stated, “I’ve just been real fortunate to have real understanding and patience.” Mr. Robertson related that when he is feeling down or stressed his wife’s support is especially appreciated; she can help by “just saying ‘it’s gonna get better.’”

Sacrifices for the family. Mr. Robertson stated that while his promotion is financially beneficial to the family, it has also been a personal sacrifice to no longer work a shift work schedule as a fireman, since he does not get to respond to calls, which is a part of the job he loved. He stated that he misses the camaraderie of the firefighters he worked with, in addition to responding to emergency calls. Mr. X made the decision to accept the promotion in order to spend more time with his family, which is possible now that he works a schedule similar to his wife’s work schedule and his children’s school schedule.

Parenting themes. Working as a firefighter has had an impact upon parenting, and the related themes emerged: fearing that his children could be one of the calls he responds to, using emergency calls to teach his children, balancing discussing the dangers

of the job and protecting his children, as well as his reluctance for his children to be firefighters.

One of your calls. Mr. Robertson stated that one of the most significant results of being a firefighter is the fear that his children might be one of his emergency calls. He revealed, “You worry about that. Could that be my kid?”

Teaching by using calls. In order to try to protect his children from ever becoming one of his calls, he uses the scenes he has responded to as teaching tools. He related a recent example, when his daughter got a speeding ticket coming down from the summit of a nearby mountain pass. He acknowledged that this made him angry because he has responded to terrible wrecks on this road. “I told her a couple of the calls. And I said, I do not want that happening to you!”

Danger of the job. Mr. Robertson does not discuss the potential dangers he faces on his job with his children. In part this is due to wanting to protect his children from the difficult calls he responds to and the inherent dangers. However, Mr. Robertson stated that danger “is just a fact of our lives, just like a police officer, a farmer, anybody. It can happen to anybody.” To prevent this fact from having a negatively impact on him or his family, he does not “dwell on it” or let it become a focus of his thoughts.

Balance. Mr. Robertson described his constant struggle to avoid being overprotective of his children due to the tragedies he has seen on the job. He tries “to find that balance” between parenting and protecting, while still teaching his children about the dangers in life.

Children becoming firefighters. Mr. Robertson revealed that although he has had a very positive experience as a firefighter, he does not want his son, who is interested in

being a firefighter, to become one. He stated that this is mostly because “I think it scares me knowing that he would be in danger. Even though it has been such a good thing for me.”

Trauma-related themes. Mr. Robertson described themes relating to the traumatic scenes he has responded to as a firefighter, which include the toughest type of calls to respond to, his emotional and behavioral reaction to challenging calls, the way he copes with these calls, and his reaction to the events of September 11, 2001.

Toughest calls. The most difficult calls for Mr. Robertson to respond to are those calls that involve the death or injury of a child or calls in which he knows the victim or the family. He shared a story from his first two weeks as a firefighter, during which time he knew “all three of these people of the deaths that I went on in two weeks.” Mr. Robertson stated that this experience was extremely challenging, especially as a new firefighter. He discussed this with his commander at the time, who reassured him that this was not a typical situation, even in a smaller town. He stated that “at the time I didn’t think I was strong enough” to continue being a firefighter. However, with the support of his commander and other firefighters he was able to cope during this time, and has not had to respond frequently to the fatality calls for those he knows personally.

Calls involving children have been the most challenging to cope with during Mr. Robertson’s time as a firefighter, and he admitted that there are several of those calls “that still haunt me.”

Emotion on abuse scenes. Although he rarely has an emotional reaction while responding to a call, Mr. Robertson confirmed that he feels angry if child abuse is apparent. He confessed that remaining professional during this type of call is a challenge,

that “sometimes you want to return the favor to them, but you know you can’t do that. It’s just, I don’t understand how somebody can do that to their child. And it just makes me mad.”

Overwhelmed after tough calls. Mr. Robertson admitted that following the most challenging calls he has been “overwhelmed” by the memory of the call for several days. He described his reaction after one particularly difficult call involving a child about his son’s age. “It’s constantly on your mind. . . . throughout the day and night I would wake up thinking of these things.”

Coping with tough calls. Following this difficult call, Mr. Robertson sought support from his wife and discussed the call with her. This is unusual for Mr. Robertson, and he noted that this was how much the call affected him, to the point that he knew he needed to reach out. Mr. Robertson will also discuss challenging calls with a group of friends who are also firefighters.

Other strategies for coping with tough calls that Mr. Robertson cited included using very dark humor, which Mr. Robertson referred to as “black humor.” He stated that he thought this type of humor was “cold” when he first became a firefighter, but through the years has seen that “that’s how you cope with it. You know you’re not making fun of the individual or situation, you just – I think that’s how we cope and deal with those situations.”

Mr. Robertson also identified coping cognitions, which he stated are particularly important to think following difficult calls. “You know you did the best you can, and you didn’t create the situation. We are there to make it better.” Following calls, Mr.

Robertson also has a tendency to analyze the call to determine “what could I have done” to improve the call.

Reaction to tough calls. After coming home from a tough call, Mr. Robertson stated that he sometimes finds himself feeling “scared” that the events he has responded to could happen to his children. He stated that seeing his child use a match can “trigger” his feelings of being scared and protective.

The events of 9/11. Mr. Robertson related that the events of September 11, 2011 had a significant impact on the way he viewed the world. “I don’t trust people as much anymore. I worry more about my family.” Mr. Robertson acknowledged, “It profoundly changed how I look at the world.” Although he works to remember that “there are a lot of good people,” he is much more aware of the danger in the world since 9/11.

Mrs. Robertson’s Experience

Job-related themes. Mrs. Robertson discussed themes related to her husband’s career as a firefighter including: how little her husband shares about his work, her lack of concern for his safety given the town they live in, challenges and benefits of shift work, transitioning home after shift work, and the family’s friendships with other firefighter families.

Spouse shares little about work. Mrs. Robertson echoed her husband, stating that Mr. Robertson discusses very little about the day-to-day activities of his job, including traumatic calls he answers. She admitted that this “kind of drives me crazy, a little bit,” as she will feel out-of-the-loop around other firefighter couples who communicate more about work. Mrs. Robertson acknowledged that her husband has always been “quiet,” and views this as a personality trait that he has always possessed.

Little danger. Mrs. Robertson related that she worries little about the dangers of her husband's job, particularly now that he is in an administrative role. However, she noted that even when he was on shift, she did not worry much. "I don't know that I really worried about him too much. I think my biggest worry was him getting hurt out on the Interstate in the winter time because those trucks are so crazy." Living in a town with an interstate highway in the Rocky Mountain region, winter brings frequent car accidents to which the fire department responds. As Mrs. Robertson noted, her main concern for her husband's safety was that he could be injured by a semi-truck in winter weather. Outside of this concern, Mrs. Robertson noted that, fortunately, there had never been a death in her husband's fire department, and the smaller buildings in the town made her less concerned that he could be seriously injured responding to a fire call.

Mrs. Robertson also explained that she has always focused more on the positive aspects of her husband's job, rather than the potential dangers. Mrs. Robertson stated, "For so long he was so new, and it was kind of new and exciting, and he was a hero." After the initial excitement of his heroic job faded, Mrs. Robertson continued to focus on "being so proud of him that I didn't really worry." Her confidence in his skills contributed to her peace of mind: "I knew he has a good head on his shoulders!"

Challenges of shift work. During the years that Mr. Robertson was working a shift work schedule, Mrs. Robertson does not remember the schedule feeling unusually taxing or unordinary. She recalled that "when that was all we knew and that was how we started out and that's how it was for so long – that was the normal." Mrs. Robertson revealed an attitude of resigned acceptance during the time that her husband worked a shift work schedule. She emphasized that the "unpredictable" nature of the schedule was

difficult to deal with at times. She concluded that “it’s a pattern, but it’s different. Sometimes you got a weekend, but sometimes you didn’t.” Mrs. Robertson’s fulltime, traditional schedule made coordinating the family’s lives even more challenging.

She also discussed events that her husband missed due to shift work, such as holidays or birthdays, and also events he wanted to participate in but couldn’t. For example, coaching their son’s baseball team was a position Mr. Robertson wanted to fill, but he “could never really be like a head coach. He could only help out when he could.” During holidays that her husband worked, the family had to adapt their holidays to either be able to celebrate with her husband at the station or to spend the holiday with Mrs. Robertson’s family.

Mrs. Robertson stated that as her children got older, she wanted a more predictable schedule for the family. This is one reason she has appreciated Mr. Robertson’s new position in administration, which has provided the family with more time together and a steady schedule.

Benefits of shift work. Mrs. Robertson cited the benefits of shift work as being able to maintain a more relaxed household while her husband was working for 24 hours. She stated that she would not always cook a complete meal or clean the house on evenings when her husband was on shift. She and the children would have a more relaxed schedule around meals and other routines.

Transitioning. Mrs. Robertson reported that the family usually had a fairly easy transition when Mr. Robertson would return home from being at work. She and the children were usually at work and school or day care by the time he returned home, so he was able to have the house to himself on weekdays. The more challenging transitions

that Mrs. Robertson cited were when Mr. Robertson would return home after a double shift and had been gone for 48 hours. She stated that “you kind of get into your own routine when he’s not there and then he comes and is there! And it is kind of like ‘Come on, you have got to adjust to our living arrangement here!’”

Friendships with firefighter families. Mrs. Robertson discussed the close relationships she has formed with other firefighter spouses. She related that these friendships were comforting, especially at times when the firefighters were on shift. “You are all in it together. You didn’t feel like you were just home alone.” She went on to say, “You kind of become each other’s family while your husband is at work.” The Robertson family would celebrate holidays at the fire station with the firefighters and their families, which she and her children enjoyed, as it was a unique experience.

Positive impression. Overall, Mrs. Robertson related a positive attitude toward her husband’s career as a firefighter and the friendships the couple has formed because of his job. Her conclusion is that

It afforded him a lot of great opportunities. Lots of great people. I don’t know if it is just the nature of the job, that it just attracts a certain type of person, you know, they are just great people. Great families. It is a nice subculture of your community.

Marriage and family themes. Themes related to the couple’s marriage and family life included: being available for communication, gaining empathy for her husband as she understood more about the job, the impact of Mr. Robertson always working nights, and the couple’s sleeping arrangements.

Communication. Mrs. Robertson discussed her husband’s “quiet nature” and related that although the couple does not regularly communicate about her husband’s job, she is willing to talk if he ever needs to. “If they want to talk about, it you are there for

them. If they don't, I am sure they have to figure out how. I am sure everyone has their own way of coping with it.”

Understanding the job. As the years have passed Mrs. Robertson has noticed that she has gained a greater understanding of her husband's job, including the activities he participates in and the involved stressors. “I think the longer, the more you get to know the ins and outs of the job you kind of understand that they need those days off, and it's not like two or three weekends a week.” Mrs. Robertson's empathy for her husband's job has increased as she has learned more about the job over the years.

Easier for the family. Mrs. Robertson reported that since her husband has always worked nights during their marriage, including when he worked at the residential treatment center, that she believes her family had an easier time getting used to shift work than other families might. She stated, “It's all I have ever known. So it's not like we had been married twenty years and then he started doing this crazy shift. So you know he has always kind of had weird schedules and stuff.”

Sleep problems. Mrs. Robertson discussed her husband's history of sleep problems, including his occasional problems falling asleep and tendency to sleep on the couch when he is having trouble sleeping. These sleep problems have led to Mrs. Robertson becoming accustomed to sleeping alone for part or all of the night, even when her husband is off shift. She said that this made her less upset by his absence when he was on shift and actually gone.

Parenting themes. Themes including her husband's use of his job as a teaching tool, the challenges of parenting and shift work, and navigating the dangers of her husband's job are explored.

Teaching opportunities. Mrs. Robertson related her husband's use of emergency scenes he has responded to as teaching tools for the children. "I know when my daughter got her speeding ticket he told her about some of the things he has seen, you know car accidents and stuff and maybe speeding." Although he typically talks little of his job, he will discuss past calls if he feels these will be useful for teaching the children about dangers to avoid.

Challenges of parenting. When the children were younger Mr. Robertson was working shift work, Mrs. Robertson was working fulltime, and the children were in day care, so there were three schedules to coordinate. She reported feeling "irritated" when her husband returned from being on shift and would rest instead of taking care of the children or cleaning the house. She stated that at those times, "You might feel like kind of a single parent at times, I guess. You're always the one doing this, you're always the one doing that." Mrs. Robertson also discussed the increased needs of smaller children, which were physically exhausting, since she was responsible for meeting most of these needs. As the children have gotten older and become more independent, this became less stressful for Mrs. Robertson. She also reported that things have been much easier within the family since her husband began to work a traditional shift.

Worrying about the dangers of the job. Mrs. Robertson stated that because she does not worry much about her husband, due to living in a smaller town, she does not believe that the children worry much either. "We haven't really made it a big deal with the kids." Rather than making a point of talking about possible dangers with her children, she makes herself available to answer questions they might have about his job. Mrs. Robertson also tends to focus on the positive aspects of her husband's job, rather

than the dangers. “It has always been, if the kids are curious, you talk about him helping people and saving people and responding and not ‘Oh there is a scary fire.’ I don’t know, [we] never really made it a scary thing.”

Harder to process when younger. Mrs. Robertson expressed her children’s tendency to worry about their father more when they were younger and were first learning about what he did for a living. She described the children’s tendency to “make stuff up in their mind about it,” which makes dangers “seem bigger than they are, or they don’t know how to process that.”

Spouse’s experience themes. Mrs. Robertson discussed the sympathy she has developed for her spouse regarding what he sees at work and her belief that her days are “benign” in comparison to his.

Sympathy for spouse. As she has learned more about the calls her husband has responded to over the years, Mrs. Robertson has become sympathetic about the difficult things her husband sees on his job. She described her reaction when she first learned about several challenging calls: “That was like ‘Oh man, really? Wow! You know, so it’s kind of sad knowing some of the stuff that they see.’”

In comparison. Mrs. Robertson believes that, in comparison to the types of activities her husband is involved with at work, “my days are pretty benign mostly, so whether I share or not ... nothing really gets missed too much. But boy, I think they see a lot that they may or may not share.” She also stated that she feels the things that stress her out at her job are minimal compared to the stresses her husband deals with at work. “I feel like sometimes my job has stressors as well or whatever. But then I think, ‘Oh my

gosh, I don't see people die or be injured to that degree like they do.' That's a pretty amazing thing to go day-to-day with."

Trauma-related themes. Themes regarding the trauma Mr. Robertson is exposed to at work include: calls involving children being the toughest, Mrs. Robertson's uncertainty about how her husband processes tough calls and when he might be upset by a call, her observation of firefighters creating emotional distance from calls, and the effect of September 11, 2001 on her husband.

Kids calls the toughest. Mrs. Robertson reported that calls involving children seem to "bother" her husband the most. Mr. Robertson does not have the habit of coming home and talking about the events of the shift, but Mrs. Robertson has noticed that he will talk about tough calls at "weird times," such as long after the event occurred or if something that happens with their children reminds him of the call.

How he processes. Mrs. Robertson admitted that, because her husband does not often talk to her about tough calls, "I don't know how he processes it." She thinks he talks to other firefighters about calls, as she has overheard conversations he has with his co-workers. She stated that since she is not his primary source of support for potentially traumatic events he sees on the job, she must "trust that he is healthy with it, so I don't worry about him too much." Mrs. Robertson has faith that her husband has coping strategies to deal with the stress he sees on the job.

Disassociates. Based on the conversations Mrs. Robertson has overheard between her husband and his colleagues regarding calls they have responded to, she stated that it seems as if Mr. Robertson and other firefighters have a tendency to distance themselves emotionally from the emergency scene. She stated, "I think they kind of

disassociate from what it really is, you know. On some level. I mean I obviously know they realize it's people and it's someone. But, it's weird to think what they see, that you just can't comprehend. "

Behavior after tough calls. Mrs. Robertson reported that the only behavioral change she has observed in her husband that indicates he might have responded to a tough call is being quiet when he returns home after shift. Contrary to her husband's report, she stated that he is not "more cloudy or irritable, or labile or anything. It's just he's just quiet. And sometimes it's hard to tell between he's quiet to begin with or he's quiet because something is bothering him." She expressed worry that perhaps his quiet nature causes her not to recognize when Mr. Robertson might need support following tough calls. "I think we probably miss a lot in him that we might have recognized, because he is quiet normally. So it's not like "Oh, you're a crab! What's going on with you?"" As his behavior does not change significantly following tough calls, Mrs. Robertson struggles to know when to give her husband extra support.

Effects of 9/11. Mrs. Robertson echoed her husband's statements that the events of September 11, 2001 significantly impacted his view of the world. She stated that it seemed as if this event may have "put a lot of things in perspective" for her husband. It also caused her husband to realize the dangers of being a fireman. She stated that "I think maybe he worries more a little bit, because it can happen anywhere." She has noticed that since September 11, 2001 her husband seems more stressed and serious, as well as committed to his family.

The Robertson Children's Experience

The Robertson daughter 17-year-old Heather chose to be interviewed alone and 13-year-old Jack was with his sister for his interview. The children discussed an overall positive impression of having a father who was a firefighter. They also shared themes related to the dangers of the job, the influence of the media on their fear about their father's job, the changes they have seen in their father since he quite working a 24-hour shift schedule, and the potential of becoming firefighters when they grow up.

Overall positive impression. The Robertson children related a positive impression of their father's career as a firefighter. Heather, the couple's 17-year-old daughter, stated that it is "cool" that her dad is a firefighter, since he is well-known around town and his name is in the paper in relation to emergency calls, because he is a fire service administrator. Jack also stated that he felt firefighting was "cool" since he has gotten to ride in the fire truck and his Dad "goes and saves lives and all that."

Dangers of the job. The Robertson children related awareness of the dangers of their father's job. Heather stated that she "would get sad" when she was younger when she thought of these dangers. However, since she has gotten older and learned more about the job she does not worry as much. Jack reported that the worst part of his dad being a firefighter was worrying that something bad "like the building collapsing" could happen.

Influence of media. Heather discussed the impact that the media has had upon her fear regarding her father's job. "One time we watched *Ladder 49* and I can't watch that. I watched it once, and I can't watch it." She stated that this film made her more aware of the potential dangers being a firefighter, which was scary "because it's the same

job my dad has.” However, she might not worry as much as she could have, since “that was in a bigger city and so their buildings are a lot bigger and a lot more dangerous.” As a younger child, this was harder to discern, stating, “When I was little it was like the same thing, and it just really scared me, because it was the same thing.”

Changes since leaving shift work. Both of the children related changes within the family since their father has stopped working a shift work schedule. Heather stated that since her father is home more often at the same time as the family, it feel as if the family communicates less. She also reported that her father shares fewer of the events of his day with the family and that she misses hearing about the emergency calls he used to responded to. In contrast, Jack stated that he likes his father being home more as they get to eat meals as a family each night and he still has fun with his dad, such as playing video games with him. Jack also related that his father is not as tired as he was when he worked shift work, which has been a benefit of the schedule change. Jack and Heather both stated that they have noticed their father appearing more “frustrated” or “stressed” since becoming a fire service administrator.

Becoming a firefighter. Heather stated that she did not want to be a firefighter when she grew up, since she has asthma and wants to do something different, such as being a cosmetologist. Jack wanted to be a firefighter when he was younger, but has now changed his mind, because he learned more about the demands of the job and does not think he would like shift work.

The Hill Family

I arrived to interview the Hill family on a chilly winter afternoon. I hurried into their meticulously kept home, which was decorated for Christmas and also held several

large pieces of attractive furniture, which I later learned Mrs. Hill had made, as one of her hobbies is wood working. The children were still at school for the day, and the house was quiet and peaceful. The Hill family is a blend of Mr. Hill's two sons, 13-year-old Ty, and 11-year-old Max, as well as Mrs. Hill's two daughters, 8-year-old Holly, and 6-year-old Megan. John and Sarah Hill have been together for nearly 5 years and have been married for 2 ½ years. Both spouses were married before and divorced. The couple has full custody of both daughters, as well as Ty. Max splits his time 50/50 between the Hill's home and his mother's, in the same town.

Mr. Hill has been a firefighter at the local department for 17 years. The family lives in a medium-size town in the Rocky Mountain region. Mr. Hill, 47 years old, has a Bachelor of Science degree in education, and Mrs. Hill, 40 years old, graduated high school and attended some college. Mrs. Hill does not work outside the home, but in addition to Mr. Hill's firefighting job, the couple owns and manages apartments in town. The couple and their children are Caucasian.

Mr. Hill's Experience

Job-related themes. Mr. Hill revealed job-related themes including: his reasons for becoming a firefighter, the pros and cons of the job, the challenges of working on the ambulance, changes in his worldview, and transitioning home after being on-shift.

Becoming a firefighter. Mr. Hill cited the reasons he became a firefighter as primarily consisting of the job security, good pay, and benefits that the fire department provided. He conceded that, contrary to some firefighters he knows, it was not his desire to help people that initially attracted him to the field, rather it was his age and his desire for a career with good pay and benefits, including a pension. As he put it, "Some guys

will say ‘I just wanted to help people.’ But that wasn’t my first priority when I was 30. I was thinking about a career, what is going to pay me better, what is going to pay me better when I quit.”

Pros of the job. Mr. Hill stated that the positive aspects of his job include the camaraderie he shares with the other firefighters and the variety that the job entails, as each shift is different from the one before. He also discussed the quality of the equipment the fire stations owns, including nice fire stations and trucks. He noted that “Our tools are cool. We can cut off doors in a matter of seconds.” Additionally, Mr. Hill mentioned the amount of time he gets to spend with his children due to the shift schedule as being a positive aspect of the job.

Cons of the job. Mr. Hill reported that the negative aspects of his job mostly revolve around the effects of working at night when on shift. He stated that he has had sleep problems since shortly after he became a firefighter. He attributed these sleep problems to working on the ambulance at the beginning of his career, since the high call volume led to little sleep while he was on shift. He also had little children who were up at night during this time. Currently, Mr. Hill experiences sleep problems when on shift and also at home, and due to shift work is unable to create a set pattern in his sleep schedule. He stated that feeling exhausted and being up at night when on shift are the most significant negative aspects of his job. He explained, “I get tired of waking up. I could be a fireman from 8:00AM to 10:00 at night, probably until I was 65, but I am tired of waking up. That is probably why I am looking to retire in 2 ½ to 4 ½ years. Because it is the nights that wear you out. You just get tired.”

Mr. Hill also cited the physical impact of the job as a negative aspect, one that he has become increasingly aware of in recent years. Moving patients on and off of backboards, stretchers, and hospital beds, as well as the weight of their firefighting and medical gear, has caused Mr. Hill to experience back problems.

Challenges of the ambulance. Mr. Hill stated that working on the ambulance, which he did for many years earlier in his career and occasionally still does, is more challenging than being stationed on the fire truck. The increased volume of medical calls, greater variety of calls, and more traumatic nature of the calls makes working on the ambulance more stressful for Mr. Hill.

Unnecessary use of ambulance. Contributing to the stressful nature of the ambulance are calls that seem to unnecessarily utilize ambulance services. Mr. Hill stated that the ambulances in his town regularly respond to calls from individuals, “that ride in the ambulance who have no business being in an ambulance” because their injury or condition is not severe enough to warrant emergency services. These calls are frustrating to Mr. Hill as they remove an ambulance from service, that might be needed to respond to genuine emergencies.

Changes in worldview. Mr. Hill stated that due to disrespectful calls he has responded to, he has seen himself become more “callous” during his years as a firefighter. Calls at which he has observed a disrespectful attitude include those in which the ambulance was called to help individuals who do not want the ambulance there, such as college students injured in a bar fight. Mr. Hill stated that, as he has responded to more of these calls, he has become more callous and thinks, “I don’t want to hear your crap,

and how you don't want us. Good. We will go, because we don't want to get paid to be here at 3:45 in the morning anyway for somebody who doesn't want [us]."

Helping those who want it. Mr. Hill was quick to explain that although he has seen himself become more callous in certain situations, he also has a desire to always help someone who legitimately needs and wants the help of the fire department. He described this, stating, "You are good with the calls that are deserving. You know you respond to an elderly [adult] or a kid or something that had a really nasty bike wreck or ran into a car or something, you don't think twice about it."

Transitioning home. Mr. Hill discussed his transition home from being on shift at the fire station. He stated that overall this transition has been easy to negotiate over the years, because "you get used to it." However, there is one factor that can contribute to a smoother transition home and a better day with his family, and that is having received fewer calls in the middle of the night, and therefore sleeping better. He said, "The better night you have, the better next day you have. The less calls you run, the better your first day off. The more you have, the more sleepy you are, the more tired you are."

Marriage themes. Mr. Hill discussed themes including the tendency for home emergencies to occur when he is at work, his dedication to remaining aware of his spouse's situation, and the importance of flexibility to the marriage.

Things happen while the firefighter is at work. Mr. Hill stated that it seems as if problems at home or urgent maintenance issues at the couple's apartments typically occur while he is at work and is unable to help with the situation. When this happens Mr. Hill must rely on his wife to take care of the situation and communicate with him about the problem and the solution.

Awareness of the spouse's situation. Mr. Hill discussed the importance of having a supportive spouse, as he does now. He stated that it is important for the spouse of a firefighter to know that “there are going to be days when he is going to get home and not want to do anything. He is tired, he was up all night, so just let him do what he wants.” At the same time, he also stated the importance of the firefighting spouse knowing “that just because he has that job, he can’t come home and do nothing, either. I mean if he comes home and she needs help disciplining kids or with dinner or house cleaning or whatever, then it is not like you are exempt from that.”

Flexibility. In order to cope with the effects of exhaustion and the atypical schedule of shift work, Mr. Hill stated that it is important for couples to be flexible regarding schedules and how they cope when the firefighter is coming off of shift. For example, if the Hill family is going to be taking a driving trip on the morning that Mr. Hill gets off shift, Mrs. Hill plans on driving the first shift in order for Mr. Hill to sleep or rest. This flexibility allows the family to continue with their plans and for Mr. Hill to recover from his shift.

Parenting themes. Themes regarding parenting that emerged included Mr. Hill's sense of responsibility since having children, the couple's similar views about parenting, the effect of shift work on parenting, and the children's awareness of the dangers of his job.

Responsibility and kids. Mr. Hill has noticed that since he had kids 13 years ago, he has developed a greater sense of responsibility. He stated, “You have a reason. You got people that are counting on you. You grow up.” He has noticed that this sense of responsibility affects behaviors such as driving fast on the highway or driving in a snow

storm, as he now is aware of the dangers of these behaviors and focuses on safety more than before he had children.

Similar parenting views. As Mr. and Mrs. Hill have blended their families they have discovered that they have similar parenting values, which has made the transition easier for them and the children. Mr. Hill stated that they have similar expectations for behavior and also communicate about parenting issues frequently, which makes them stronger as parents and a couple.

Shift work and parenting. Mr. Hill discussed the impact that shift work has had upon parenting, stating, “Where you lose, you gain. Where you don’t get to see your kid at night, I get to see my kid at Christmas break and in the summer I get to spend all day with them, where a lot of dads aren’t here.” For Mr. Hill the time that he is away from the home is made up for by the amount of time he gets to spend with his children on his off days.

Dangers of the job. Mr. Hill related that he does not discuss the potential dangers of his job with his children. He stated that he assumes his older child in the 10th grade is more aware of the dangers than the younger children, although he has not had a conversation with any of the children about this. For Mr. Hill, while the dangers of the job are present, he focuses on the fact that “most people do go home” every night. He is not sure if talking about the dangers would be beneficial for the children. “Why go there, I guess.”

Trauma-related themes. Mr. Hill reported trauma-related themes including: how tough calls affect him emotionally and behaviorally, his reaction to encountering trauma off the job, and how he copes with tough calls.

Temporarily affected. When Mr. Hill is exposed to a potentially psychologically traumatic scene he stated that he might be continue to think about the event “more that day or for a few days and then it kind of fades out.” He focuses on the events in his own family, which helps the memories of the call to fade. He described this, stating, “Life just kind of goes on. I mean as far as you get busy. You got bills. You got kids. They got homework. You got sports.”

Mr. Hill stated that firefighters rarely have time to get side-tracked by traumatic calls, since they are continually busy with the next call or preparing for the next shift. “You have got to move on and you have got to be ready to go on the next shift. So you don’t have time to dwell on much.”

Trauma off the job. As he routinely sees trauma when he is at work, Mr. Hill has noticed that he is not as affected by trauma that he sees off the job. He said, “Obviously if you see any trauma off the job it is not going to be a big deal, because you see it on the job all the time. So it’s not going to be like it is for somebody else, because you see it all the time.”

Toughest calls. Mr. Hill admitted that the most difficult calls to respond to are those that involve the death or injury of a child or someone he knows. He stated, “You know we always kind of talk about the hardest ones are the ones with kids or someone you know.” He reported that calls involving children are especially difficult if the children are similar in age to his own, as “that makes you think about it a little more.”

Behavior after kids calls. When Mr. Hill returns home from a call involving a child he wants to talk to his children or call home to check on them and also expresses

increased affection to them when he gets home. He stated, “You call home and tell them to hug them, love them, squeeze them and stuff.”

Emotional reactions. Mr. Hill does not feel an emotional reaction to calls at the time he is responding, noting that “When you are on the call you deal with the call.” However, he has noticed that later, when he is no longer intensely focused on completing the call, he will sometimes feel sadness or anger.

Talking about tough calls. In order to get support in dealing with tough calls he sees on the job, Mr. Hill will talk to the firefighters who responded to the call with him. He will also talk to his wife or other friends who are firefighters. Occasionally he and other firefighters will remember some of their more challenging calls and revisit these situations.

Making sense of death. Mr. Hill discussed the importance of being able to make sense out of the reason for a death or injury. He stated that those calls which he can make sense of are easier to process and cope with afterward. He gave the example of a man who committed suicide due to the pain of throat cancer. He stated, “That one is easier to take, because it is like, well geez, maybe they were suffering so bad they couldn’t stand it.” The calls which Mr. Hill finds himself having a more difficult time making sense out of are those involving an “unnecessary” accident with a child or “weird circumstances.” He also has a more difficult time coping with those calls that “could have been prevented” or “did not have to happen.”

Analyzing calls. Following each call, Mr. Hill described his tendency to “think each call could have gone better” regardless of the outcome. He described his routine of

focusing on what could have been improved and what aspects of the call might have gone wrong.

Healthy cognitions. Mr. Hill revealed several cognitions that contribute to coping well with calls during which a patient dies. He focuses on the fact that there are many “factors you can’t control,” such as a person’s predisposition to having a heart attack. He also keeps in mind the statistical odds of a person surviving a heart attack, especially once he factors in circumstances such as distance to town or time since the heart attack. He stated that these circumstances are “just the way it is. There are only certain types of calls we can save.” Each of these cognitive strategies allows Mr. Hill to maintain a realistic mindset regarding his ability to save people on the job.

Mrs. Hill’s Experience

Job-related themes. Themes emerging related to her husband’s career as a firefighter included: pros and cons of the job, the importance of communication about his job, her process of psychologically preparing for his absences, the firefighters struggle with sleep problems, and the personality traits of the firefighter she admires.

Cons of the job. Mrs. Hill reported that the most significant negative aspect of her husband’s job as a firefighter is that he must carry a pager at least 1 week out of the month and respond when necessary. She stated that when he is carrying the pager the family’s schedule becomes “unpredictable,” as he must leave suddenly when paged. When her husband is called out by the pager, she feels “stressed” because there is no way of immediately knowing how long Mr. Hill will be gone, and she also worries about him while he is on these emergency calls. Becoming accustomed to the unpredictability of the pager has been the biggest adjustment for Mrs. Hill as she has been a firefighter wife.

Pros of the job. Mrs. Hill disclosed a positive attitude toward her husband's job as a firefighter, primarily because she "loves" the shift schedule, as the couple gets to spend "lots of time together" when he is off work.

Communication. In order to cope with the unpredictable nature of the pager and also the long absences of shift work, Mr. and Mrs. Hill communicate frequently about her husband's job. If Mr. Hill receives a page and must leave the family, he calls her as soon as he is able to let her know the type of call and how long he estimates he will be gone. Mrs. Hill stated that this communication is central to her being able to avoid unnecessary worry and keep the house running smoothly, since she can then inform the children about Mr. Hill's absence and the effect it will have on the family's plans.

Psychologically preparing. When her husband is leaving for a 24-hour shift at the fire station, Mrs. Hill consciously prepares herself for his absence. She described her thought process, stating, "When he's is at work and he goes and you know he's going to be gone for 24-hours, you psychologically prepare for that, and you know he is going to be gone." Mrs. Hill compared this process with the sudden interruption of the pager going off, which was harder for her to become accustomed to, as she cannot mentally prepare herself for these interruptions and her husband's unexpected absence.

Sleep problems. Mrs. Hill echoed her husband's report of his sleep problems. She stated that he has trouble sleeping an entire night both at work and also at home. She stated that he deals with these sleep problems "really well," is seldom grumpy, and rarely shows his exhaustion to the family. On days that he is especially tired, the couple will often take a nap together in the afternoon.

Personality traits of a firefighter. Mrs. Hill observed that several of the traits her husband possesses appear to have been “refined” by his job as a firefighter. She stated that he is “very aware of things in his surroundings and how to do things very efficiently. Because with his job, time could be a life.” She also pointed out his “cautious” nature in most areas of life does have a limit if you “get him on a motorcycle and he’s popping wheelies down the street.” Mrs. Hill also discussed her husband’s “helpful” nature around the house. She discussed her appreciation for his willingness to help with cleaning, errands, or taking care of the children. She stated that these characteristics, being aware, efficient, cautious, and helpful, are personality features that are beneficial at his job and also at home, because the “attributes that make him a good fireman, make him a good husband.”

Marriage and family themes. Mrs. Hill related several themes related to her marriage, including the emphasis the couple places on spending time together, maintaining balance, accomplishing household and personal tasks, and the importance of flexibility and communication to the relationship.

Time together. Mrs. Hill reported that she and her husband get to spend “lots” of time together, due to the shift work schedule of her husband’s job. “I have him home for two days. I love it! It’s like a weekend every third day. And we love to spend time together and stuff. We get groceries together, we shop together, we go and take care of the kids together. Whatever we need to do we do it together.” In addition to taking care of household chores together, the couple also shares similar interests in hobbies and recreational activities. She stated that on her husband’s days off the couple will ride motorcycles or dirt bikes together and will also be outdoors or go hunting.

Keeping balance. Mrs. Hill related that one of the most valued characteristics of her marriage their ability to maintain balance between his career, maintaining the house, parenting, and spending leisure time together. She admitted that this is made easier since she does not work outside the home. This gives her time to relax when her husband is home or to help him maintain and manage the apartments the couple owns. She stated that at this point in the family's life it is more important to the couple that there be a full time parent at home and also that the couple get to spend time together, rather than Mrs. Hill working outside the home. This helps the family maintain the balance that they strive for.

Taking care of personal business. In order to make Mr. Hill's time at home as enjoyable as possible and to spend the most time with him, Mrs. Hill tries to get all of her personal business and the household chores done while Mr. Hill is at work. She described her attempts to schedule her personal appointments, such as doctor's appointments or nail or hair appointments during her husband's shifts at the fire station. She also works to complete the laundry while he is on shift, as she does not mind this task and finds that it makes her husband's days off more relaxing for the couple.

Help around the house. Mrs. Hill admitted that she feels "spoiled" by the amount of help her husband contributes to household chores. She described this, stating, "I'm spoiled, because he goes and works 24 hours and deals with all that stuff on the other end – personnel, patients, hazards. So on his two days off, I get spoiled. He helps me do laundry, he helps me clean, he helps me clean ceiling fans, cleans windows. We do yard work together." While Mrs. Hill is grateful for the amount of help she gets around the house, she also expressed empathy for the challenging calls her husband faces

at work. Mrs. Hill discussed the positive aspects of her current marriage, compared to her first marriage, and related how much she values her husband's willingness to help her around the house.

Lots of communication. Mrs. Hill discussed the importance of communication in all areas of her marriage. In addition to communicating about her husband's schedule at his job, the couple also frequently communicates about parenting issues, and also personal feelings and situations. She stated that the "biggest piece of advice" she could give another couple would be to "communicate everything with your spouse. Everything." She also stated that the amount of communication in her current marriage is a pleasant change from her first, as it makes the marriage and life more enjoyable. "I have wonderful communication in this marriage and I really enjoy, just enjoy every challenge that comes along, because we can talk about it."

Importance of flexibility. Because of the potential of her husband being paged and the effects of shift work on his level of exhaustion, Mrs. Hill emphasized the importance of flexibility in the family. She stated that if Mr. Hill is paged and must leave the family, "You just go with the flow." This need for flexibility has been something that the children have grown accustomed to as the two families have blended. Mrs. Hill models flexibility for the children and encourages them to cope well with their father's sudden absences or changes of plans for the family.

Parenting themes. Themes related to parenting included: the couple's allocation of parenting tasks, their similar parenting values and constant communication, the process of becoming a blended firefighter family, and the information the children are told about Mr. Hill's job.

Sharing parenting tasks. While her husband is at work, Mrs. Hill is responsible for all parenting tasks for the 4 children in the family. This includes dealing with discipline issues and also emergencies, such as when the couple's oldest son recently broke his arm. Mr. Hill was at work; therefore, it was up to Mrs. Hill take Ty to the hospital and take care of him while he was in pain. Once Mr. Hill returns home, the couple splits parenting duties and Mr. Hill spends time with the children and attends sports and school events. Mrs. Hill expressed appreciation for the amount of help her husband provides with parenting.

Parenting values. As Mr. Hill mentioned, Mrs. Hill also discussed the "similar" parenting values that the couple had prior to getting married. These similar values have made the transition of the children and the parents in the blended family smoother.

Communication about parenting. Mrs. Hill related the couple's habit of communicating about parenting issues, especially if one parent is away from the home and a parenting duty, such as disciplining a child, is left up to the parent at home. Mrs. Hill will call her husband at work and talk about any issues that come up with his two sons, and she stated that Mr. Hill will do the same when he is at home alone with her two daughters.

Adjusting to the family. Mrs. Hill reported that the children have "blended well" into their new family structure. She stated that the children have "bonded" with each other and enjoy spending time together, especially her two daughters and Mr. Hill's youngest son, Max. In addition to adjusting to the new blended family structure, Mrs. Hill's children also had to adapt to being in a family in which a parent works shift work. She stated that this transition has been made easier for her daughters, as "their biological

parent is always here.” Since her daughters are younger, 6 and 8 years old, they are not completely aware of how the shift schedule works, and Mrs. Hill described her daughters’ tendency to “assume that if he is not here, he is at work.” The absences of their stepfather are made easier by having their mother home with them.

Challenges of blending the family. Although her daughters have easily adjusted to being in a shift work family, Mrs. Hill reported that it can be more challenging for Mr. Hill’s biological sons to have their dad away from the home. “For the boys it’s a little bit different, because their biological parent is gone, and they are kind of waiting for him to come back sometimes.” Another challenge of being in a blended, shift work family is finding time for Mr. Hill to spend with his sons. Mrs. Hill stated that she easily finds lots of time to spend with her girls when her husband is at work and the boys are either at their mother’s or with friends. However, it is more challenging for Mr. Hill to have time alone with his two sons. In order to ensure that the boys spend enough alone time with their father, Mrs. Hill will occasionally take the girls out of the house in order for the boys to have time together.

Dangers of the job. Mrs. Hill reported that she does not discuss the potential dangers of her husband’s job with the children. She believes that she should be the only person in the family worrying about his safety, and that the children should not be burdened with this worry. She stated, “I try not to worry them about that. I try not to do that. That buck should stop here. They should be able to be kids and I will do the stressing.” She acknowledged that the couple’s oldest son is likely more aware of the dangers of his father’s job, but does not express concern about his father’s safety.

Purpose of the job. Mrs. Hill reported that the aspect of her husband's job the couple focuses on most with the children is the purpose of his job – to help someone in need. She described the children's tendency to complain or wonder why their father must leave the family for work. The couple answers these questions by making them "aware that he is doing his job, and if he has been called in for overtime, it is because somebody needs him. It is because somebody else has had something horrible happen. He has got to go take care of them."

Trauma-related themes. Mrs. Hill related trauma-related themes including her husband's ability to separate work and family life, the most challenging calls for him to respond to, the couple's communication about traumatic calls, and how she copes with the threat of danger when her husband is on the job.

Separating work and family life. Mrs. Hill stated that her husband copes well with the challenging scenes he sees at work. She described his tendency to "separate" his work and home life, so that traumatic calls do not impact the family. She stated that "a lot of them don't seem to bother, to stay and stick with him and bother him. He adjusts very well."

Toughest calls. The toughest calls for Mr. Hill to respond to are those that involve the death or injury of a child. Mrs. Hill described two such calls that Mr. Hill has shared with her that she believes were some of the toughest calls he has responded to.

Communicating about tough calls. While Mr. Hill does not go into great detail about each shift, he will briefly discuss his previous day at work. However, occasionally Mr. Hill will share some of his most traumatic calls with his wife. She stated that his

need to discuss these calls lets her know that these are the calls that “really hit home” for him.

Threat of danger to the firefighter. Mrs. Hill stated that the threat of danger to her husband while he is at work is “always on my mind.” She described her strategies to “limit” her thoughts about the potential dangers her husband could face. These strategies include trying to limit the amount of danger-related thoughts she thinks, staying focused on the children, not appearing worried, and reminding herself that “no news is good news.” She admitted that these thoughts are easier to control during some shifts and harder during others, given environmental factors such as bad weather, when she is prone to worry more.

Previous experience with a dangerous job. Mrs. Hill reported that her first husband had been in the military and would be deployed for four months at a time. She stated that this prior marriage has helped her know how to cope with having a spouse who could potentially be in danger. Despite this experience, she admitted that because of her close relationship with her current husband, it is a much more frightening thought to consider something happening to Mr. Hill. She reported, “John is my heart. He is my everything. This whole thing could not be without him. So it is scarier. I will tell you it is scarier for me than it was with my ex-husband, because we didn’t have the communication, connection, and strong foundation like I do with John. So it would be more significant to me if something happened to him. It would be more significant to this family.”

The Hill Children's Experience

Tye, age 13, and Max, age 11, wondered in separately for their interviews after they returned home from school. The boys related themes regarding their positive impression of having a father who is a firefighter, as well as talking about emergency calls, their desire to be firemen when they grow up, the advantages and disadvantages of shift work, and the community of firefighters and their families that they know.

Positive impression of job. Ty and Max both related a positive impression of their father's job as a firefighter. Max stated that the best part of the job is getting "to put out fires and stuff. And then you also get to save people." Ty also cited getting to help people as a good part of the job. Max also discussed some of the perks of the job, such as getting to hang out at the fire station and ride the fire truck, as well as "go to basketball games for free" as benefits of being a firefighter.

Talking about calls. The kids reported that their dad will talk to them about calls he has responded to, especially interesting ones. Max discussed a call he heard about when "someone had a heart attack at the basketball game."

Being a firefighter. Both boys stated that they would consider being a firefighter when they grow up. They reported that it would be "cool" to get to have a job in which they could help people.

Shift work. The Hill sons both reported that shift work is a benefit for the family, as they get to see more of their dad than they would if he worked a traditional schedule. They stated that the time he is gone goes by "fast" and that it does not feel any different at home when he is gone.

Community of firefighters. Ty and Max discussed their friendships with other firefighter kids and cited the friendships their dad has with other firefighters as benefits of the job. Ty related that his best friend's father is also a firefighter who is friends with his dad, and related that having dads who were firefighters was a common bond that the boys shared.

Worst part of firefighting. While both of the boys reported that shift work was a benefit for the family, they also discussed the cons of this schedule. Ty stated that his dad "being gone at night" was worst part of the job. Max discussed a recent example of his father being suddenly paged and having to leave the family or change plans with the family. On Max's most recent birthday, his father was paged and had to go to work right as the family was planning to leave to birthday shop and have dinner. Max stated that this did not make him upset, but he had to let himself adjust to the change of plans.

Conclusion

The previous findings expressed the themes that each participant in the study related regarding being a firefighter, spouse, or child in a firefighter family. Themes emerged in the categories of job-related themes, parenting-related themes, marriage and family-related themes, trauma-related themes, and those themes that detailed the spouse's experience. Using the commonly expressed themes from this chapter, Chapter 5 consists of the composite experience of being in a firefighter family.

CHAPTER V

FINDINGS: COMPOSITE EXPERIENCE

This phenomenological study explored the experience of being in a firefighter family. The individual themes of the firefighters, wives, and children in the five families participating in this study were explored in Chapter 4. According to Moustaka's (1994) phenomenological method for data analysis, after identifying each theme in the study and creating a textural-structural description for each participant, a composite experience based on these themes is created. This chapter details the composite experience that is the essence of being in a firefighter family.

Overarching Themes

Themes reported by a high percentage of both spouses and reiterated by other couples in the study are considered overarching themes of the study. These themes include valued aspects of the job, such as being able to help others, providing well financially for their families, and enjoying the camaraderie shared with other firefighters and their families. The couples also focused on the family-oriented nature of the firefighters. The advantages and disadvantages of 24-hour work shifts was a significant theme. Each firefighter agreed that working on the ambulance is more challenging than being stationed on the fire truck. Firefighters and their spouses also discussed the changes in the firefighters' worldviews during their careers. The importance of flexibility and communication in a firefighter marriage was emphasized throughout the

data. The challenges of discussing the dangers of the job with their children were reported and are explored in this chapter, as are the firefighters' use of emergency calls as teaching tools for their children. These overarching themes are represented in *Table 3*.

Table 3

Overarching Themes Reported by the Couples

| Overarching Themes | |
|----------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------|
| Theme | Description |
| Helping Others | Firefighters' perspective: "Our job is to make their bad day better." Spouses' and children's perspective: firefighters are heroes, save lives |
| Providing for the Family | Dependable career that provides financial stability and comfort for their families |
| Camaraderie | Other firefighters are "brothers" and their wives and children become "family" |
| Family-Oriented | Values and behaviors focused on caring for and supporting members of family |
| Shift work: Appreciating the Advantages, Coping with the Challenges | Shift work subthemes: Time together, helping around the house, missing out, exhaustion, spouses' adjustment |
| Challenges of the Ambulance | More stressful than the fire truck due to higher call volume and more complex calls |
| Changing Worldview | Viewing humanity more negatively, becoming "jaded," "callous," "cynical" |
| Flexibility and Communication | Importance of these characteristics magnified in firefighter family |
| Balancing Act | Parents are cautious to balance not worrying their children about the firefighters' safety with the reality of the dangers of the job and the world |

Helping Others

The importance of helping others is a consistent theme within each family. The firefighters take pride in the fact that the purpose of their job is to help people. One particular idea expressed by several of the firefighters depicts their ultimate goal: “Our job is to make their bad day better.” These words are a veritable mission statement for the firefighters. In fact, for most of the men, helping people was the reason they originally chose this career and continue to value the job. Mr. Julian specifically affirmed this, stating “It is going to sound cliché, but helping people. I mean it really is that.”

The men’s skills and goals elicit a strong positive response from their families. For the spouses and children, the men’s ability to “save lives” and consequently be viewed as “hero[es] of the town,” as 18-year-old Hayden Julian, daughter of Ted and Linda Julian, stated, is a characteristic that makes the family members proud. It is also a source of comfort that enhances the children’s sense of security. For example, when asked about the best part of having a dad who is a firefighter, 10-year-old Maddie Julian immediately exclaimed, “He can save us!” This was echoed by several of the other younger children, who see their fathers as uniquely powerful.

Providing for the Family

While acknowledging that one might not become exceedingly wealthy as a firefighter, the families in the study expressed appreciation for the comforts and steady income. Mrs. Jones stated that her husband’s job at the fire department allowed her to

stay home with their children, which was important to her and her husband. She concluded, “ It worked for our family. It’s been great for our family.”

Camaraderie

Every firefighter emphasized that the camaraderie shared with other firefighters is a highly-valued aspect of the job. Multiple participants referred to fellow firefighters as “family” or “brothers.” The spouses and children of the firefighters also expressed their appreciation for close friendships with firefighter families. Mrs. Robertson stated that these friendships are so significant that it can feel as if the women become members of your family.

[The other wives] are your family while your husband is at work. A lot of my really good friends now are because our husbands worked together on shift, so we would always get together when they were on shift and our kids would play and our kids grew up together.

The Hill sons discussed their close friendships with firefighter children they have grown up with “since birth,” and stated that these friendships were one of the best things about having a dad who is a firefighter.

Family-Oriented

The firefighters in this study, all men, revealed values and behaviors that are heavily focused on caring for their spouses and children. Each firefighter discussed the importance of family in his life and his dedication to making his marriage successful. These values were expressed through behavior, the firefighters demonstrated high levels of involvement with domestic chores such as cooking, cleaning, and childcare. The Julian family splits childcare and cooking evenly, based on Mr. Julian’s shift work schedule. One spouse cooks and cares for children for a day and a half before handing these duties over to the other spouse. While no other families were quite as organized in

their allocation of duties, most firefighters shared grocery shopping, cooking, and cleaning duties with their wives.

Shift Work: Appreciating the Advantages, Coping With the Challenges

Each family related the advantages and disadvantages of shift work. For most of the families, the benefits of shift work outweighed the disadvantages.

Time together. In the three families in which the wife does not work outside the home regularly, there was greater appreciation for the benefits of the 24-hour shift schedule, as the couples were able to spend a great deal of time together. However, in the two families where the wife routinely worked outside the home, the shift work schedule was seen as more of a challenge since it conflicted with the schedules of the other family members.

Helping around the house. Most of the spouses felt that another advantage of the 24-hour shift schedule is the amount of time their husbands are able to help around the house. Most of the wives were not accustomed to being responsible for cooking dinner every night, and when they were, they described it as more exhausting than when their husband's are able to help.

Missing out. Regardless of the benefits of a 24-hour shift, there will naturally be disadvantages as well. It is inevitable that the firefighter will miss some family events. Most of the children cited this as a disadvantage of having a father who is a firefighter, although they also acknowledged that their fathers try to attend as many important school or sporting events as possible, for example by swapping shifts with a colleague.

Exhaustion. Another significant disadvantage of the 24-hour shift is the level of exhaustion the firefighter experiences during and after a busy shift. The men typically

reported needing to rest or nap the day that they finish a 24-hour shift. Families must plan around this exhaustion, which most wives reported factoring into their plans. The Hill family reported that if they are going on a road trip the morning Mr. Hill gets off work, Mrs. Hill plans to drive the first few hours. While the firefighters reported a desire to get the most out of their two days off work, occasionally, after a particularly busy shift when a firefighter comes home exhausted, the family might have to cancel or delay their plans so he can rest. Mr. Hill illustrated the insidious effect of being awakened repeatedly during the night to go on calls, stating,

I get tired of waking up. I could be a fireman from 8:00AM to 10:00 at night, probably until I was 65, but I am tired of waking up. That is probably why I am looking to retire in 2 ½ to 4 ½ years. Because it is the nights that wear you out. You just get tired.

Spouses' adjustment. Two of the spouses were not bothered by being home alone at night. Mrs. Robertson, whose husband had worked overnight shifts at a residential treatment center throughout the early years of their marriage, and Mrs. Hill, whose previous marriage had been to a member of the military who was deployed for months at a time, had obviously resolved any discomfort years ago. However, the three wives who had not previously experienced being alone all night reported an adjustment period during which they tried to learn to feel safe in the home without their husbands. Mrs. Smith reported that in the first years of her marriage to Mr. Smith, she would put the t-shirt he had worn the day before on a pillow in their bed, which made it a little easier to sleep without her husband. Mrs. Jones discussed her tendency to check and re-check that the doors were locked before going to bed because she did not feel as safe at home without her husband. When there was a transition period for the Jones family, such as when she was pregnant or the family moved into a new house, she would experience

more discomfort being alone at night. She acknowledged that she has become more comfortable being alone at night as the years have passed, her children have gotten older, and the family has lived in the same house for many years. Mrs. Julian admitted that since the couple had been married for 14 years before her husband became a firefighter, the transition to being home alone overnight was challenging for her.

In addition to learning to feel safe and sleep alone, the wives also discussed the change in their roles as parents when their husbands are on shift. Mrs. Smith stated that she had to “step up” and take on all aspects of parenting, including discipline. Every spouse related a similar reaction to the alternating nature of their parenting roles, from having total responsibility while the firefighter is on shift to sharing parenting duties when he is home.

Challenges of the Ambulance

Every firefighter emphasized the more challenging nature of being stationed on the ambulance for a 24-hour shift versus the fire truck. Much of the increased stress resulted from the negative attitude of some patients and the frequent overuse of the ambulance by people who, in the words of Mr. Robertson, may not “have any business being in an ambulance” because their injuries or illnesses are not severe enough to warrant emergency services. Mr. Robertson reported his most extreme experience with unnecessary calls in need of an ambulance “I’ve had calls where they have called 911, said they need help and you get there and all they wanted- they are basically lonely- was to put pizza back in their refrigerator because it’s sitting on their table and they don’t want to get up, they can’t get up.” The frivolous absurdity of a call for help to put a

leftover pizza in the refrigerator would certainly engender anger and frustration on the part of first responders.

Every firefighter also related the exhausting nature of a shift on the ambulance, because the volume of calls is much higher for medical emergencies than for emergencies needing the fire truck. The firefighters reported getting much less sleep during shifts stationed on the ambulance because they are woken up constantly throughout the night.

In the medium-size town in a Rocky Mountain state that Mr. Jones lives in the fire and ambulance services are operated separately, which is unique among the participants in this study, as all the other towns ran the ambulance and fire truck services in conjunction—meaning the firefighters rotated between assignments to the ambulance or the fire truck depending on the schedule. Mr. Jones began his career working for the ambulance service, but due to the stress and exhaustion of this work, he moved to the fire service after only a few years. Mrs. Jones realized that she “had no idea” how exhausted he was during the years he worked on the ambulance, until she compared her memory of his fatigue at that time to his current higher energy level after work.

Changing Worldview

Every firefighter reported that he had observed a definite change in his worldview, and now sees humanity more negatively. The men chose powerful connotative words to describe this phenomenon. For example, Mr. Julian described himself as having become “jaded” during his six years as a firefighter, the result of his seeing a broader range of the human experience than he had before. Mr. Jones reported becoming “callous,” and Mr. Smith stated that he felt he had become “cynical” due to

some of the scenes he had responded to. Additionally, Mrs. Robertson asserted that her husband had become “desensitized” to the magnitude of the events to which he responds.

Flexibility and Communication

The couples in the study emphasized the importance of flexibility and communication in a firefighter marriage. While most acknowledged that these characteristics are important to every marriage, they felt that the importance is magnified in a firefighter marriage because one spouse is out of the house for 24 hours every third day. Mrs. Hill affirmed the benefit of frequent, open communication in her marriage. “Lots of communication” helps the couple schedule doctor’s appointments and other events with their four children. She also discussed the close bond she feels with her husband, which is enhanced by their frequent discussion about difficult life situations. For those spouses whose husbands carry a pager, flexibility is crucial to coping with the sudden interruptions that this can bring. Mrs. Hill stated that regular communication while her husband is away on a page helps the house run smoothly and calms her worries. Mrs. Jones emphasized her focus on flexibility concerning plans the family has or time the couple plans to spend together. She stated that the couple’s “date nights” are not limited to a traditional evening out, but could also be going to lunch together and grocery shopping. What is important to the couple is that they are together, rather than when or where they go.

Balancing Act

Every adult participant in the study reported that they do not discuss the dangers of the job with their children, unless the children have questions. Most participants stated that this was because they did not want to worry their children unnecessarily. Mrs. Julian

illustrated this point, saying, “Kids are kids. Let them be kids. I don’t remember worrying when I was that age about my dad having dangerous jobs. I don’t want them to worry about it either.”

Although the parents strove not to worry their children, every couple reported that the firefighter uses emergency calls as teaching tools. Mr. and Mrs. Robertson both described Mr. Robertson’s use of car wrecks as examples to teach their daughter about the dangers of speeding because she had received a speeding ticket on a nearby mountain pass. A recurring theme in the data was the parents’ use of such emergency calls to teach teenagers about the potential hazards of driving. Mr. and Mrs. Jones and the Julian family also have teenage children who have recently started to drive, and their fathers discuss with them accidents that involved young people drinking and driving.

While the parents expressed a desire to protect their children from worrying about their fathers’ safety, they also acknowledged that must strive to achieve a delicate balance between protecting children from fearing the dangers of the job while also educating them about the dangers in the world. The parents reported telling their younger children less about these dangers. However, as the children mature and learn more about the world, the parents begin to discuss more about the firefighters’ job and potential hazards. Mr. Julian stated that he tells his youngest, Maddie, age 10, very little about his job. However, he tells more to his oldest daughter, Hayden, age 18, and son James, age 15, especially since they acquire much information through the media, such as local news broadcasts. Mr. Julian knows that he cannot prevent his oldest children from seeing his fire engine on television occasionally. When it comes to television news coverage and learning about the dangers of the world, “I can’t really hide it from them. And I don’t

really want to. I want them to understand that there is some bad stuff out there, and they need to understand that.”

Firefighters’ Themes

The five firefighters expressed several common themes: their desire to protect their families, their tendency to be less stimulated by trauma outside of work, the difficult nature of calls involving children, their process of coping with emotions during calls, the effect traumatic calls have upon their behavior, their strategies for coping with traumatic calls, and the challenge of emotionally processing calls that seem senseless and cause them to wonder why this tragedy occurred. These themes are reflected in Table 4.

Table 4

Themes Reported by the Firefighters

| Firefighters' Themes | |
|---------------------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Theme | Description |
| Desire to Protect Family | Shielding wives and children from traumatic aspects of the job |
| Desensitized to Trauma | Not distressed or excited by trauma seen off the job Subthemes: Have been trained how to respond to trauma Desensitizing nature of repeated trauma exposure |
| Calls Involving Children | Most affected by those calls involving death or severe injury of a child |
| Focused on the Job | Do not experience emotional reactions during calls, focused on completing the mission |
| Behavior After Tough Calls | Can be irritable or grumpy after returning home from a tough call |
| Coping Strategies | Talking to other firefighters and spouses, dark humor, creating emotional distance, coping cognitions, processing calls |
| Questioning Why? | Question deaths that seem senseless or unnecessary |
| Reluctance to Seek Professional Help | Reluctant to seek mental health services following traumatic calls |

Desire to Protect Family

Every firefighter expressed a desire to shield his spouse and children from the most gruesome and traumatic events by limiting the information shared. Mr. Robertson revealed that he does not regularly discuss any aspect of traumatic calls with his wife or children because “I don’t want them worrying about it. I don’t want them worrying about what’s going on down on the interstate or [if] a roof caved in. I don’t want them to know that.” Mr. Robertson thus represents the most extreme example on a continuum of

behaviors designed to shield the families from traumatic aspects of the job. The other firefighters related a similar desire to protect their families. Hayden Julian, age 18, expressed awareness of her father's tendency to censor information, stating that he "keeps it PG" when he discusses calls with the children. Mr. Julian echoed this: "I don't give the details. Suicides and multiple shootings and stuff like that, I don't think they need to know all that."

Most of the firemen reported that talking to their spouses helps them deal with traumatic events. In order to make sure they are not telling their spouses more than they are able to hear without becoming upset, four out of five of the families, with the exception of the Robertsons, have had discussions or hold continuing discussions about how much detail the wives are able to cope with. Mrs. Hill stated that she will tell her husband when he is becoming "too graphic" about a call. In the beginning months of his career, Mr. and Mrs. Julian had a conversation regarding how much detail she could tolerate, before Mr. Julian began to talk about difficult calls with her. For most of the men, their wives are important sources of social support; however, they also have a desire not to burden their wives unnecessarily.

Desensitized to Trauma

Every firefighter reported that he is now less stimulated by traumatic events or personal crises in his life outside the department. Two themes related to the reason for this desensitization emerged: having been trained to respond rationally to emergencies and having seen so many traumatic events that they no longer cause as intense of a response. As Mr. Julian recalled his reaction when he heard that his daughter had been in a car wreck. Because he had been "trained" to deal with emergencies, he used these

skills to respond to this personal situation calmly, without getting excited “to the point that I just go stupid and not think about what I am doing.” Mr. Julian’s reaction is an example of applying his professional training to a personal situation.

The firefighters also stated that because they have observed so many traumas, they no longer view trauma off the job as being particularly upsetting. Mr. Jones admitted that because of his seemingly muted reaction to trauma off the job, he has been labeled as “emotionally detached” by friends. He agreed with their assessment, saying, “A lot of little things don’t really bother me. You know, little minor problems or accidents and injuries that happen around the home. Some people really overreact on things. I tend to be the one that doesn’t really react much.” Because of the many serious emergencies Mr. Jones and the others have encountered professionally, they do not view ordinary daily accidents or emergencies as being as traumatic, since in comparison these events rarely life threatening.

Calls Involving Children

The challenge of coping with calls involving children was a strong theme in the data, with every firefighter reporting that the most challenging calls were those involving the death or injury of a child. Mr. Julian admitted that he is much more affected by calls involving children: “Adults don’t bother me, because nine times out of ten, they brought that on themselves. It’s the kids that get to me. You know, I really have to work through those.” Mr. Robertson reported that calls with child victims are much more disturbing for him as well: “I think the ones that shake everybody up are the kids. The young ones, the ones that were innocent. Those are the ones that still haunt me. And a couple [of] different, specific calls probably always will.” Mr. Hill related that within his fire

department it is well-known that the most upsetting type of calls are those involving children. “We always talk about the hardest ones are the ones with kids.”

Focused on the Job

Even during their most challenging calls, the firefighters reported remaining focused on the task at hand and not typically experiencing an emotional reaction while on the call. Mr. Hill stated, “Most of [why you don’t have an immediate emotional reaction] is you are so tuned in to what you have to do.” The firefighters reported that they rely on their training to stay focused on helping the individual in need, even when the circumstances of the scene are upsetting or potentially traumatic. After the call has ended, they occasionally experience feelings of anger, such as when Mr. Julian witnesses child abuse, or sadness, as several reported experiencing after the death of a child. Mr. Smith reported that calls involving children evoke more of an emotional reaction from him; however, he tries to hide this reaction during the call in order to stay focused on the job. He stated,

If it’s a kid, that’s the thing that I have trouble dealing with sometimes. If a kid gets hurt or somebody hurts a kid, I do have trouble. I don’t ever get really upset emotionally, but when I see something happened to a kid, kid gets burned, somebody leaves a kid unattended, I feel it inside. I don’t ever show it.

Behavior After Tough Calls

Every firefighter reported that they have noticed that their behavior at has at times been negatively affected by traumatic calls. The most common behavior reported was being grumpy or irritable. Mr. Robertson reported that he is aware that “my temper might be a little shorter, my responses might be a little sterner” following difficult calls. He observed, “Unfortunately, the ones you take it out on are the ones you love.”

Coping Strategies

The use of coping strategies was reported by each firefighter and thus is a significant theme. The interviews revealed that many of the men described similar specific behaviors, including: talking to other firefighters or their spouses about difficult calls, using dark humor, and creating emotional distance from the scene. Every firefighter also revealed coping cognitions used to maintain a rational view of their level of responsibility for the outcome of a call.

Talking to other firefighters. The men reported talking about challenging calls with other first responders, such as the firefighters who had also been on that call, a supervisor, or a friend that is a firefighter at another department. Mr. Smith related the challenge of discussing difficult calls with people who have never responded to emergencies, mentioning his occasional feeling that his wife cannot fully understand the impact of what he sees. He acknowledged, “It’s hard [for them] to relate. . . . Unless you see the surroundings, how people live, see the despair. You really can’t understand.” For this reason, Mr. Smith, and the others often prefer to discuss emergency calls with other first responders.

Talking to spouses. Four out of five firefighters acknowledged their spouses as important sources of support following challenging calls. Mr. Robertson was the only participant who reported that he does not regularly talk to his wife about calls, as he wants to protect her from the upsetting aspects of his job. However, each firefighter, including Mr. Robertson, reported talking to his wife after the most difficult call they ever experienced. Mr. Robertson stated that, after his most challenging call, involving a child near his son’s age playing with matches and causing a fire that fatally burned him,

“Initially, I said I didn’t bring it home and talk about [traumatic calls]. That one, I did a little bit. That one, I wasn’t getting through that one on my own.”

The other four firefighters stated that they routinely talk about the events of their shift with their spouses. Mr. Julian emphasized the importance of talking about difficult calls, saying, “I know I got to talk about it. You got to work through it somehow; you can’t just do it yourself.” Mr. Julian’s talks with his wife help him process his experiences. Mr. Smith reported that he had been reluctant to talk to his wife about traumatic calls for the first ten years of his marriage; however, the stress of the job began to take a significant toll on his health and his relationship with his wife. Therefore, he and his wife started talking about challenging calls and his stress at work, which he believes has contributed to an improvement in his health and the couple’s relationship. He explained the reason for these improvements, stating, “It’s kind of funny, but it’s just relating more to my wife about it [that helped].”

Dark humor. All of the firefighters admitted that the use of dark humor during stressful emergency calls makes dealing with tense, unusual situations a bit easier. Mr. Julian stated that when he joined the fire department he was taken aback by senior firefighters’ use of morbid humor; however, during his six years with the department he has seen the value in the occasional use of dark humor. He stated,

We’ll crack jokes on scenes. It is not out of disrespect. It is a coping mechanism. You know, family members can overhear some of that stuff and really feel insulted. And I understand. If you are on the outside looking in, you can see how insulting it can be. But, shoot, I had--four or five months ago--I had probably a CPR every shift for a month. One shift I had three. You see that much death and you have to find a way to cope. So the joking would be the way.

Creating emotional distance. Every firefighter related the importance of not becoming overly emotional about the calls they respond to. Mr. Julian stated that he

purposely distances himself emotionally, stating, “I try to care about everybody I run on. But you can’t put your heart and soul into every run. Because if you do, you are going to run out of heart, eventually.” Mr. Jones reported, “I’m pretty good at detaching myself emotionally from what I see and do at work and what happens at home.” He cites his ability to achieve this separation as the reason he has been able to have a long, successful career as a first responder.

Coping cognitions. Each firefighter volunteered examples of coping cognitions that help create emotional distance. An important aspect of maintaining emotional distance that emerged in the data was the firefighters’ ability to be realistic about the degree to which they are personally responsible for saving every person.

Analysis of Mr. Julian’s interview revealed cognitions including “[I] know [I] did [my] best, bottom line”; and “You can’t fight God’s will.” Mr. Smith reported coping cognitions such as “People are going to die everyday”; “I know life goes on”; “It wasn’t me [who caused the accident].” Mr. Jones shared coping cognitions such as “I understand, first, that it’s my job”; “I didn’t cause the call”; “It’s not my fault”; “It’s their emergency, not mine”; and “A lot of what we see . . . are things [that are] out of our control.” Mr. Hill’s coping cognitions include “There is only so much you can do”; an event cannot change since “It’s just the way it is”; and “There are a lot of factors you can’t control.” Mr. Hill also discussed his tendency to consider the odds of an individual surviving certain circumstances, such as having a heart attack many miles outside of town where there would be little chance to receive help in time to be revived.

Processing calls. The firefighters reported that following difficult calls, they often assess whether they could have done something differently in order to improve their responses to future calls. Mr. Julian described this process:

If I have a call that I didn't feel like went right, I want to talk about it, talk to other guys and say "Hey, what would you do in this situation?" And see if I can do better the next time it comes by. . . And you want to go back and reflect on that call and say where did it go wrong, what sent it down the wrong path? Usually that comes from talking with the rest of your crew, "Hey what did you see?" Or talking with a lieutenant who isn't really involved in the call.

Questioning Why?

Themes emerged in the data indicating that the firefighters have more difficulty coping with calls that cause them to question the reason for the injury or death of the victim. Those calls that they do not question and are able to make sense out of are easier to deal with. For example, Mr. Hill stated that it is easier for him to understand suicide by an older adult who has been in pain due to cancer than the unnecessary death of a child in an accident. As stated earlier, all of the firefighters admitted that calls involving children are hardest to cope with because these situations often seem "unfair," as Mr. Jones put it. Events that seem as if they "did not have to happen" or "could have been prevented," in the words of Mr. Hill, are harder for the firemen to cognitively process, accept, and leave behind them, which is why several of the firefighters reported that they are affected for longer periods of time and more seriously by calls involving children.

Reluctance to Seek Professional Help

All of the firefighters admitted that they have never sought professional mental health services, which are available through their departments, even though several of them struggled to cope with their most traumatic emergency calls. Mr. Julian reported that he had not sought services, since he has been able to cope well through the support of

family and friends. Mr. Robertson suggested that most firefighters are too “independent” and “stubborn” to admit that they could benefit from professional mental health services. Most of the firefighters acknowledge that mental health services are available through their department, but quickly added that they had never sought this help.

Spouses’ Themes

Five wives participated in this study. Analysis of the wives’ interviews revealed themes including the effort they put into creating a smooth transition when their husbands come home from work, increased stress when their children are younger, their ability to discern whether the firefighter has responded to a tough call, empathy they feel for their husbands, the varying degree of concern they feel based on the setting of the fire department, and the coping cognitions they employ to deal with the threat of danger to their husbands. The wives’ themes are reflected in Table 5.

Table 5

Themes Reported by the Spouses

| Spouses' Themes | |
|--------------------------------------|----------------------------------------------------------------------------------------|
| Themes | Description |
| Smooth Transitions | Creating a calm, peaceful environment for the firefighter after work |
| Younger Kids, More Stress | Spouses are more stressed when children are younger |
| Spouses Can Tell | Able to discern when the firefighter has responded to a traumatic call |
| Hearing About Traumatic Calls | Willing to hear about traumatic calls, but set limits around how much detail is shared |
| Developing Empathy | Spouses develop empathy as they learn about their husbands' work |
| Varying Degrees of Concern | Amount of anxiety about the firefighters' safety varies, less anxiety in small towns |
| Spouses Coping Thoughts | Focusing on the firefighters' skills, limiting anxiety-provoking thoughts |

Smooth Transitions

Most of the wives acknowledged their efforts to create a smooth and relaxing transition into the home after their husbands come off a 24-hour shift. The spouses recognize that the men are often tired after a long shift and need time and a quiet home for a nap. The children's schedules can make it more challenging to ensure a smooth, restful transition, as on the days children are home from school. For other families the transition becomes more difficult when the children must leave for school around the same time their father is coming home from work. However, Mrs. Julian stated that, as the children have gotten older, she has realized that she can let the children "sleep in,"

which keeps the house quiet while her husband naps. Mrs. Robertson acknowledged that she used to feel frustrated that her husband got to be at home alone and have a quiet house while she was at work and the children were at day care. However, as she has gained greater understanding of his job and learned how much rest is required to recuperate after being on shift for 24 hours, she has become more understanding of Mr. Robertson's need to rest.

Mrs. Hill reported that she attempts to complete as many household chores and errands as possible while her husband is on shift. She feels that this makes his transition back into the home more relaxing, since he will not feel obligated to help her around the house. She stated that completing these chores while he is at work not only makes his transition home easier, but also makes his two days off more enjoyable, since the couple can focus on other tasks beyond housework. Mrs. Jones described the family's "routine" when her husband gets home from work, which includes his changing out of his work clothing and then eating breakfast with the family while discussing his shift. She stated that they all enjoy this routine; however, on days when the children are going to school, the family is not able to have breakfast together, and two children are already at school before Mr. Jones gets home. The spouses strove to create the most peaceful possible transition while also accommodating their own schedules and those of their children.

Younger Kids, More Stress

The spouses reported that they were more stressed when their children were young and their husbands worked 24-hour shifts. Mrs. Jones described the challenge of having two young children and a husband with a shift work schedule:

I remember being young with young kids. And then I'm tired because I've been up all night, and [my husband] comes home and he's tired because he's been up

all night. And then, who's going to deal with the kids? We're both tired! . . . But it's definitely gotten easier since our kids are less maintenance right now. But I remember, it was hard! It was hard. I remember having a real melt down after our second child was born, because our oldest son was jealous. And I was just tired. I was in my jammies all the time. And I was literally [thinking], "I can't deal with this anymore." So it, it's hard. It's hard that way when you never get a break, especially when they are little.

Having young children in a firefighter family was also challenging for the only mother who worked fulltime outside the home. Mrs. Robertson, who has worked fulltime throughout her entire marriage, reported that she felt a higher level of stress and frustration when her children were younger, as she felt primarily responsible for taking care of the house and her children while receiving less help than she would have liked from her husband due to his job and the time he needed to sleep and recover from being on-shift for 24 hours. She admitted, "You might feel like kind of a single parent at times, I guess. You're always the one doing this; you're always the one doing that." Mrs. Robertson echoed Mrs. Jones's statement that parenting has become less demanding as her children have gotten older.

Spouses Can Tell

Two of the spouses reported that they had a difficult time telling whether or not their husbands had been on a tough call and discussed the possible reasons for their difficulty discerning their husbands' states of mind. Mrs. Robertson stated that her husband is by nature "really quiet" and talks little about his job, so "you never really know if it's just like stress on the job, within the department, or if it has been a call." Mrs. Robertson reported that it is hard to differentiate between "he's quiet to begin with or he's quiet because something is bothering him." Mrs. Hill reported that she thinks she has not seen signs of her husband having trouble with traumatic calls because, in the four

years the couple has been together, he has responded to fewer of these calls since he is an officer and is stationed on the fire truck rather than the ambulance.

The other three wives stated that they are able to tell when their husband has responded to an upsetting call. Mrs. Julian said, "I can tell," based on her husband's behavior, such as times when "he's not talking" about the shift with her as he usually does when he gets home. Mrs. Smith stated, "I always knew when something had happened to a child," because her husband would call home and check on their son. Mrs. Jones also notices when her husband is struggling to deal with a call based on his behavior at home after his shift. She reported that he will discuss the call repeatedly and will read the obituaries. These spouses reported that since they are able to tell when their husband is bothered by a call, they can then offer their support. All the wives stated that they are willing to talk about calls if their husbands need to, but they do not force or nag their husbands to talk. Mrs. Julian stated that, based on her experience being a firefighter wife, she would tell other spouses to keep this advice in mind when trying to support their husbands after tough calls:

Make sure that he knows that you are there for whatever he wants to talk to you about. And he will talk to you when he gets ready. And if he doesn't talk to you, don't worry about it, because he will talk to you when he needs to talk to you. I mean if you have a good relationship, he is eventually going to talk to you if he needs to work something out. . . . But don't overanalyze it, because they have got to work through it before they can deal with it with you.

Hearing About Traumatic Calls

All of the wives related their willingness to help her husbands cope with difficult calls when they need support. Mrs. Julian described her ability to tolerate hearing about tough calls, which she believes is strengthened by not being a first responder. She stated that when it comes to traumatic calls, "I don't have to see it. I don't have to deal with it.

So to me there is no picture in my head of a kid who has been thrown out of a car or something to that effect.” The spouses did not report that it was too difficult to hear about the traumatic calls their husbands respond to, but several did relate that they will tell their husbands if they are giving too many details or becoming too graphic in their description.

Developing Empathy

As the wives learn more about their husbands’ jobs throughout their marriages, they develop empathy for the challenging situations their husbands experience. Every wife related feeling empathy for her husband because of the traumatic events that are part of his career. Mrs. Smith stated, “It’s got be stressful” to deal with sick or upset people every day on the job. Mrs. Robertson admitted, “It’s kind of sad knowing some of the stuff that [firefighters] see.” Mrs. Jones said, “There are sad calls. You know, young people, young parents or kids.” Mrs. Hill discussed her empathy for her husband because of the numerous inherent challenges of the job such as “personnel, patients, [and] hazards.”

Varying Degrees of Concern

The spouses experience varying degrees of concern about their husbands’ safety when at work. The two spouses whose husbands are firefighters in a large, urban fire department reported a significant amount of worry about their husbands. These two spouses discussed the impact of the local news because they regularly see reports about fires and emergencies that the fire department responds to or about firemen who are injured or killed on the job. The urban spouses discussed coping strategies they rely on, which include Mrs. Smith’s praying every Sunday at church for her husband’s safety and

Mrs. Julian's reliance on frequent communication by cell phone to make sure her husband is safe during his shift.

The three spouses in smaller towns in a Rocky Mountain state report feeling less anxiety about their husbands' safety. Mrs. Jones admitted that the smaller size of their town makes her feel more comfortable with her husband's job than she would if the family lived in a larger city with bigger buildings. She said, "I have to say, being here, I don't feel as threatened." Mrs. Robertson also reported that "for so long he was so new [to firefighting], and it was kind of new and exciting and [he was a] hero. I don't know that I really worried about him too much." Mrs. Robertson and Mrs. Hill live in the same town, which has a major interstate highway running through it, and both acknowledged that their biggest fear was that their husbands might be hurt while responding to a call on the Interstate during bad weather. Mrs. Hill reported that she does worry about her husband's safety on the job, and her worry is increased when there is severe winter weather or other circumstances that increase the chance that her husband might be injured.

Overall, the wives in small towns reported fewer concerns for their husbands' safety, since they feel that some of the characteristics of their towns—smaller buildings, less violent crime—make it a less dangerous place to be a firefighter than more urban areas. Mrs. Robertson said that in comparison with a larger town, "The fires they see are not the big warehouse fires, and the big, you know, high rises, and the big scary things."

Spouses' Coping Thoughts

While the wives in small towns can take some comfort in their husbands' jobs having fewer inherent dangers, the spouses are aware that the potential for danger is part

of being a firefighter. In order to cope with this ever-present danger, the wives have developed coping cognitions to relieve some of their worry. Mrs. Julian and Mrs. Robertson described their confidence in their husbands' skills that makes them good at their jobs and able to be as safe as possible. Mrs. Smith focuses on and discusses with the children the safety procedures her husband uses on the job. She stated that she tells her children that "he does everything that he can to keep himself safe every day." Mrs. Jones reported worrying very little about her husband's safety, but the couple does "have a plan" for how she would proceed with life if her husband were seriously injured or killed on the job, and this contingency plan provides her with a sense of security and competence.

The Hills have only been together 4 years, and she reported that her concern that her husband could be injured is "always in the back of my head." To cope with this threat, Mrs. Hill attempts to limit the amount of worrying thoughts she has and instead thinks, "I still have got a job to do here [at home], and I have got to keep my head on my shoulders for the kids, too." She also reminds herself that "no news is good news" when her husband is at work. Although the wives expressed varying levels of concern for their spouses' safety, they all revealed important coping cognitions that serve to reduce the amount of stress they feel about their husbands' jobs.

Children's Themes

Twelve children ranging in age from 7 to 18-years-old participated in this study. All the children had a father who was a firefighter. Interviews with the children revealed the following themes: positive impressions of their father's job among the children and their peers, children having knowledge of the job from conversations with their

firefighter parents', a desire to be a firefighter when they grow up, advantages and disadvantages of shift work, parental continuity at home when their dad is at work, and the influence of the media on their knowledge of firefighting. The children also reflected a degree of worry about their father's safety that is similar to that of their parents, and the children who expressed the most worry discussed coping strategies they rely on when their father is at work. Table 6 presents the children's themes.

Table 6

Themes Reported by the Children

| Children's Themes | |
|------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| Theme | Description |
| Positive Impressions | It is "cool" to have a dad who is a firefighter |
| Talking About Calls | The fathers talk about emergency calls with the children |
| Being a Firefighter | Most have wanted or still want to be firefighters when they grow up |
| Shiftwork: Advantages and Disadvantages | Advantage of getting to spend lots of time with fathers during off-shift days Disadvantage of fathers inevitably missing some family events |
| Parental Continuity | The home environments feel the same to most of the children when their dads are gone |
| Influence of the Media | Television news and movies influence their level of fear about their dads' jobs |
| Children's Level of Concern | Children whose fathers work in the city express more anxiety and concern about safety |
| Coping With Fear | Focusing on fathers' skills at their jobs, praying for their safety, limiting worrying thoughts |

Positive Impressions

The children all related a positive impression of their fathers' careers as firefighters. Several children used the word "cool" to describe the job. The children discussed a number of reasons why having a dad who is a firefighter is "cool," which ranged from getting to play basketball at work, as Max Hill, age 11, reported, to the child getting to ride on the fire truck and hang out at the fire station, as Peter Smith, age 13, recalled. Most of the children also mentioned that their fathers "save people," or are viewed as "hero[es] of the town," in the words of Hayden Julian, age 18, as positive aspects of the job. The children also discussed their friends' favorable views of their dads being firefighters, reporting that their friends think being a firefighter is a "cool" job.

Talking About Calls

All of the children reported that their fathers talk to them about calls and that this was an interesting part of having a dad who is a firefighter. The younger children felt that their dad told them all the details of their calls. The Smith family's granddaughter, 7-year-old Jenny, said, "He tells me everything, like what he does and things like that"; for example, "He tells me how long he has been a firefighter." The older children appear more aware that there are many details that they do not find out from their fathers. Hayden Julian, 18 years old, stated that her father "keeps it P.G." when he talks about his job. She stated that her father "never really gives full-out details, which is good, cause, yeah, we don't really need to know. But I mean we know how the job works and how it goes and stuff like that." This is representative of the overall attitude of the older children, who were aware that they knew a good deal about their fathers' jobs, but that

some things at work are not shared with the children. The adults' interviews support this finding: the firefighters and their spouses reported sharing more about the job as their children matured, but told very little to the children when they were young.

Being a Firefighter

At least one child from each family reported that he or she currently or in the past had wanted to be a firefighter in the future. Several of the boys had had their bedrooms decorated in a firefighter motif when they were young. Some of the children who had wanted to be firefighters, however, reported that they no longer wanted to because of what they have learned from having a parent who is a firefighter. Jack Robertson, 13 years old, stated that he had wanted to be a firefighter when he was younger, but now he does not think he would enjoy shift work, so he no longer sees firefighting as a probable career. Other children reported that the inherent danger of the job has changed their minds. The Julian family's 15-year-old son, James, said, "I have actually thought about [becoming a firefighter]. But after seeing the way he works, I am kind of scared in a way. I just don't want to go into a job that I could possibly get killed in." Other children were still considering firefighting a career option, including Hayden Julian and both Ty and Max Hill.

Shift Work: Advantages and Disadvantages

The children echoed their parents' discussions of the advantages and disadvantages of shift work. Several children, including the Jones and Hill children, cited the advantage of getting to spend more time with their dads than other children whose fathers work a traditional schedule. They talked about the summer weekdays they spend with their dads and discussed fun outings such as going to the pool. Many of the children

cited their fathers' missing important events, such as holidays, birthdays, or school concerts, as a disadvantage of shift work. Jessica Jones, 13 years old, stated, "It's kind of sad" when her father misses an event, such as one of her orchestra concerts; however, she acknowledged that "he hasn't missed that many, because he tries to be there." Most of the firefighters reported that they do try to swap shifts when possible in order to miss as few important family events as possible.

Parental Continuity

Nearly all of the children reported that they do not notice a difference in the atmosphere of the home or parenting styles when their father is at work. The children who did report feeling a difference included 7-year-old Jenny, who reported that it feels safer when her grandfather is home, and the Robertson children, who admitted that the atmosphere at home is more relaxed when their father is on shift, since they do not have a formal family dinner or cook and clean. The Jones children reported that, since their father has been working 24-hour shifts their entire lives, "It's pretty normal," and it does not impact the atmosphere of the house. The Hill children, part of a blended family in which their stepmother cares for them while their biological father is on-shift, stated that they did not notice a difference at home when he is at work.

Influence of the Media

Several of the children reported that the media, such as television news and movies, have influenced their knowledge of the dangers of their fathers' jobs. The Julian family reported that they frequently watch the local television news and see fire trucks and ambulances from their father's department. Mrs. Julian stated that when the children see a fire truck on television they immediately want to know if it is their dad's truck;

however, once they are told it is not their father's truck, they go on with their evening without worry. The Julian children and Heather Robertson admitted that they had watched *Ladder 49*, a movie about firefighters who were killed in the events of September 11, 2001, and that it was extremely upsetting. Heather said, "One time we watched *Ladder 49*, and I can't watch that. I watched it once, and I can't watch it." She stated that the film was scary "because it's the same job my dad has." Hayden Julian reported that the film made her more aware of her biggest fear -- the fear of her father "going into a fire and not coming out."

Children's Level of Concern

A pattern emerged in the children's interviews in which their level of concern for their fathers' safety paralleled the amount of concern their parents expressed. Both sets of children of the two families of first responders working in a large, urban fire department expressed more concern for their fathers' safety, just as their mothers did. The Julian children related their fear of their father being harmed on the job, such as by a violent crime. Hayden Julian said, "Everybody hears about policemen getting shot or something like that. It always worries me that something like that is going to happen to him." Peter Smith also discussed his fear that his father could be hurt on the job, stating, "When I do stop to think about it, I do think about how he could be risking his life for other people." The children of the urban firefighters were acutely aware of the dangers their fathers face each time they go to work in an impoverished area of a major city. These children's parents, Mr. and Mrs. Julian and Mrs. and Mrs. Smith, also more openly discussed the threat of being harmed as a firefighter in a large city and how they cope with this threat.

All five of the children with fathers working in an urban fire department discussed their fear of their father being harmed on the job. These children's awareness of the dangers of the job affords a sharp contrast to the level of concern expressed by the children of firefighters in a rural Rocky Mountain state. Of the seven children interviewed whose fathers worked at smaller fire departments, only the two Robertson children ever mentioned feeling concerned for their father's safety. As previously reported, the parents of the children in the more rural departments acknowledged that they did not worry as much about the firefighters' safety because there are fewer hazards in their small towns. The attitudes of the children in this study appear to be influenced by their parents' attitudes toward the level of danger that the firefighter faces on the job.

Coping With Fear

The children who reported feeling afraid for their fathers' safety described how they cope with this fear. Hayden Julian stated that danger is "part of the job. You get used to it, and you live with it." In order to ease their fears, the Julian children reported that they pray for their father's safety. They also rely on the fact that their father is skilled at his job and motivated to come home safely. Hayden said, "We know that he knows how to do his job. And we know that he is definitely going to keep safe, especially for us. He has got a family at home. He is going to stay safe for us, 'cause he wants to be here with us." Peter Smith stated that he focuses on the thought "He will come home the same person he was yesterday." He also strives to minimize his worry in order to "keep it something that doesn't make me feel bad." The Robertson children related feeling less fear for their father's safety since he is now working in an administrative position; they did not report any coping strategies.

Summary of the Themes

Themes emerged in the categories of overarching themes, firefighters' themes, spouses' themes, and children's themes. Overarching themes include ideas and experiences that were common to all the families in the study including aspects of the job the couples value, the advantages and disadvantages of shift work, the family-oriented nature of the firefighters, the challenges of working on the ambulance, and the importance of flexibility and communication. Themes unique to the firefighters in the study include the desire to protect their families, the tendency to be less stimulated by trauma outside of work, the difficult nature of calls involving children, the process of coping with emotions about calls, the effect traumatic calls have upon their behavior, their methods for coping with traumatic calls, and the challenge of emotionally processing calls when they seem senseless. Themes the wives expressed included the following: creating a smooth transition when their husbands come home from work, the increased stress of having children who are younger, being able to discern if the firefighter has responded to a tough call, empathy for their husbands, varying degrees of concern based on the setting of the fire department, and the cognitions spouses employ to cope with the threat of danger to their husbands. The children related themes expressing positive impressions of firefighting, knowledge of the job from conversations with their fathers, a desire to be a firefighter when they grow up, advantages and disadvantages of shift work, not noticing a difference at home when their dad is at work, and the influence of the media on their knowledge of firefighting. The children's level of concern for their fathers' safety appeared related to their parents' level of concern, and those children who

expressed anxiety about their fathers' safety related strategies that help cope with this fear.

Chapter Six discusses these findings and theoretical applications, implications of the study for mental health providers, firefighters, firefighters' families, and fire departments, and limitations of the study.

CHAPTER VI

DISCUSSION

This study explored the experience of being in a firefighter family, with emphasis on the trauma firefighters are exposed to on the job and the experience of having a family member who works a shift schedule. The current chapter contains a summary of the study, discusses the findings, and applies constructivist self development theory and a family resilience approach to those findings. This chapter also details the implications of the study for firefighter families, mental health professionals, and fire departments, as well as limitations of the study and possible directions for future research.

Summary of the Study

First responders experience traumatic events throughout the course of their careers. While multiple studies document firefighters' increased risk of developing posttraumatic stress disorder (PTSD; McFarlane, 1988; Bryant & Harvey, 1996; Marmar et al., 1999; Regehr et al., 2000), most do not become severely traumatized by their work, despite repeatedly responding to scenes involving death and severe physical injuries. Factors that prevent first responders from developing PTSD have been explored, and social support from family is noted as being imperative to coping with the stresses of emergency service work (Regehr et al., 2005). Nevertheless, there is a dearth of research exploring the ways that firefighters utilize family for support and the impact that the firefighter's job has upon his or her most important support system – the family. The

current study provides insight into how families adapt and manage the stresses of being in a firefighter family. This information can benefit those who are struggling to navigate the challenges of having a first responder in the family. With the exception of the work of Cheryl Regehr, who has investigated the experiences of first responder spouses in multiple studies, little attention has been given to the families of first responders (Regehr et al., 2000; Regehr et al., 2003; Regehr et al., 2005; Regehr & Bober, 2005).

Exposure to traumatic events is not the only challenge firefighters face. Firefighter families typically deal with a non-traditional work schedule because most fire departments utilize a 24-hour shift model, meaning firefighters work 24 hours on duty and then are off duty for 48 hours. Consequently, the present study also explored the impact of shift work and the way families respond to this schedule.

This study was guided by constructivist self development theory (CSDT), which addresses the impact of psychological trauma on the organizing systems of the self (McCann & Pearlman, 1990a). These systems include the following: self capacities, ego resources, psychological needs, and cognitive schemas. CSDT was used to conceptualize the impact of traumatic exposure on firefighters and their family members.

Previous research has explored the experience of being married to a firefighter (Pfefferbaum et al., 2002; Regehr et al., 2005), as well as the responses of their children to the events of September 11, 2001 (Linkh, 2006). However, before the current investigation a study including the entire family had yet to be completed.

This study explored the following question:

H1 What is the experience of being in a family in which one spouse is a firefighter?

Other questions addressed included

H2 What impact has trauma the firefighter encountered on the job had upon the marriage?

H3 What impact has trauma the firefighter encountered had upon the firefighter?

H4 What impact has trauma the firefighter encountered had upon the spouse?

H5 How does the firefighter's schedule and shift affect the marriage?

H6 How has the firefighter's job impacted his role in raising children?

H7 How do children of firefighters experience having a first responder as a parent?

Five families participated in the study. The families each comprise a husband (age range 41 to 48 years old) who works fulltime as a firefighter or has recently worked fulltime as an active duty firefighter, a wife (age range 39 to 47 years old), and two to three children (12 children, age range 7 to 18). Four families are Caucasian and one family is African American. Two of the families are blended families, the result of second marriages. Two of the firefighters work in a large, urban fire department in a southern state, and three firefighters work in small town fire departments in a Rocky Mountain state. I recruited participants by visiting fire stations, describing the necessary characteristics of families being sought for the study, and handing out recruitment flyers. Interested firefighters contacted me privately after my visit.

Data were collected through semi-structured interviews that were conducted in the participants' homes, and follow-up interviews were completed by phone, in person, and via email. Interviews were recorded on a digital recorder and transcribed. The

transcripts were utilized for data analysis, which was guided by Moustaka's (1994) phenomenological method of data analysis. The steps of this method included identifying each expression that is relevant to the experience of being in a firefighter family and coping with traumatic exposure and then eliminating unnecessary or insufficient expressions (Moustaka, 1994). Expressions were then grouped together and labeled. A textural-structural description of the experience of each participant was created based on the themes he or she expressed, which were reported in Chapter Four. Using the individuals' themes, an overall composite experience of being in a firefighter family was created and reported in Chapter Five.

I administered instruments to all firefighters and their spouses to assess lifetime exposure to traumatic events, measured by the Traumatic Events Questionnaire – Revised (TEQ-R; Vrana & Lauterbach, 1994) and current symptom levels of posttraumatic stress disorder, assessed by the Purdue PTSD Scale – Revised (PPTSD-R; Lauterbach & Vrana, 1996). These instruments provided quantitative data about trauma exposure and symptomatology and were not used to diagnose or inform treatment of the participants.

On the TEQ-R, all firefighters and all but one spouse reported experiencing or witnessing at least one traumatic event during their lifetimes. The traumatic events ranged from those experienced on the job by the firefighters, such as witnessing fatal car wrecks, house fires, or being injured in a fire, to traumatic events experienced earlier in life, such as the death of a parent or sexual abuse as a child. Traumatic events reported by the spouses included car wrecks, natural disasters such as hurricanes and tornadoes, the deaths of friends and family, rape, and being severely ill to the point of fearing for her life.

If an individual reported a significant traumatic event on the TEQ-R, they were administered the PPTSD-R. The PPTSD-R can be dichotomously scored to indicate the presence or absence of PTSD. Individuals endorsing at least one reexperiencing symptom, three or more avoidance/numbing symptoms, and two or more hyperarousal symptoms are considered to qualify for a diagnosis of PTSD. In this study, one firefighter, Mr. Robertson, and one spouse, Mrs. Julian, qualified for a diagnosis of PTSD.

To ensure a rigorous study, methods to increase trustworthiness were implemented. Peer debriefing, member checks, and triangulation were used to enhance the credibility of the study. To create the most transferable study possible, I utilized thick description to allow readers to determine the applicability or generalizability of the study to the reader's particular situation (Guba & Lincoln, 1989). To assure dependability an audit trail was created to track any changes in methodology or research questions. The original research questions of the study did not change; however, there was a change to the methodology. Initially this study had been designed to be a double interview study; however, due to the level of detail collected during the first interviews and the high saturation of the themes, the second interviews were utilized for reviewing findings with the participants and obtaining their input, but not asking additional questions about the experience of being in a firefighter family. Additionally, confirmability, which ensures that the findings are based on the data collected, was maintained by a confirmability trail, which was part of the audit trail.

Discussion of the Findings

In accordance with Moustaka's (1994) method of data analysis, the individual textural-structural descriptions of each participant were reported in Chapter 4. Common themes were then used to create the composite experience of being in a firefighter family, which was detailed in Chapter 5. Overarching themes of the study were those common to both spouses in most families interviewed. Themes unique to the firefighters, spouses, and children were then explored.

Overarching Themes

Couples reported valuing similar aspects of firefighting including the firefighters' abilities to help those in need and to provide financially for their families. For four out of five firefighters, the desire to have a career in which they could help others was a primary motivation for becoming a firefighter. The spouses and children discussed their respect for their husbands'/fathers' career choice, and several family members called the firefighter a "hero." Kirshman (2004) explores the motivating factors that attract firefighters to the career:

If you asked a dozen people what motivates someone to become a fire fighter, you'd probably get a dozen different answers. Many of us would agree that people who want to be fire fighters want to make a difference in the world; but there are some who would say that career fire fighters are vintage blue-collar trade unionists who are equally attracted to the work schedule and the job security. Hardly anyone would suggest people are in it for the money. (p. 38)

This is a fairly accurate depiction of the motivating factors revealed by firefighters in the current study. Although most of the firefighters reported that they were motivated to help, they also cited the dependability and benefits of the job as an aspect they valued. Kirshman (2004) doubts money is a motivating factor for most firefighters, but these families did cite the financial security the job provides as a valued aspect of the firefighters' careers that allowed several of the spouses to stay home to raise their children.

Most of the firefighters are the primary wage-earners in their families, and they also evinced themes of being family-oriented. Four out of five of the wives fulfill traditionally female roles, as they are the primary caregivers for the children, do not work fulltime outside the home, and take responsibility for maintaining the household. Yet these women also receive help from their husbands, who contribute to household chores such as cooking, cleaning, or grocery shopping. The men are also active parents who contribute a great deal of their time at home to raising their children. The wives expressed their appreciation for having husbands who are involved and active within the household and with the children.

The families discussed the disadvantages and advantages of shift work for their individual family situations. For most of the couples, the shift schedule allows them to spend a considerable amount of time together, both with the children as a family and also as a couple when the children are in school. Regehr et al. (2005) have documented the benefits of shift work for families, noting that the shift schedule allows the firefighters to spend time at home caring for children during their off shifts.

The families related that missing family events, such as school plays or sporting events, is a disadvantage of the job. However, the firefighters also acknowledged that they can spend time with their wives and children that people working a traditional schedule cannot because they are home on many summer days and weekday afternoons when children are home from school. For the families in which the spouse did not work fulltime outside the home, the advantages of the shift work schedule far outweigh the disadvantages. However, for the two families in which the spouse worked outside the home fulltime or nearly fulltime, the shift work schedule complicated the families' schedules and made spending time together more difficult. Previous research involving firefighter spouses has cited this phenomenon, since couples who work opposite schedules spend little time with each other and often place the children's needs over those of the couple (Regehr et al., 2005). The need for first responder spouses to change their career plans or work only part time, as four out of five spouses in the current study reported, has been noted as a theme among firefighter and paramedic spouses because they choose to ensure that their children have at least one parent who can provide constant care, which is difficult or impossible for the first responder who is working 24-hour shifts (Regehr et al., 2005; Regehr, 2005).

Physical and mental exhaustion is a considerable disadvantage of shift work for all five of the firefighters. Most needed to spend a part of their first day off sleeping or resting. Fatigue and sleep disturbances have been cited as short-term consequences of shift work (Knutsson, 2003). However, long-term consequences of shift work can include a greater risk of developing gastrointestinal problems, cardiovascular disease, and possibly diabetes (Knutsson, 2003). The participants appear to recognize the physical

stress the 24-hour shift causes, and most of the families reported creating protected sleep time for the firefighter after he gets off shift. For the spouses, the firefighters' level of fatigue meant that making plans for the day or evening after the firefighter comes off shift could be difficult because sometimes those plans have to be cancelled if the firefighter needs to sleep. Despite the inconveniences of scheduling around firefighters' shifts, it seems that the participants have realized what Kirschman (2004) proposed: "Happy fire fighter couples learn to respect each other's sleep patterns" (p. 221).

Every firefighter reported that being stationed on the ambulance for a 24-hour shift is more challenging than being on the fire truck because the ambulance responds to more emergencies. Busy nights on the ambulance are more exhausting because the first responder will be up much of the night. The firefighters also revealed that working on the ambulance could be more frustrating, as some calls seem unnecessary and the patients can be challenging to deal with. The spouses echoed these themes and reported that they have seen their husbands negatively impacted by shifts on the ambulance.

A study utilizing job stress questionnaires as well as urine samples to analyze cortisol and catecholamine levels in one sample of firefighters and another sample of paramedics found that the paramedics reported higher levels of job stress and higher levels of epinephrine and norepinephrine than the firefighters (Dutton, Smolensky, Leach, Lorimor, Hsi, 1978). Paramedics were more likely to have experienced frequent, severe traumatic events on the job and reported significantly higher rates of exposure in the following categories: death of patients, multiple casualties, death of children, and violence against others (Regehr, Goldberg, & Hughes, 2002). Also, paramedics reported higher rates of being assaulted on the job and feeling that they have been in situations in

which their lives were at risk (Regehr et al., 2002). The first responders in this study constituted a unique cohort because four out of five work for departments that provide both fire and emergency services. Thus the men alternate between the roles of paramedic and firefighter. The firefighters/paramedics in the present study reported stressors similar to the first responders in these earlier studies, and also reported that working as a paramedic was more exhausting, more challenging, and less satisfying than working as a firefighter.

Every firefighter described a change in his worldview since the beginning of his career. The men stated that they have developed a more negative view of humanity because they have seen a broader range of the human experience, including the tragic aspects. The firefighters used a variety of powerful words to describe this common experience, including “jaded,” “callous,” and “cynical.” Spouses in the study confirmed that they have noticed this change in their husbands, as they seem to have become “desensitized,” as one spouse put it. The firefighters have had to adapt their worldviews to accommodate the unusual and traumatic events they have witnessed. This phenomenon will be further explored in the context of constructivist self development theory later in the chapter (McCann & Pearlman, 1990a).

The parents reported that they censor themselves when discussing the dangers of the job with their children, especially when they are young. While the parents said that they are happy to answer questions the children have, they do not want to worry the children unnecessarily about their fathers’ safety. The parents admitted that it is a delicate balancing act to protect their children from worry about their fathers’ safety on the job, while at the same time educating them about the dangers of the world. As their

children mature and learn more about the potential hazards of the world, the parents also begin to tell them more about the dangers of firefighting, as children are naturally learning more about these dangers, particularly from television news and movies.

Surprisingly little research exists regarding the most appropriate ways for first responders to talk about the dangers of the job with their children. Kirschman (2004) addressed the potential for children of firefighters to be significantly impacted by trauma witnessed on the job and provided information regarding symptoms exhibited by children in reaction to that trauma. Kirschman also provided suggestions for talking to children following traumatic events (Kirschman, 2004); however, there is no guidance for those parents who broach the subject of potential danger before the occurrence of a traumatic event. Given the inquisitive nature of most children, it is likely that most first responder parents will at some point need to discuss the possible hazards of the job with their children. The current participants indicated that they were not sure what the best approach was for talking about danger. Previous literature focused on children impacted by a parent with PTSD or children's reactions following mass tragedies such as 9/11; however, preparing children in families who are as yet unaffected by trauma has not been addressed. This is likely a result of the lack of attention that firefighter families as a unit have received in the literature. The current study provides valuable initial insight into children's experiences of having a parent who is a firefighter, including the children's varying levels of fear and anxiety and the coping skills the children employ.

Firefighters' Themes

Participants reported a desire to protect their family members from the most traumatic aspects of the scenes they respond to on the job. The firefighters described

telling their families varying amounts of information, ranging from telling their young children very little about their work to regularly discussing their shifts with their spouses and older children. Most of the men stated that talking with their wives about difficult calls helps them cope with traumatic events and is an important source of social support. These findings are consistent with those of Regehr who reported that first responders want to protect their spouses from unnecessary exposure to trauma (Regehr, 2005), while at the same time relying on their spouses for social support (Regehr & Bober, 2005).

All firefighters reported that they have become less stimulated by traumatic events away from work. One theme related to this indicated that because the firefighters have been trained to respond calmly to crises and trauma on the job, this learned response transfers to events off the job as well. Another theme expressed by the firefighters indicated that because the firefighters have been exposed to so many traumatic events at work, traumas off the job are not as arousing as they are to civilians faced with tough situations. The firefighters in the study described this as feeling “detached” or “desensitized” to trauma, therefore showing that they experienced habituation due to the repeated exposure to traumatic scenes. Habituation is defined as “a behavioral response decrement that results from repeated stimulation” (Rankin et al., 2009, p. 136) to the same type of situation. As the firefighters are repeatedly exposed to traumatic scenes they experience decreasing levels of physical arousal. This process of habituation affects them in a beneficial way when exposed to trauma on the job, as well as when away from work. Together with their training, habituation helps them deal with emergencies.

Every firefighter reported that calls involving children are the most difficult to emotionally process, and that calls involving the death or injury of a child remain in their

memories far longer than those involving adults. The firefighters reported that calls involving children can produce emotions such as sadness or anger, particularly when abuse was present. These findings echo those of Regehr and Bober (2005) who reported that calls involving violence toward children commonly resulted in traumatic reactions in first responders and were more memorable to the first responder.

In addition, the firefighters reported that they do not typically experience an emotional reaction during an emergency call but remain focused on performing as well as possible to help the individual in need. Earlier research found that firefighters control emotional reactions during a call in order to focus “on the cognitive aspect of the job. Feelings about the event are avoided, and efforts are made to avoid seeing the victim in the context of their own lives, as this increases the risk of emotional distress in the emergency responder” (Regehr & Bober, 2005, p. 121-22).

All firefighters observed that their behavior after particularly challenging calls is affected, noting that they were grumpy or irritable and quieter than usual around their family members. Some of this irritability can be attributed to the level of exhaustion and fatigue firefighters experience following a 24-hour shift, as these symptoms are common in shift workers (Knutsson, 2003). It is also possible that the firefighters were withdrawing emotionally to protect their family members from hearing about difficult calls and also to protect themselves from experiencing emotions connected to traumatic calls that could be elicited by talking about the event (Regehr & Bober, 2005).

The firefighters volunteered multiple coping strategies they employ when faced with difficult calls. Following traumatic scenes, the firefighters will talk to other firefighters about the call. They also rely on their spouses for social support after the

calls. Social support from co-workers and spouses is important to coping with frequent exposure to traumatic events, and will be explored in further detail in the context of CSDT (Beaton, et al., 1997; Regehr & Bober, 2005).

While on the scene, the firefighters may use dark humor to cope with stressful situations. Mr. Julian acknowledged that this is a way firefighters cope with traumatic, stressful situations on the job. Humor has been cited in the literature as a way of “putting emotional distance between themselves and the victims” (Kirshman, 2004, p. 29-30). Participants in the current study, as well as previous studies, have acknowledged that this humor can be misunderstood by those not in an emergency service career, although the intent is not to be hurtful or disrespectful.

All of the firefighters admitted that they have not sought help from mental health professionals to deal with even their most distressing experiences. They stated that, although they and other firefighters are aware that these services are available, they have been able to cope well without professional help or they are reluctant because other firefighters continue to stigmatize mental health services. One firefighter described his colleagues as too “independent” and “stubborn” to admit that professional help could be beneficial. The emergency services face a problem similar to that of the United States military: A stigma attaches to mental health services and prevents those who could benefit from seeking help. Studies within military populations suggest that only a fraction of those who need mental health services actually seek help (Hoge, Castro, Messer, McGurk, Cotting, & Koffman, 2004). The firefighters in the current study expressed varying degrees of stigma toward mental health services, and none had ever sought help, despite at least one firefighter admitting that it might help him cope with

stress on the job. It will be the tall task of emergency service leadership to decrease negative impressions of mental health services and to create an environment that is accepting of seeking professional help to cope with trauma, job stress, and marital problems.

Spouses' Themes

The spouses recounted their efforts to ensure their husbands had the smoothest possible transition after work. Because having a calm house to rest in is important, the wives attempted to keep the children as quiet as possible, which is sometimes difficult on summer days or weekends. The spouses are faced with the multifaceted challenge of creating a peaceful home environment while also accommodating their own schedules and those of their children. Regehr and Bober (2005) recommended that families create “decompression routines” (p.123) to allow first responders to relax when returning home after a shift, before being faced with the numerous demands of children and household chores. The families related that they have naturally created such routines, in particular to allow the firefighters to sleep.

The wives admitted that their home lives were more challenging when they had very young children. The families were more exhausted during these times, and spouses often felt overwhelmed because they were responsible for all of the children’s needs and the household duties when their husbands were on shift. Research confirms that dual-earner parents reported increased parental stress when children were very young (Deater-Deckard & Scarr, 1996). Mrs. Robertson reported this stress was exacerbated when her children were younger as she worked fulltime and was solely responsible for coordinating three or even four different work, childcare, and school schedules.

Most of the spouses reported that they are able to tell by their husbands' behavior that they have responded to a traumatic call. The wives stated that their husbands might discuss the call repeatedly or be noticeably quieter about the shift. Studies involving first responder spouses echoed this finding and reported that spouses relied on cues from body language and behavior to make this determination (Regehr et al., 2005). Despite their husbands' desires to protect them from hearing about the most traumatic aspects of their jobs, the wives reported that they are willing and able to hear about tough calls if this is helpful to their husbands. Hearing about these emergencies has caused the wives to develop empathy for their husbands because they better understand what it means to be a first responder.

The spouses related varying degrees of concern about their husbands' safety when they are at work. Those wives whose husbands worked in a large, urban fire department expressed more anxiety about their husbands' safety. The spouses whose husbands work in smaller towns in a Rocky Mountain state admitted that they do not feel as much anxiety and fear for their husbands' safety. Several of the smaller-town spouses attributed this to the absence of major hazards such as high-rise buildings or large warehouses. While the size of the towns could play a role in the spouses' varying degrees of concern, prior research with firefighter spouses found that overall, firefighter wives may not appear worried about the safety of their husbands for several additional reasons (Regehr et al., 2005). Regehr et al. (2005) proposed that firefighters' withholding information about the truly dangerous aspects of the job, as well as acceptance of the danger inherent to the job, are reasons that some firefighter spouses are not anxious about their husband's safety.

Although none of the five spouses reported being traumatized by their husbands' experiences, as measured by the TEQ-R or PPTSD-R or indicated in the interviews, it is important that research continue to investigate the experience of first responder spouses. A recent study by Gawrych (2011) reported that in a sample of male firefighters ($n=67$) and their wives ($n=67$), 21% of wives met criteria for secondary trauma and 25% reported significant psychological distress, including symptoms of depression and anxiety. Given the importance of first responder families in providing social support, it is imperative that studies continue to investigate the effects of firefighters' work on spouses. The current study explores the experience of spouses without symptoms of PTSD or secondary trauma and their strategies for coping with the unique stresses of being married to a first responder.

While the smaller town spouses in the current study experienced less anxiety about their husbands' safety, they did acknowledge the potential for danger. In order to cope with this threat, all of the spouses expressed coping cognitions that related to their husbands' skill, which helps keep them safe. Other wives remained focused on their chores at home and tried not to worry unnecessarily. Despite the varying levels of anxiety about their husbands' safety, each wife revealed important coping skills that served to reduce the anxiety they experienced when their husbands are at work. Firefighter spouses in a previous study reported similarly that "focusing on the skills, training, culture, and supports that protect their husbands both physically and emotionally" (Regehr et al., 2005, p. 432) is an effective strategy to relieve anxiety about their husbands' safety.

Children's Themes

The children in the study related positive impressions of having a father who is a firefighter. They also reported that their peers see their fathers' jobs as "cool." The youngest children in the study reported that their fathers tell them "everything" about their jobs as firefighters; however, the older children expressed awareness that there were difficult aspects of their jobs that the firefighters do not discuss with their children. At least one child from each family reported that they had considered or were still considering firefighting as a possible career. Some of the children who no longer viewed firefighting as a potential career choice reported that, because of the disadvantages of the job, such as shift work and danger, they no longer want to become a firefighter.

The children expressed themes similar to those of their parents regarding the advantages and disadvantages of shift work. An advantage of shift work is being able to spend considerable amounts of time with their parents that other children whose parents work a traditional schedule might not enjoy, such as on summer weekdays. The most common disadvantage of having a father who works a 24-hour shift is that they must at certain times miss family events, such as school concerts and sporting events. However, the children acknowledged that their fathers attempt to be at these activities when they are able, by swapping shifts or taking vacation time. Although one of their parents is out of the house every third day, the majority of children reported that there was no difference in the home environment when their father was gone.

The concept of "ambiguous loss" (Boss, 2010, p. 137) in children of first responders has been cited. The children experience this because of either the parent's physical absence or his or her physical presence but psychological absence, due to a

condition such as PTSD (Regehr & Bober, 2005). A parent's experiencing PTSD can result in fewer pleasant interactions between the child and parent and eventually result in a poorer quality relationship with that parent (Ruscio, Weather, King, and King, 2002). Fortunately for the families in the current study, the children overall related close relationships with their parents and exhibited positive attitudes about the increased amount of time they are able to spend with their fathers.

Many of the children in the study reported that the media, including television news and movies, have influenced their level of fear about their fathers' jobs. Several children cited the movie *Ladder 49* as having created a frightening awareness of the dangers firefighters face. The families living in the larger city discussed the emergencies firefighters respond to when these events appeared on the news because this can be a source of stress for the children, who naturally wonder whether their father was at a particular accident scene. Studies of children exposed to media coverage of the Oklahoma City bombing (Pfefferbaum et al., 2003) and the events of September 11, 2001 (Otto et al., 2007) indicated that even those children who viewed the events indirectly, through television and print news, reported symptoms of PTSD. Following media exposure to the events of 9/11, Otto et al. (2007) reported that younger children and those children who more strongly identified with the victims of the event were more likely to report PTSD symptoms. It is likely that firefighter children would identify closely with the death or injury of a firefighter seen in the media. Otto et al. (2007) and Pfefferbaum et al. (2003) recommend that the amount of time and content of media coverage that children watch following traumatic events be monitored by an adult to prevent overexposure.

The children related varying levels of concern for their fathers, which reflected the levels of concern their mothers had described. Children of urban firefighters openly discussed their fears for their fathers' safety. However, most of the children of the small town firefighters did not acknowledge fear for their fathers' safety at all. It appears that children of urban firefighters experienced an increased amount of anxiety about their fathers' safety, just as the wives of urban firefighters reported. It is possible that the children and mothers were exhibiting the phenomenon of "emotional contagion" (Hattfield, Cavioppo, & Rapson, 1993), defined as "the tendency to automatically mimic and synchronize expressions, vocalizations, postures, and movements with those of another person's and, consequently, to converge emotionally" (p. 153-154). Those mothers experiencing less anxiety, or hiding their anxiety from the children as in the case of Mrs. Hill, communicated either consciously or unconsciously to the children and in turn do not cause their children to worry. On the other hand, the children of the mothers experiencing anxiety and fear mimic that attitude and also report concern for their fathers' safety. Catherall (2005) proposes that families realize that it is crucial not to allow fear to spread throughout the family. To prevent this, family members employ strategies to extinguish the fear.

In the current study the mothers and children used coping strategies to prevent fear or anxiety from overtaking the family. Even though some of the children were fearful, virtually all of them employed coping strategies that were similar to those of their mothers. These strategies included relying on religion for comfort and praying for their fathers' safety. They also revealed coping cognitions based upon their fathers' competency at their jobs and the fathers' desire to come home safely to their families.

The use of such coping strategies was previously cited in the literature as helpful to firefighter spouses (Regehr et al., 2005). Kirschman (2004) provided support for the concept of emotional contagion between parents and children when she discussed children's tendencies to mimic parents' reactions to stressful situations and also proposed that children will react more to their parent's emotions following an event, than to the actual event itself (Kirschman, 2004). With respect to the current study, it is uncertain whether the children developed these coping strategies on their own and to what extent their parents' coping skills were emulated. There is a need for further research regarding first responder children's methods of acquiring coping skills, which could be beneficial to parents who try to teach and model effective techniques to minimize anxiety about the first responder's safety.

Theoretical Application

The experiences of participating families will be explored through the application of constructivist self development theory, as well as a family resilience approach (Walsh, 2006).

Constructivist Self Development Theory

Constructivist self development theory (CSDT) addresses the impact of psychological trauma on an individual's self. The self is defined as "the psychological foundation of the individual" which is comprised of:

- (1) basic capacities whose function is to maintain an inner sense of identity and self-esteem;
- (2) ego resources, which serve to regulate and enhance one's interactions with the world outside oneself;
- (3) psychological needs, which motivate behavior;
- and (4) cognitive schemas which are beliefs, assumptions, and

expectations, both conscious and unconscious, through which individuals interpret their experience (McCann & Pearlman, 1990a, p. 16-17).

CSDT acknowledges that psychological trauma has a unique impact on every individual and will influence the organizing systems of the self differently (McCann & Pearlman, 1990a).

CSDT proposes that while psychological trauma can negatively influence an individual, it can also lead to positive adaptations of schemas, as when individuals become aware of the limits of their assumptions about the world and themselves and then possibly reassess their priorities and values (Pearlman & McCann, 1990a). The firefighters, spouses, and children in this study revealed a number of ways they have been impacted by the traumatic events the firefighter is exposed to on the job and the adaptations this has led to in their schemas. These adaptations will be explored according to CSDT's components and functions of the systems of the self, which are detailed in Table 1 on page 59.

Few advances have been made in the area of vicarious traumatization since the seminal work of McCann and Pearlman (1990a; Dunkley & Whelan, 2006; Ponce, Williams, & Allen, 2004). Dunkley and Whelan (2006) attributed this to unclear key concepts, few empirical studies applying the theory, and the trend to focus research on specific groups of therapists experiencing vicarious trauma due to treatment of victims. It is noteworthy that the current participants were overall a healthy, adaptive group, for whom the application of existing literature incorporating CSDT is limited, since those studies were conducted with persons experiencing PTSD or vicarious trauma. A major criticism of CSDT is its failure to fully develop the positive adaptations that can occur as

a result of trauma (Dunkley & Whelan, 2006). As previously noted, CSDT acknowledges that trauma can lead to positive adaptations, but does not detail these adaptations to the same degree that it does negative adaptations, such as distortions to cognitive schemas. The following discussion will utilize the key concepts of CSDT and apply many to positive adaptations in response to traumatic exposure. Studies that have been conducted from a CSDT perspective will be incorporated into the following discussion when applicable.

Self Capacities

The purpose of self capacities is to regulate self-esteem. Components of self capacity that are impacted by the psychological trauma firefighters are exposed to include the ability to tolerate strong affect and the ability to calm oneself (McCann & Pearlman, 1990a, p. 17 and Pearlman & Saakvitne, 1995). Firefighters are exposed to events that can be extraordinarily upsetting to the average individual. However, the firefighters in this study are able to tolerate these situations with relatively little impact on their emotional states. The firefighters expressed several strategies for tolerating these potentially upsetting events and remaining calm in the process. Maintaining emotional distance from the situation and focusing on coping cognitions that emphasize a realistic view of the degree of their responsibility helped the firefighters tolerate traumatic events on the job. Following difficult calls, the firefighters engaged in a number of strategies to calm themselves, including talking to other firefighters and their spouses about the call and analyzing the call to determine what they can learn from the events.

Mindfulness is defined as the ability to be aware of the present moment and to also describe and make decisions based on current physical sensations, thoughts, and

feelings (Smith et al., 2011). A recent study investigating the quality of mindfulness in firefighters reported a connection between higher levels of mindfulness and fewer symptoms of PTSD, depression, and alcohol abuse (Smith et al., 2011). Smith et al. (2011) suggested that mindfulness may facilitate emotional regulation and emotion tolerance, which make coping with traumatic exposure more bearable. It is possible that the current firefighters exhibited characteristics of mindfulness, which may have been present prior to the job or may have developed in response to the stresses of emergency work.

By maintaining emotional distance and implementing coping strategies after the call, the firefighters were able to tolerate the affective impact of trauma and reassure themselves that they did all they could for the person in need. A study utilizing CSDDT following the shooting of a judge in a courthouse found that other judges created emotional distance from the victim by identifying ways that they were different, such as working in another building – albeit across the street -- or presiding over different types of courts (Miller, Flores, & Pitcher, 2010). These judges created emotional distance through the use of logic, just as the firefighters maintained rational cognitions to create emotional distance from the victims at emergency scenes.

The spouses and children of the firefighters must also cope with the knowledge that their family member is facing potential danger each time he goes to work. These family members also adapted self capacities to tolerate the anxiety of this situation and to calm themselves in the face of this danger. The spouses and children revealed several coping strategies including relying on religious beliefs for comfort. They also reported coping cognitions based on their confidence in the firefighters' abilities and their desire

to return home unharmed. These adaptations of the self allowed the wives and children to tolerate the anxiety of having a family member face potential harm, yet remain calm while this threat is present. While religious or spiritual beliefs have been identified as a way that vicarious trauma can impact the suffering individual the most, by causing questions regarding the meaning of the event (Pearlman & Saakvitne, 1995; Trippany, White Kress, & Wilcoxon, 2004), for several families religion was an essential coping strategy that served to strengthen their faith that the men would return home safely.

Ego Resources

Ego resources serve to regulate interactions with others. The relevant components of ego resources are the abilities to be aware of psychological needs, establish mature relations with others, foresee consequences, appreciate the perspectives of others, and establish boundaries and empathy. The firefighters related adaptations in these areas that contributed to being able to do their jobs well by maintaining healthy relationships on the job and at home. The spouses also exhibited adaptations of the self in several of these areas, which helped them relate to their husbands and understand the stresses of their jobs.

For the firefighters, the ability to maintain professional and mature relationships with other firefighters is imperative to remaining safe on the job. While responding to emergency calls, firefighters rely on each other in dangerous and tense situations. These men affirmed a high degree of camaraderie with their coworkers, as they routinely put their lives on the line with them. The firefighters also spend a great deal of time together during 24-hour shifts, which provides a unique opportunity for bonding. For the

firefighters, it is important to maintain positive professional relationships not only to ensure a comfortable work environment, but to remain safe in dangerous situations.

The literature confirms that social support from co-workers and spouses is beneficial to first responders' physical and mental health. Beaton et al. (1997) explored the benefits of positive relationships with co-workers and reported that this support was associated with increased job satisfaction and morale. The same authors reported that higher levels of social support from coworkers and spouses were correlated with fewer physical ailments such as cardiovascular and respiratory problems as well as the psychological problems of depression and anxiety. Smith et al. (2011) confirmed these findings regarding depression in first responders and also identified support as a protective factor against PTSD.

Studies of new and veteran firefighters indicated that social support for firefighters decreased over the course of the career, in part due to the structure of firefighting organizations (Regehr et al., 2003; Regehr, 2009). In the current study, two of the firefighters had been promoted to administrative/management positions and no longer worked 24-hour shifts at the fire stations. Because they now worked during typical business hours in administrative offices, these two men no longer had the opportunity to bond over a long shift with their peers and were removed from crucial social support because they were now managing their former peers. Mr. Robertson repeatedly mentioned how difficult it has been for him to no longer be on shift because he misses the camaraderie of the fire station.

The firefighters exhibited a high level of awareness concerning their psychological needs and discussed the importance of using coping strategies to deal with

tough calls. Most stated that, at some point in their careers, they realized the importance of maintaining psychological wellbeing as well as physical health in order to be an effective firefighter and a present and loving father and spouse. The ability to foresee consequences contributed to several of the firefighters developing coping strategies to deal with trauma from the job. Some firefighters did not talk to their wives about traumatic calls until they realized that they were not dealing well with this alone and that there could be potentially negative consequences if they did not reach out for support. The firefighters' awareness of psychological needs and their ability to foresee consequences have allowed them to adapt and respond in a healthy manner, as these ego resources were important components of seeking support to cope with trauma. The connection between mindfulness, defined as the ability to identify and respond to current physical sensations, thoughts, and feelings, and the benefits of this characteristic for firefighters could provide insight into the men's ability to respond in a healthy way to anticipated consequences of job-related trauma (Smith et al., 2011). First responders with a natural inclination toward mindfulness may be more likely to be aware of their psychological needs.

The ability to appreciate perspectives is crucial to the firefighters' ability to deal with challenging patients who may exhibit a rude or disrespectful attitude. The firefighters discussed their consideration of the perspective of the individual in need. Several firefighters and their spouses discussed the fact that, when people are in pain or are scared, they may not be very pleasant. Understanding the perspective of the victim helps the firefighters remain calm when faced with challenging patients or family members. However, the firefighters did admit that, after a certain amount of disrespect or

when they are particularly exhausted, it is more difficult to treat rude patients with courtesy. Trippany et al. (2004) explored the risk for vicariously traumatized counselors' ego resources to be disrupted to the point that they are unable to empathize and understand the perspective of clients, which can lead to negative consequences in therapeutic relationships. It appeared that, as the firefighters' capacity for empathy lessened over an exhausting shift, their behavior was also negatively impacted as they lost sight of the victim's perspective.

In the context of marriage, several firefighters emphasized the importance of considering the perspectives of their spouses in order to keep the spouses' stressors in mind. Even though everyday challenges can pale in comparison to the traumas the firefighters see on the job, the spouses admitted that they can be overwhelmed by the difficulties of being in a shift work family. Nevertheless, the spouses also strove to consider their husbands' perspectives and be mindful of stressors their husbands face on the job. Empathy on the part of both spouses, which most participants in this study reported, has been cited as crucial to maintaining a healthy marriage and is the crux of techniques and theories of couples counseling (Greenberg & Johnson, 2010).

The wives all expressed empathy for the sad, traumatic situations their husbands encounter. Several spouses reported that, as they learned more about the challenges of firefighting, their empathy for their husbands increased. Empathy for the firefighter enhanced the spouse's understanding and served to strengthen the relationship between the couple.

The firefighters all reported the ability to maintain emotional distance from the calls they respond to. The ability to establish emotional boundaries between themselves

and the victim/patients and their family members allowed the firefighters to remain professional in their interactions with those they are trying to help and to focus on performing the best interventions possible.

Psychological Needs

The psychological needs of the self motivate behavior and are composed of the individual's frame of reference or worldview, and psychological needs such as safety, power, and trust. McCann and Pearlman (1990a) described the frame of reference as being a broader concept than the other psychological needs. Cognitive schemas develop in relation to each psychological need and influence behavior and interpretation of the world. All of the firefighters reported changes in their worldview due to their experiences on the job. They discussed their increasingly negative views of humanity, the result of witnessing terrible tragedies created by human beings' bad decisions, such as drunk driving accidents and child abuse. The worldviews these men held prior to becoming firefighters have been adapted in order to accommodate the realities they witness at work. Miller et al. (2010) identified similar changes in the worldviews of judges following the shooting of one of their colleagues. The judges reported that the incident caused them to realize that "evil and crazy people" or "sociopaths" in the world could harm them (Miller et al., 2010). After vicariously experiencing the attack on their colleague, these judges' worldviews were negatively impacted and adapted to the reality of the shooting.

According to CSDT, safety is a basic psychological need that all individuals strive to maintain (McCann & Pearlman, 1990a). The trauma that firefighters see on the job and the dangers that they are exposed to daily impact the sense of safety of both the

firefighters and their families. In order to adapt to these threats, the firefighters and their families have developed strategies to maintain a sense of safety. The wives and children maintain cognitions regarding the firefighters' abilities to remain physically safe. The families in smaller towns perceive fewer significant dangers than do the families in the city. Every spouse and the children who were aware of danger acknowledged using strategies to cope with this threat. The firefighters also reported strategies to adapt to the threat of danger, including being confident in their skills and the skills of their fellow firefighters to help them remain safe.

The firefighters' need for power is also impacted by trauma. Several firefighters admitted that the emergencies they deal with have caused them to become overly protective of their spouses and particularly their children at various times. Mr. Jones and Mr. Robertson reported that they desire control at home, which is directly related to the importance of being in control to ensure the safety of their family members. The need for power or control has been identified in victims of traumatic events. Miller et al. (2010) reported that colleagues of the judge who was assaulted experienced increases in their desire to control the thoughts, actions, and feelings of themselves and others, and also to control their environment. Exposure to trauma significantly impacts a person's sense of safety, which can in turn lead to a strong urge to control the environment and those in it.

Mr. Robertson reported that his beliefs about being able to trust strangers were negatively impacted by the events of September 11, 2001. He reported being more aware of the potential threats strangers pose to his and his family's safety. In order to adapt to this lack of trust, Mr. Robertson reported withdrawing from social events and focusing on his family, whom he can trust. This change in Mr. Robertson's behavior can also be

viewed from the perspective of prosocial and antisocial coping behavior. Prosocial coping behavior is defined as coping with stress through positive uses of social resources (Monnier et al., 2000). Antisocial coping behavior can meet the individual's needs but harm those he or she has relationships with, such as friends, a spouse, or children (Monnier et al., 2000). Although Mr. Robertson feels comfortable with this adaptation, it is possible that this has been a negative way of adjusting to a perceived loss of trust, as he is less able to access critical social support from his peers.

Cognitive Schemas

Cognitive schemas serve to organize the experience of oneself and the world, and are composed of one's beliefs, assumptions, and expectations (McCann & Pearlman, 1990a; Pearlman & Saakvitne, 1995). The firefighters in this study related important adaptations of cognitive schemas that allow them to cope with traumatic events.

The firefighters acknowledged that their beliefs and assumptions about the world have been challenged, and each described a change in his worldview since becoming a first responder. They have had to adjust their beliefs about the world to accommodate the crimes and accidents they have witnessed because they can no longer believe the world is mostly safe. The firefighters in the study described this change in worldview as negative, using words such as "callous" and "jaded" to describe their attitudes. However, from the perspective of CSDT, these changes in worldview are necessary to protect the firefighters from feeling a sense of shock or betrayal by humanity each time they respond to a tragic scene. This shift in worldview allows the firefighters to continue to respond to traumatic events without being traumatized by the event, since even the most challenging scenes will not be likely to shatter their altered view of the world.

Every firefighter also reported other strategies for creating emotional distance from emergency calls. In order to create this distance, the firefighters employ a number of coping cognitions that help them maintain a realistic view of their responsibility to save each person. Regehr & Bober (2005) explored the necessity for firefighters to adapt their sense of control to acknowledge “that there are situations outside of one’s control,” which can serve to “reduce self-blame when things end less than ideally” (p. 79). Coping cognitions such as “It’s my job” or “It’s their emergency, not mine” remind the firefighters that they should not become emotionally involved in the calls.

Cognitions have been identified as playing a major role in the development and maintenance of PTSD symptoms (Foa, Ehlers, Clark, Tolin, & Orsillo, 1999). Edna Foa and colleagues have identified two cognitive distortions that lead to the development of PTSD, which are “the world is *completely* dangerous, and one’s self is *totally* incompetent” (Foa et al., 1999). The firefighters revealed several coping cognitions that help them maintain realistic beliefs and assumptions about their personal competency. These cognitions include “You can’t fight God’s will”; “People are going to die every day”; “I didn’t cause the call”; and “It’s not my fault.” These thoughts hold at bay unreasonable and debilitating assumptions that can surface after difficult calls, such as expecting to save every injured person or being solely responsible for the outcome. By maintaining these realistic coping cognitions, the firefighters are essentially preventing some of the distorted cognitions that contribute to the development of PTSD, hence remaining healthy and capable of doing their jobs well. This is a significant finding of the current study because it provides valuable insight into the cognitions of well-adjusted

firefighters without PTSD, who have received little attention from prior studies because the focus has been individuals who have developed PTSD.

The firefighters' beliefs contribute to the meaning they make regarding the deaths of patients. They reported being better able to emotionally process and move on after calls they can make sense of, such as an older adult with a history of heart trouble dying from a heart attack. However, calls that seem senseless are more challenging to cope with, as the firefighters' beliefs do not help them make sense out of the accidental death of a child or the death of a child due to physical abuse. These events violate the basic and hopeful beliefs that children should live to grow up and no child should be killed by their parent. The firefighters reported that these are the times they find themselves asking "Why?" The violation of prior held meaning and beliefs by a traumatic event has been found to mediate the development of PTSD (Park, Mills, & Edmondson, 2012). This study by Park et al. (2012) tested the theoretical assumptions of cognitive theories of PTSD, such as those of Edna Foa and colleagues, referred to above, whose theoretical underpinnings had rarely been explored quantitatively (Park et al., 2012). Park et al. (2012) also reported that violation of meaning predicted negative views of the self and the world, as assessed by the Posttraumatic Cognitions Inventory (PTCI; Foa et al., 1999). Although most of the current first responders did not report symptoms of PTSD, they did describe increased difficulty coping with deaths that violate prior held meaning. These men surely did not begin their careers with the belief that children are killed by physical abuse. Responding to this type of tragedy, particularly for the first time, would have violated the responders' prior held beliefs about the right to safety and protection as a child, which is why they report increased difficulty making sense of this type of call.

The firefighters' views of the world would also most certainly have changed during years on the job, as they reported when discussing increased feelings of cynicism or callousness; however, they continue to struggle when they reencounter this type of trauma that violates their beliefs. Although they have modified worldviews they have not become completely immune to feelings of frustration, sadness, and anger. They have not become totally cynical, regardless of what they said earlier, because they continue to struggle with the sadness of truly tragic calls that challenge their persistent idealistic hope for the world.

Constructivist self development theory is useful as a conceptual framework with which to analyze the ways that the study participants have been influenced by exposure to psychological trauma. The firefighters in this study related ways in which the systems of the self have been impacted by traumatic situations encountered on the job. The spouses and children of the firefighters have also had to adjust to having a family member who repeatedly faces danger on the job. CSDT provides a useful, logical way of conceptualizing the effects of psychological trauma in the firefighters and their family members.

Family Resilience Approach

A family resilience approach (Walsh, 2006) views crises and stress from a systems perspective, meaning that the entire family unit will be impacted by adverse events. Family stress and resilience literature also assumes that there is no "normal" family and expects that every family will face stress at one time or another (Boss, 2002; Walsh, 2006). Also, the criteria to define an event as stressful is not universal, but a subjective experience that is dependent on the meaning a family assigns to an event and

the extent to which the event affects the family (Boss, 2002). Boss (2002) takes care to note that the terms *stress* and *crisis* cannot be interchanged to discuss challenges to the family. Family stress is defined as a “state of disequilibrium” (p. 67), whereas crisis is “a point of acute disequilibrium” (p. 67).

The experience of being in a firefighter family is inherently punctuated by events that disrupt the family’s equilibrium, such as the firefighter being suddenly called away from a family dinner to respond to a major emergency. However, crisis is not inevitable because all firefighters will not be severely injured or killed, events that would inarguably create crisis in most families. The families in this study discussed events that can be described as family stressors that resilient characteristics successfully mitigated. Resiliency is defined as the “process of endurance, self-righting, and growth in response to crisis and challenge” (Walsh, 2006, p. 4). The families in this study exhibited key characteristics of family resilience.

Keys to Family Resilience

Walsh (2006) stated, “What distinguishes healthy families is not the absence of problems or suffering but rather their coping and problem-solving abilities” (p. 16). The families in the current study exemplify this concept because even those faced with the most challenging circumstances, such as a terminally ill child or marital problems that nearly led to divorce, exhibit characteristics and problem-solving abilities that have allowed them to cope with life’s most severe problems in addition to the everyday stresses of being in a firefighter family.

The “Keys to Family Resilience” (Walsh, 2001, p. 26) include

Family belief systems:

- 1) Making meaning out of adversity
- 2) Positive outlook
- 3) Transcendence and spirituality

Organizational patterns:

- 1) Flexibility
- 2) Connectedness
- 3) Social and economic resources

Communication processes:

- 1) Clarity
- 2) Open emotional expression
- 3) Collaborative problem solving (Walsh, 2001, pg. 26)

Every family in this study exhibited virtually all of these characteristics, and the overarching themes of the current study closely resemble these constructs.

Family Belief Systems

As previously mentioned, the meaning a family assigns to an event can determine the impact it will have upon a family (Boss, 2002). Family beliefs provide cohesion and organization during times of stress and crisis (Walsh, 2006). The families in this study approached the experience of having a firefighter in the family with a positive attitude that served to make the most out of a potentially challenging situation. An overarching theme was the participants’ belief that the husband was doing honorable, respectable work by saving lives. This meaning helps the families cope with stresses such as unusual

work hours and the threat that the firefighters could be injured or killed because the wives and children believe in the worthwhile work the men are engaging in and all are united in their belief in the value of this work.

Three of the families relied on religious beliefs and practices to help maintain a positive outlook on the husband's work. These families prayed for the firefighters' safety and also relied on their faith to give them strength and guidance in challenging situations. For these families, spirituality was an integral part of the family belief systems. Positive religious experiences serve to strengthen the bonds within the family (Walsh, 2010).

Organizational Patterns

Themes in the data reflected the importance of flexibility for the families. This characteristic was emphasized by Walsh (2006), who cited flexibility as a key component of a resilient family. Flexibility was crucial for the five participating families, particularly given the rotating nature of the 24-hour shift and the fact that most of the firefighters could be paged or called to respond to a significant emergency during off shifts. Families also reported that they remain flexible about the time they spend together and are open to changing plans if the firefighter is tired and needs rest. Remaining flexible and creating a "system of rain checks for unforeseen occurrences" (Regehr & Bober, 2005, p. 123) is similar to the Hill family's method for rescheduling events that must be cancelled if Mr. Hill is paged into work.

The families also related a great deal of connectedness between spouses and between parents and children. The families were proud and happy to get to spend lots of time together because of the husbands' shift schedule. For several of the wives this was considered the best part of their husbands' jobs. These close relationships can be vital to

coping with frequent trauma exposure. Walsh (2007) explained the importance of these relationships: “Strong connections, with trust that others will be there for them when needed, counteract feelings of insecurity, helplessness, and meaninglessness” (p. 208). Not only are close family relationships enjoyable and fulfilling, they also provide protection from developing negative reactions to trauma.

Most of the families also reported that the firefighters’ steady income has provided the families the ability to live the lifestyle they chose, including four out of five of the wives staying home full or part time to care for their children. The community of firefighters and their spouses and children has been an important social resource for all of the firefighter families. In these families the organizational patterns of resilient families have been created as they adapted to life with a first responder. These families have recognized the need and usefulness of flexibility, are connected and value time together, and appreciate the economic and social resources they have.

Communication Processes

The importance of frequent, meaningful communication within the families was a theme expressed by nearly all of the participants. The couples viewed open communication as a way to stay connected with their spouse and solve problems as they occurred within the families. Communication while firefighters were on duty was important to the wives’ and children’s sense of safety, and text messages or cell phone calls were often used to maintain an emotional connection when the husband was out of the house for an entire day.

Although it was not the intent of this study to seek out resilient families skilled in stress management, the findings of this study revealed that most of the families portrayed

a majority of the characteristics of resilient families and employed stress management strategies. This was an unexpected finding, which provided a unique significance to the study. “A family resilience framework can serve as a valuable conceptual map to guide prevention and intervention efforts to support and strengthen vulnerable families in crisis” (Walsh, 2002, p. 130). The current families can serve as important models for other first responder families struggling to manage stress and cope with the challenges of their lives.

Limitations

The participants in this study were all volunteers who had to meet a number of inclusion criteria, such as being married and having a child over the age of 12. The inclusion criteria and the subject of the study impacted participation in several ways. Since the participants all volunteered to be in the study, it is likely that only the couples who were most confident about their marriage and family life, as well as their ability to cope with trauma from the job, offered to participate in the study. The self-selected nature of the participants has resulted in an overwhelmingly healthy, mature, resilient sample. While this makes for interesting results regarding the experience of coping well with trauma on the job, the perspective of a firefighter who has struggled significantly with exposure to trauma is not represented.

Also, the families were required to have a child over the age of 12, the firefighters in the study were older, ranging in age from 42 to 48 years, and most had worked at the fire department for a considerable amount of time. The firefighter with the least experience had been on the job for six years, and the other firefighters’ careers ranged from 17 to 30 years. Due to the number of years most of the firefighters had been with

their departments, three had become officers and two had been promoted to administrative positions and no longer worked a 24-hour shift schedule. This could have been a factor that limited the ability of these two firefighters and their families to relate the experience of being in a shift work family, as they were no longer accommodating this schedule. The participants recalled to the best of their ability the family's experience of the firefighter working a 24-hour shift, but it is possible that some of the details of the experience could have been forgotten.

Another aspect of the study that could limit the conclusions is the variations between the families who participated. Two of the firefighters worked in a large, urban fire department in a southern state and three of the firefighters worked in fire departments in smaller towns in a Rocky Mountain state. Although there are some noticeable differences between the families living in such different environments, caution has been taken when comparing the participants' experiences, as the sample sizes are relatively small. Additionally, volunteer firefighters were not included in this study, so it is difficult to say if these findings could apply to those firefighters.

The study yielded valuable information about adaptive strategies to cope with stress; however, little to no information was gathered about potentially maladaptive coping strategies, such as drinking, that the firefighters could have used or are using to deal with trauma. The lack of this information could be due to the interview questions, which were open-ended and did not directly address maladaptive coping strategies.

Implications

For Firefighters

The implications of this study for those firefighters who are not coping well with stress are multifaceted. Firefighters must be aware of their ability to handle traumatic events on the job and realize that there are strategies that can improve this ability if they are struggling. The importance of social support from fellow firefighters and family members is reiterated throughout this study as well as in the traumatic stress literature (Regehr et al., 2003; Paton & Violanti, 1996). The firefighters in this study acknowledged that they first had to realize that they needed social support before they began to talk about difficult calls with their families and friends. Future firefighters could benefit from this knowledge in order to create a support network prior to beginning to respond to emergency calls.

The firefighters in this study also related coping cognitions that help them create emotional distance and maintain a realistic attitude about their personal responsibility when responding to calls. Other firefighters can use the coping cognitions expressed by the well-adapted firefighters in this study in order to create their own balanced cognitions related to personal responsibility and emotional distance.

For Firefighter Families

The inclusion of entire firefighter families in this study, which explored the experience of being in a firefighter family from a phenomenological perspective, is a unique methodology. Implications for firefighter families include the importance of each spouse being aware of the stresses of the other. The firefighters admitted that they can lose sight of their spouses' challenges and struggles because they seem mundane or

trivial compared to the life-threatening situations which the firefighters regularly face. The wives also reported that, as they learned more about the challenges of being a firefighter, their empathy increased. Firefighter couples should communicate about their struggles and discuss ways their spouses can support them in coping with stress. The couples in the study also reported that the firefighters use their spouses as important sources of social support and talk with them about difficult calls. However, some firefighters were reluctant to talk to their spouses about these events because they wanted to protect them from the traumatic aspects of their jobs. The couples in the study reported that communicating about how much detail the wives wished to hear was an important step toward creating supportive communication patterns for dealing with tough calls. Firefighter couples can learn from these findings and initiate discussions to explore the best ways for them to communicate about job-related trauma.

For Fire Departments

The findings of this study and trauma literature support the importance of strong social support networks when coping with traumatic exposure. Fire departments need to recognize that spouses and partners are essential elements of social support, and departments should encourage firefighters to maintain healthy marriages and communicate with their spouses about the challenges of their job. Through collaboration with mental health professionals, fire departments could provide marriage education to firefighters and their spouses about the potential challenges of being in a firefighter marriage and important coping skills to navigate these stresses. The couples identified flexibility and communication as imperative to maintaining a healthy firefighter marriage, and these are also essential characteristics of resilient families (Walsh, 2006).

Marriage education programs could provide couples with skills and knowledge to increase family resilience and stress management strategies, including knowledge of communication techniques, perspective-taking exercises to better understand the spouse's experience, and strategies for flexibility within the family (Stanely, Markman, Jenkins, Blumberg, 2009). Psychoeducation groups for families experiencing stress and trauma have proven helpful by providing crucial social support and addressing cognitive techniques for coping with trauma (Rabin & Apel, 2004). A marriage education curriculum designed for firefighter couples could emphasize the importance of both spouses utilizing coping and self-care strategies to deal with the stresses of the job.

Despite the benefits that marriage education could provide for firefighter couples, the stigma attached to mental health services, expressed by several firefighters and previously cited in the literature (Paton & Violanti, 1996), could be a significant barrier to the effectiveness of marriage education or any other professional mental health intervention for firefighters. It is the duty of the fire department leadership and mental health professionals to work to de-stigmatize professional mental health services (Wright, et al., 2009). The first step will be for firefighter leadership to embrace the importance and usefulness of mental health services and to create an environment that is accepting of those who choose to seek these services. Firefighter leadership must promote mental health and healthy family relationships as important to being an effective first responder. Additionally, mental health professionals must learn about the culture of first responders and determine the most effective way to incorporate services into these departments.

Counseling psychologists are uniquely suited to tackle the challenge of incorporating mental health services into emergency service departments. Counseling

psychology is historically rooted in assisting a nonclinical population with adjustments to life changes from a developmental perspective, as well as advocating for the importance of mental health treatment (Roger & Stone, 2012). Counseling psychologists can provide firefighters with education about the impact of frequent exposure to traumatic events, as well as the benefits of seeking mental health services. The presence of counseling psychologists in fire departments can begin to change any negative attitudes about mental health providers and also make these services more accessible. Counseling psychologists can also provide firefighters and their family members with strategies for coping with job stress, marital problems, and exposure to traumatic events.

Future Research Directions

Future research involving first responders who were unable to cope with the stresses of the job and left the field would be a useful adjunct to the findings of the current study. By exploring the cognitions and coping strategies of those who were unable to handle the challenges of being a first responder, information could be gathered about risk factors such as burn out or PTSD. There is a noted lack of research, which Harris (2004) regrets is “nonexistent” (p. 420), regarding effective ways to prevent systemic emotional trauma within families. The current families may or may not have been unique in their ability to cope with trauma encountered by the firefighters. This emphasizes the importance of future research investigating the coping skills of a broader sample, which could help determine whether these strategies are widespread. Further research into the resilient nature of firefighter families who are successful coping with challenges could provide other families with information that could help them become stronger and more resourceful (Walsh, 2002). The resiliency of emergency worker

families is an ideal subject for further exploration by counseling psychologists because of the field's focus on healthy adjustments during periods of life change.

Research involving separated or divorced firefighter couples could also provide information about the role the firefighter's job played in the divorce. If the firefighter's job or PTSD were a significant contributing factor, this research could inform other firefighter couples of the potential impact of the job upon the marriage. Symptoms of PTSD have a significant impact on an individual's ability to function within a family because emotional numbing and avoidance impact the ability to emotionally connect with loved ones (Lebow & Rekart, 2004). Therefore, it is important for family members of a person with PTSD and mental health professionals to understand the effects of PTSD within the family context in order to provide the most effective psychotherapy.

There is a dearth of literature regarding the most appropriate ways for first responder parents to discuss the dangers of their jobs with their children. Until now, most literature relevant to the children of first responders has focused on the impact of the death of a parent (Williams, 1999) or the effects of PTSD on parenting (Jordan et al., 1992; Lauterbach et al., 2007). Future research investigating healthy ways for the firefighter parent to communicate with children about the dangers of the job could benefit the families by providing a road map for difficult conversations. Additionally, future research regarding the process by which first responder children learn coping strategies could benefit parents trying to teach and model effective techniques to assist their children with minimizing anxiety about the first responder's safety. This literature could inform the practice of counseling psychologists as they work with firefighter families struggling to create the most adaptive atmosphere for their children.

Conclusion

Despite the importance of family members of first responders in both creating an environment in which the firefighter can rest and recuperate, and providing crucial emotional support, these efforts often go unappreciated and unnoticed. Regehr and Bober (2005) describe this:

The families of first responders are arguably the most important resource of not only responders but also emergency service organizations. Family members provide a buffer in times of emotional trauma, they accommodate the needs of responders so that responders can work disruptive schedules and long hours, and they provide a counterbalance to a job where individuals are confronted almost exclusively with the negative side of human nature. Yet families are often the forgotten victims of workplace stress and trauma. (p. 124)

The goal of the current study was to shine a light on a crucial resource for emergency services—the families of first responders. The families in this study are resilient and creative in coping with the challenges of the job, including traumatic events and shift work. It is my hope that this study will help other first responder families struggling to cope with these challenges and be the first of many studies exploring the unique experience of being in a firefighter family.

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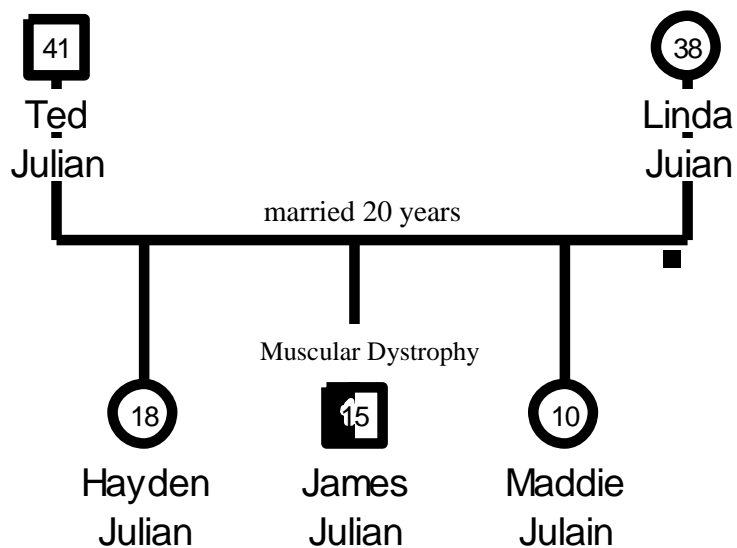
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APPENDIX A

Genograms of Participating Families

The Julian Family

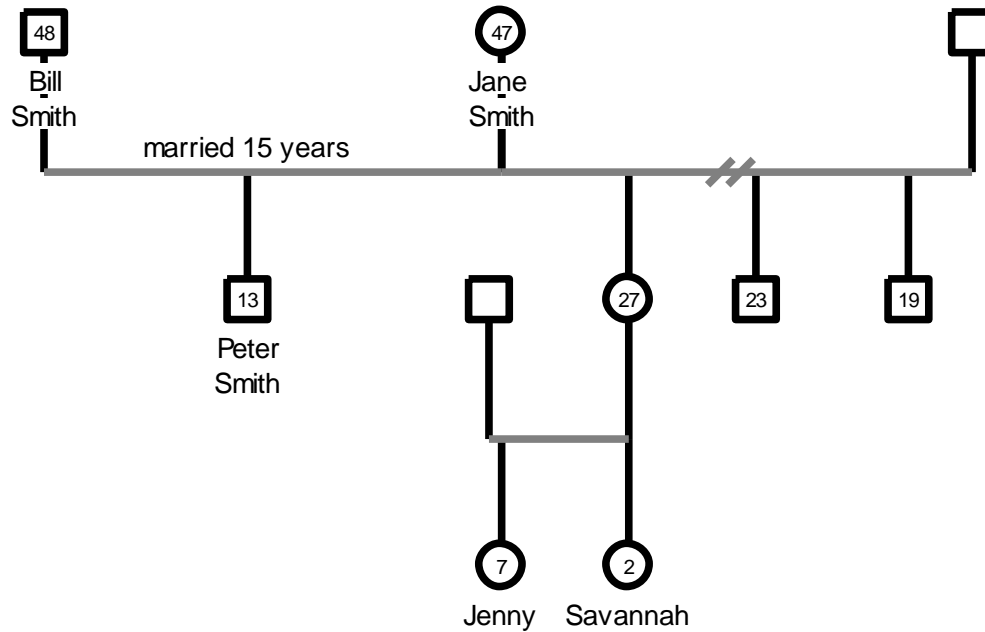
Caucasian; Live in rural area 1 hour from major city firefighter works in.
Wife substitute teaches. Firefighter for 6 years



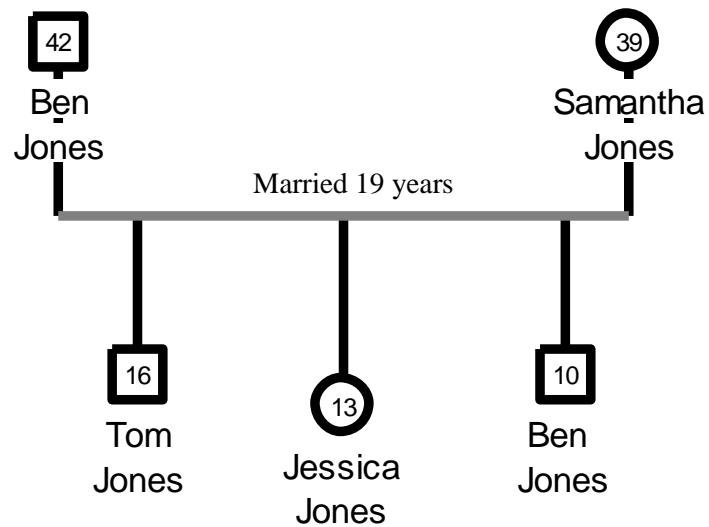
The Smith Family

African American; Live in suburban area of major city; Wife works part-time;
Blended, multigenerational family

Firefighter recently promoted to administrative position, no longer working shiftwork

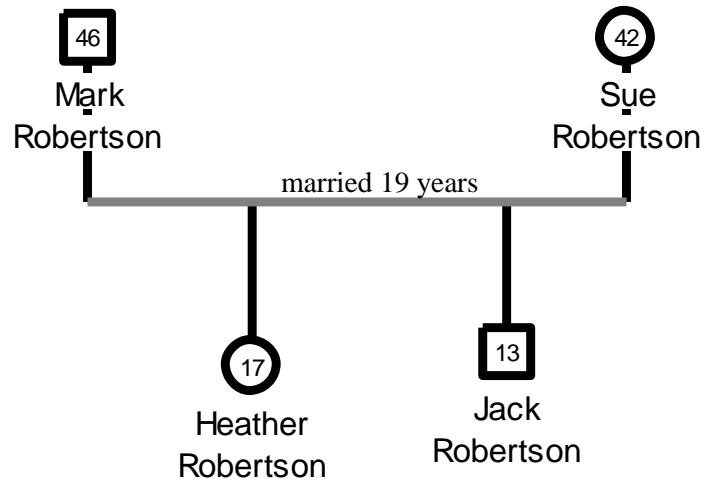
**The Jones Family**

Caucasian; live in small town in Rocky Mountain state; wife substitute teaches
Firefighter for 19 years

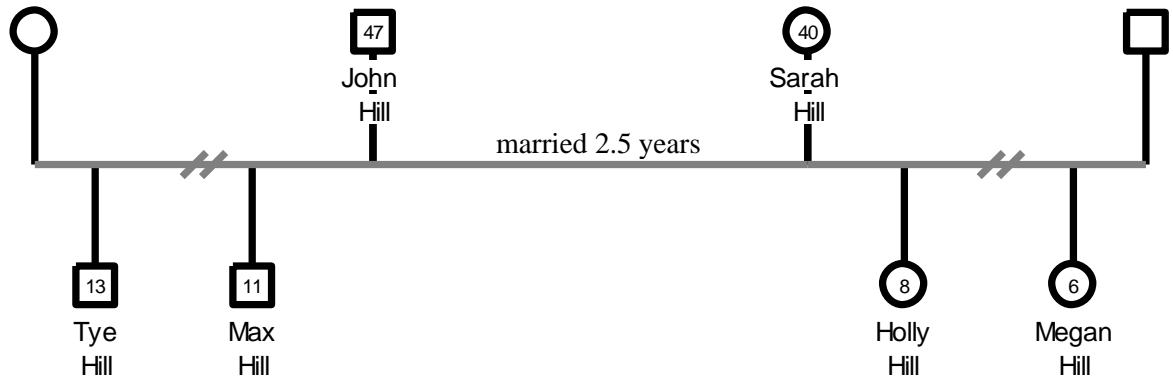


The Robertson Family

Caucasian; live in small town in Rocky Mountain state; wife works fulltime
Firefighter for 17 years

**The Hill Family**

Caucasian, blended family; live in small town in Rocky Mountain state
Wife does not work outside the home
Firefighter for 17 years



APPENDIX B

Adult Consent Form

Informed Consent for Participation in Research University of Northern Colorado

Project Title: A Look Inside the Marriage of First Responders: A Qualitative Study

Researcher: Catherine Phillips Carrico, BA, Counseling Psychology Doctoral Candidate
Phone Number: (903) 819-2691

Research Advisor: Mary Sean O'Halloran, PhD, Professor of Counseling Psychology,
School of Applied Psychology and Counselor Education
Phone Number: (970) 351-1640

As part of my doctoral dissertation, I will be conducting a study that will investigate the experience of being in a family in which one of the spouses/parents is a firefighter. The study requests that participants agree to take part in two interviews with the researcher and that the firefighter and spouse agree to complete two brief written surveys prior to the first interview. These surveys ask about reactions to traumatic exposure and potential past traumatic experiences. The researcher will interview both spouses and children over the age of 12. The spouses will be interviewed separately, and the parents and children can decide if the child would like to interview alone or with a parent present. During this interview the participants will be asked to discuss the impact that trauma encountered while working as a first responder has played in their marriage and home life, the impact of shift-work in their marriage and home life, and the impact of daily stress on their marriage. This research will contribute to the field of psychology in order to further educate counselors and psychologists about the needs of first responders, their spouses, and families when receiving counseling. It will also help to create a clearer picture of the impact of trauma on the marriages and families of first responders, such as firefighters.

The interviews will be audio taped for the purpose of transcription. Audio recording will be destroyed after transcription. In order to protect your confidentiality, participants will choose a pseudonym, which they will be referred to by in the interview transcriptions and in the written study. The interview process can take place in a quiet, private place that is convenient for the participant, such as their home. Each interview will be approximately 60 to 90 minutes in duration. After completion of the research project, the participants are welcome to receive a summary of the study.

There is the potential risk that participants in this study could feel some psychological discomfort as they discuss past traumatic events they have encountered while working as

a first responder. Steps will be made to minimize this discomfort, including not encouraging the participant to discuss any topic that he or she is not comfortable talking about. Also, if a participant were to realize that they needed counseling to further discuss past trauma, a referral to licensed mental health professionals would be provided. Sensitive topics regarding the participants' marriages and home life could also be discussed. These topics will not be required discussion, and the participants will once again only be encouraged to discuss what they are comfortable talking about in the interview. Referrals to mental health professionals will also be provided if a participant indicates the need for future individual, couples or family counseling following the study.

Participating families will be provided with a \$25 gift card to a local movie theater as compensation for participating in the study. The only cost to the participants will be the time they volunteer for the interviews.

Please feel free to phone me if you have any questions or concerns about this research and please retain one copy of this letter for your records.

Thank you for assisting me with my research.

Sincerely,

Catherine Phillips Carrico

Participation is voluntary. You may decide not to participate in this study and if you begin participation you may still decide to stop and withdraw at any time. Your decision will be respected and will not result in loss of benefits to which you are otherwise entitled. Having read the above and having had an opportunity to ask any questions, please sign below if you would like to participate in this research. A copy of this form will be given to you to retain for future reference. If you have any concerns about your selection or treatment as a research participant, please contact the Sponsored Programs and Academic Research Center, Kepner Hall, University of Northern Colorado Greeley, CO 80639; 970-351-1907

APPENDIX C

Children's Assent Form

ASSENT FORM FOR HUMAN PARTICIPANTS IN RESEARCH
UNIVERSITY OF NORTHERN COLORADO

Hi,

My name is Catherine Phillips and I'm a student at the University of Northern Colorado. I do research on firefighters and their families. That means I study what it is like to have a parent who is a firefighter. I would like to ask you what it is like for you to have a mom or dad who is a firefighter. If you want, you can talk with me about this.

If you want to talk with me, I'll ask you how you feel about having a mom or dad who is a firefighter. I will also ask what your parents tell you about working as a firefighter and what you want to be when you grow up. We will also talk about what it is like when your parent who is a firefighter is at work and what it is like when they are home. You can take your time and think about what you would like to tell me. If you don't want to talk about anything, you don't have to. It is your choice what we talk about. I will record what you say, but I won't use your name when I write about our conversation. It will take about 30 minutes for you to answer my questions about having a parent who is a firefighter.

Talking with me probably won't help you or hurt you. Your parents have said it's okay for you to talk with me, but you don't have to. It's up to you. Also, if you say "yes" but then change your mind, you can stop any time you want to. You can chose if you want one of your parents to be with us while we talk or if you want to talk alone. Do you have any questions for me about my research?

If you want to be in my research and talk with me about having a parent who is a firefighter, sign your name below and write today's date next to it. Thanks!

 Participant

Date

 Researcher

Date

APPENDIX D

Interview Topics

Questions for the firefighter

- What impact has trauma that you have encountered at work had upon your marriage?
 - Can you recall a particularly difficult scene you responded to?
 - After you returned home after that difficult call did you notice a difference in your behavior at home?
 - Have you seen any major changes in yourself since you have been a first responder?
 - If so, how have these changes affected your marriage?
- Discuss the experience of being exposed to situations in which other people are injured or killed.
 - What is your emotional reaction to being in these difficult situations?
 - How does being around these situations impact the way you think, feel, and act off the job?
 - Have there been times that you have been discouraged or disappointed about the outcome of an event at work? How do you cope with these feelings?
- What drew you to becoming a firefighter?
- What do you value about being a firefighter (your spouse being a firefighter)?
- Tell me about the transition from being on the job to coming home.
- How does your schedule and shift affect your marriage?
- Does your schedule impact your involvement with the children?
- What do you tell your kids about your job and the dangers of your job?
- What advice would you give a new firefighter couple?

Questions for the spouse

- What impact has trauma that your spouse /partner encounters at work had upon your marriage?
 - Can you recall a particularly difficult scene your spouse responded to?
 - After your spouse returned home following that difficult call did you notice a difference in his/her behavior at home?
 - Have you seen any major changes in your partner since he/she has been a first responder?
 - If so, how have these changes affected your marriage?
- Discuss the experience of being married to a person who is exposed to situations in which other people are injured or killed.
- What do you value about your spouse being a firefighter?
- Tell me about the transition from having your spouse gone while on the job to being at home.
- How does the first responder's schedule and shift affect your marriage?
- Does his/her schedule impact their involvement with the children?
- What do you tell your kids about your spouse's job and the dangers of this job?
- What advice would you give a new firefighter couple?

Questions for the children

- What are your feelings about your mom/dad being a firefighter?
- What do you tell your friends about what your mom/dad does at work?
- Would you want to be a firefighter when you grow up? Why or why not?
- What does your mom/dad tell you about his/her work as a firefighter?
- Is it different at home when your father/mother is there and not at work?
- How is it when he/she is at work?
- What advice would you give another kid whose parent just became a firefighter?

APPENDIX E

Manuscript Draft

Coping Strategies of First Responders: Family Support and Cognitions as a Protective Factors Against Developing PTSD

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Abstract

This study utilized a qualitative methodology to investigate the way in which career firefighters cope with trauma they are exposed to on the job. Literature suggests that social support and cognitions are important preventative factors against developing PTSD. Five firefighters whose careers have ranged from six to thirty years participated in semi-structured interviews that asked about the impact of job-related traumatic exposure on their thoughts, feelings, and behavior and the strategies developed to cope with this traumatic exposure. Interviews were tape recorded and transcribed verbatim. Data analysis was conducted according to Moustaka's (1994) phenomenological method of data analysis. Findings included themes regarding the firefighters' use of spouses and other firefighters as social support, as well as the cognitions firefighters have developed to cope with trauma seen on the job. Coping cognitions were organized into themes, such as locus of control, examining alternative possibilities, questioning why events happen, and removing oneself from the situation. It appeared that these cognitions served as protective factors from the development of PTSD. Future research directions and limitations of the study are explored.

Coping Strategies of First Responders: Family Support and Cognitions as Protective Factors Against Developing PTSD

Nearly two centuries ago, medical doctors and psychologists proposed a number of theories regarding the relationship between trauma exposure and behavioral changes following traumatic events (Birmes, Hatton, Brunett, & Schmitt, 2003). However, these behavioral changes were not fully attributed to psychological causes for some time (Birmes et al., 2003). It was not until 1980 that the American Psychiatric Association created the diagnostic category of Posttraumatic Stress Disorder (PTSD) in the Diagnostic and Statistical Manual of Mental Disorder, Third Edition.

The *DSM-IV-TR* (American Psychiatric Association, 2000) now includes symptoms of PTSD grouped into three different categories: intrusive, avoidant/numbing, and hyperarousal. An individual must have been exposed to a traumatic event and have symptoms in each of the symptom categories to qualify for a diagnosis of PTSD. These symptoms must persist for at least a month following the traumatic exposure (4th ed., text rev.; *DSM-IV-TR*; American Psychiatric Association, 2000). Symptoms are often disruptive to an individual's career and home life. Frequent exposure to job-related trauma, as in the case with emergency workers, leads to increased risk of developing PTSD (Lieberman, Best, Metzler, Fagan, Weiss, & Marmar, 2002).

PTSD in Emergency Workers

The effects of traumatic scenes on emergency workers have been a focus of research over the past several decades. Studies have demonstrated high prevalence rates of PTSD in both non-professional (volunteer) firefighters (Guo et al., 2004) and professional firefighters (Dean, Gow, Shakespear-Finch, 2003). Nearly all of the

ambulance workers in another study had experienced work-related intrusive memories (Ehlers & Steil, 1995). These intrusive memories were most often caused by accidents involving the loss of a child, loss of an acquaintance, deaths resulting from violence, severe burns, or failed attempts to save the life of victims. Fullerton, McCarroll, Ursano, and Wright (1992) add that firefighters' responses to disasters include feelings of helplessness and guilt. McFarlane (1988) investigated firefighters who had responded to large fires and found that delayed-onset and chronic PTSD was more commonly developed than acute stress disorder. Regehr, Hill, Knott, and Sault, 2003 and McFarlane (1988) also reported that those who worked longer as a firefighter were more likely to develop PTSD. Overall, exposure to unnatural death and disaster can lead to "traumatic stress reactions" (p. 68) in emergency service personnel (Regehr & Bober, 2005). Treatments for PTSD, such as Cognitive Processing Therapy (CPT; Resick & Schnicke, 1992), have gained empirical support for the treatment of PTSD (Alvarez, McLean, Harris, Rosen, Ruzek, & Kimerling, 2011; Chard, Schumm, McIlvain, Bailey, & Parkinson, 2011; Monson, Schnurr, Resick, Friedman, Young-Xu, & Stevens, 2006).

Foa et al. (2000) suggests that CPT is one of the treatments of choice for PTSD due to the quality of studies that have demonstrated methodological rigor and robust results in reducing symptom severity. CPT is based on the social cognitive theory of PTSD, information processing theory (Lang, 1977), and emotion processing theory of PTSD (Foa, Steketee, & Rothbaum, 1989). One main core component of CPT involves the patient writing an "impact statement" in order to identify the beliefs and interpretations about the traumatic event (Zappert & Westrup, 2008). These "stuck points" are often maladaptive cognitive responses that have not allowed a person to

realize other possible and rational perspectives regarding their experiences. CPT also involves an exposure component, in which patients are asked to read their impact statements aloud, as well as a narrative of their traumatic experience. This particular component of CPT is important because individuals can experience their unpleasant emotions and learn that avoidance of these emotions is unnecessary. Moreover, patients learn that expressing the story does not indicate that the event is going to be re-lived and how to express themselves to others without the fear of being judged. As a function of verbalizing their experiences, patients also consider different aspects of the event that they had not previously considered. Therefore, the verbal expression to others is an important component of treatment that allows a person to alter their interpretations and conclusions about themselves, the event, and the implications of the traumatic experience (Zappert & Westrup, 2008).

Not everyone who has experienced a traumatic event develops PTSD. Prevalence rates of PTSD are lower than the overall number of individuals exposed to traumatic events. (Galea, Nandi, Vlahov, 2005). Similarly, not all first responders have PTSD. PTSD prevalence rates in these occupations range from 6% to 32% (MacFarlane, Williamson, & Barton, 2005). First responders, such as firefighters, may engage in certain protective factors that serve to prevent the development of PTSD. Consistent with the active components of CPT, including restructuring maladaptive cognitive responses and expression of the traumatic experience, it is thought that individuals who seek out social support from spouses and coworkers, as well as endorse reasonable and adaptive cognitive reactions, are less susceptible to developing PTSD. The literature appears to support this notion.

Social Support as a Protective Factor

A study by Regehr, Hill, Knott, and Sault (2003) compared social support of newly recruited firefighters and experienced firefighters. They measured trauma symptomatology, expectations of success, and social support. Instruments were administered to a group of new recruits prior to training, following training, and also to a group of experienced firefighters. Results indicated that new firefighters had a stronger social support network than experienced firefighters and that lower levels of social support were significantly negatively correlated with symptoms of traumatic stress and depression. Authors suggested that as social support decreased, traumatic stress and depression significantly increased. New recruits also expected that they would be better able to solve problems than did experienced firefighters (Regehr et al., 2003). A related study found that police officers who did not disclose traumatic events that happened on the job to their spouses had higher levels of PTSD symptoms and higher levels of somatic complaints, anxiety, sleep problems, social problems, and depression (Davidson & Moss, 2008). Monnier, Cameron, Hobfoll, and Gribble (2000) also found that lower levels of prosocial coping, defined as the utilization of social networks to cope with stress, was associated with higher levels of depression, anger, and poor relationship adjustment.

Studies have also supported the benefit of endorsing adaptive coping responses after exposure to a traumatic experience, in order to prevent the development of PTSD. For instance, Ness and Macaskill (2003) examined five narratives of individuals who had experienced traumatic events. They found that cognition related to a sense of mastery and control prevented a sense of helplessness. Therefore, individuals who are able to distinguish between events that are in their control and other events that are outside of

their control, may be helpful for processing and decreasing the likelihood for PTSD to develop. Lancaster, Rodriguez, and Weston (2010) found through path analyses that the extent to which an individual integrates a traumatic event to their self-identity and negative cognitions about the self and world independently contributed to PTSD maintenance.

Results from these studies suggest the importance of maintaining a social support system for workers exposed to traumatic events, as well as the utility of adaptive and reasonable cognitive responses to traumatic events. However, there is currently a weakness in the literature that addresses the process of creating the social support system, how emergency personnel realize their need to seek out these resources, and what types of communication are helpful. Though several studies have examined the impact of PTSD on social support systems, specifically following the September 11, 2001 terrorist attack in New York City, NY (Evans, Giosan, Patt, Spielman, & Difede, 2006; Evans, Patt, Giosan, Spielman, & Difede, 2009; Stellman et al., 2008), a review of the literature did not indicate how increased social support may have helped individuals from developing PTSD (Neria, DiGrande, & Adams, 2011).

Adaptive Cognitions as Protective Factors

Owens, Chard, and Cox (2008) identified that after undergoing treatment utilizing CPT, an inpatient group of veterans' maladaptive cognitions were reduced, subsequently decreasing PTSD symptoms. Furthermore, maladaptive cognitions, specifically involving hopelessness and beliefs regarding wrongdoing, were predictive of posttreatment PTSD severity. Bennett, Beck, and Clapp (2008) examined individuals who attended healthcare facilities due to a serious motor vehicle accident (MVA).

Researchers measured feelings, thoughts, and severity of PTSD, and found that dysfunctional cognitions significantly predicted the severity of PTSD. Moreover, how individuals controlled these dysfunctional thoughts partially accounted for the relationship between maladaptive cognitions and PTSD. The dysfunctional thoughts were evaluated via the Posttraumatic Cognitions Inventory (Foa et al., 1999), which measures negative cognitions about the self, negative cognitions about the world, and self-blame. Other studies have shown similar results between cognitions and PTSD severity. For instance, one study demonstrated that the extent to which a traumatic event violated beliefs and goals was related to PTSD (Park, Mills, & Edmondson, 2012). These studies signify the importance of targeting and restructuring cognitions about individuals' experiences during a traumatic event; however, there may be more categories of cognitions, including adaptive cognitions that influence PTSD severity.

This study contributes to the knowledge of the social support system in a unique group of first responders. Moreover, this study aims to identify adaptive coping responses that are thought to help prevent PTSD symptomatology. Five firefighters were interviewed about the experience of being in a firefighter family and the way in which they cope with trauma witnessed on the job. Emergent themes were extracted relevant to how they viewed their spouses as a significant source of social support and the adaptive coping cognitions firefighters develop to maintain emotional distance from traumatic calls.

Methods

Theoretical Framework

Phenomenology seeks to identify the everyday experience of phenomena such as deciding, feeling, hearing, and seeing, and to describe the way in which individuals perceive these events (Schwandt, 2007). Individuals experience the world subjectively and phenomenology seeks to identify and describe the way in which this takes place (Schwandt, 2007). The key assumption of phenomenological methodology is that there is “an essence or essences to shared experience” (Patton, 1990, p.70) which the researcher seeks to identify and understand. The essence of an experience is the “core meanings” which those who experience the phenomenon share (Patton, 1990). The goal in this study was to describe the essence of being a firefighter who has a family and how firefighters utilize their family and other coping strategies to prevent PTSD symptomatology. The process of developing adaptive and reasonable cognitive responses concerning their traumatic experiences were also assessed.

Participants

Data for this study were collected between April 2011 and December 2011. Eligibility requirements included: being a married couples in which one partner is a first responder; participants were also eligible if they were monogamous, cohabitating couples who have been together for at least five years. Participants had to have at least one child over the age of 12 living in the home who was willing to participate in the study. The University of Northern Colorado Institutional Review Board reviewed and approved all study procedures. All participants provided consent to take part in the research.

Participants were all male, between the ages of 41 and 48 ($M = 44.60$, $SD = 3.44$). The average number of years that participants worked as a firefighter was 17.80 ($SD = 8.53$). Four firefighters were Caucasian and one was African American.

Please refer to Table 1 for demographics of individual firefighters.

Measures

Instruments. Two brief psychological assessments were given in conjunction with the qualitative interviews. These instruments were given to collected information about participants' exposure to traumatic events over their lifetimes and identified those individual who could qualify for a PTSD diagnosis. The Traumatic Events Questionnaire Revised (TEQ-R; Vrana & Lauterbach, 1994) and the Purdue Posttraumatic Stress Disorder Scale Revised (PPTSD-R, Lauterbach & Vrana, 1996) were utilized in this study. The TEQ-R provided valuable information about the number and type of traumatic events firefighters and their spouses had been exposed to over their lifetimes. The PPTSD-R was then administered to determine if the participant has developed PTSD symptomatology in response to the traumatic events he or she had been exposed to and the severity of the PTSD symptoms.

On the TEQ-R, each firefighter reported experiencing or witnessing at least one traumatic even throughout their lifetime. The type of traumatic events reported ranged from those experienced on the job by the firefighters, such as witnessing fatal car wrecks, house fires, or being injured in a fire, to those traumatic events experienced earlier in life, such as the death of a parent and sexual abuse as a child.

If an individual reported a significant traumatic event on the TEQ-R, they were subsequently administered the PPTSD-R. The PPTSD-R is dichotomously scored to

indicate those individuals who are considered to qualify for a PTSD diagnosis and those who do not qualify (McCormick, 2007). Individuals endorsing one or more reexperiencing symptom, three or more avoidance/numbing symptoms, and two or more hyperarousal symptoms are considered to qualify for a diagnosis of PTSD. In this study, one firefighter qualified for a diagnosis of PTSD.

Semistructured Interviews. Participants were asked to reflect on aspects of being a firefighter. Prompts included questions about the impact of traumatic exposure from the job on the firefighters' thoughts, feelings, and behavior, and the strategies firefighters developed to cope with this traumatic exposure. Interviews were tape recorded and transcribed verbatim into Microsoft Word (Microsoft Corp., Redmond, Washington) files.

Procedures

Participants were contacted through the fire departments where they were currently employed. Fire departments' leadership was first contacted to obtain permission to recruit participants for the study through the department. The principal investigator (PI) visited fire stations to recruit participants. After talking to the firefighters about the purpose and inclusion criteria of the study, flyers were left, which included contact information for the PI. The letter asked potential participants to privately contact the PI if they wished to be interviewed.

Prior to the study, participants completed the trauma assessments to gather data about trauma exposure and PTSD symptoms. After providing consent, participants choose a pseudonym they were identified by in the transcripts and written results. Interviews were conducted in the firefighters' preferred setting (i.e., typically in their

home). After the initial interview, participants were interviewed a second time after the consideration of emergent findings. Prior to the second interviews, participants were emailed their transcripts, themes that emerged from their individual interviews, and the overarching finding of the study. During the second interview, participants were asked if they had any additional information that they would like to contribute to the study.

Analyses

Moustakas's (1994) phenomenological method of data analysis was utilized. This method of data analysis is a variation of van Kaam's (1959, 1966, as cited in Moustakas, 1994) procedures for analyzing phenomenological data. Moustakas (1994) has outlined the following steps of phenomenological data analysis:

1. *Listing and Preliminary Grouping*: List every expression relevant to the experience
2. *Reduction and Elimination*: To determine the Invariant Constituents: Test each expression for two requirements:

- a. Does it contain a moment of the experience that is a necessary and sufficient constituent for understanding it?

- b. Is it possible to abstract and label it? If so, it is a horizon of the experience.

Expressions not meeting the above requirement are eliminated. Overlapping, repetitive, and vague expressions are also eliminated or presented in more exact descriptive terms. The horizons that remain are the invariant constituents of the experience.

3. *Clustering and Thematizing the Invariant Constituents*: Cluster the related invariant constituents of the experience into a thematic label. The clustered and labeled constituents are the core themes of the experience.

4. *Final Identification of the Invariant Constituents and Themes by Application*

Validation: Check the invariant constituents and their accompanying theme against the complete record of the research participant. (1) Are they expressed explicitly in the complete transcription? (2) Are they compatible if not explicitly expressed? (3) If they are not explicit or compatible, they are not relevant to the co-researcher's experience and should be deleted.

5. Using the relevant, validated invariant constituents and themes, construct for each co-researcher an *Individual Textural Description* of the experience. Include verbatim examples from the transcribed interviews. [...]

6. Construct for each [participant] an *Individual Structural Description* of the experience based on the Individual Textural Description and the Imaginative Variation.

7. Construct for each research participant a *Textural-Structural Description* of the meanings and essences of the experience, incorporating the invariant constituents and themes.

Following this process, Individual Textural-Structural Descriptions was created for a Composite Description of the group's meanings and essences of the experience (Moustakas, 1994). A peer reviewer was utilized to

The results section of this study includes each participant's Individual Textural Description of being in a firefighter family. This description includes verbatim excerpts from the interview transcripts to support the researcher's portrayal of each individual's experience. Guba and Lincoln's (1989) approach to qualitative research was used for this investigation. The steps included peer debriefing – conducted with the second and third

authors of the study, member checks that were conducted during the second interviews, transferable data gathering, dependability, and confirmability

Results

Each firefighter mentioned that the most challenging calls are those that involve children or someone they know personally. Firefighters stated that traumatic events impact their behaviors when they return home and interact with their family. Some participants described that they noticed increased irritability, shorter tempers, and quieter dispositions. Moreover, firefighters among this sample noticed that their emotions are restricted during an emergency call; however, sadness and anger can emerge following the completion of a call. The broad themes that were examined included the social support that the firefighter utilized in the fire department, as well as the cognitions that each firefighter endorsed after exposure to a traumatic situation. Sub-themes emerged, and are explained below. Please refer to Table 1 for information regarding each participant.

Social Support

Each of the five firefighters mentioned the importance of utilizing a support system, including spouses and/or other firefighters who are familiar with the dangers and situations that are typically encountered while on shift. The first sub-theme that emerged was *talking to spouses about tough calls*. A quote that exemplifies this sub-theme is described below.

| Sub-theme | Quote |
|----------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Talking to spouses about tough calls.</i> | <i>I try to be (proactive) and I think that comes with age. Because a lot of the younger guys, they try to cowboy it, “I don’t need to talk about it.” Well, with (our terminally ill son) and everything, it has helped out with that, because I know I got to talk about it. You got to work through it somehow, you can’t just do it yourself.” (Ted)</i> |

A second sub-theme emerged related to social support. Firefighters mentioned that they sometimes do not want to divulge information about more gruesome calls, in order to protect their spouses from experiencing unpleasant reactions. This sub-theme was labeled *protecting spouses from difficult calls*. One firefighter was adamant about not sharing the details related to the job.

| Sub-theme | Quote |
|------------------------------------------------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Protecting spouses from difficult calls</i> | <i>I think you see so much stuff on the job and you don’t bring it home, you don’t want them to hear about it, you don’t want them to know about it. I know (wife) wishes I could come home and talk more about it, what happened that day, but I don’t want her to worry. I don’t want her to think about it. (Mark)</i> |

A third sub-theme that was consistent among all firefighters involved the importance of discussing certain calls among their co-workers. The sub-theme named *discussing calls with other firefighters* highlights how these individuals are comfortable discussing calls to others who are familiar with the dangers, and who have also experienced similar situations.

| Sub-theme | Quote |
|-------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Discussing calls with other firefighters</i> | <i>Every once in a while you have a couple guys that have been on that call with you kind of bring it up. Or, I have a couple really close friends who are firemen, and once in a while, every once in a blue moon we will talk about a call that kind of stays with you longer. But then we go on and we talk about it, and they will talk about this one or that one, or that one was weird because of this or this. (John)</i> |

A fourth sub-theme that was coded involved the removal from oneself from a social support system. Due to social norms and perceived expectations, some firemen are unwilling to seek out a social support system. This sub-theme was labeled *Social Support as Weakness*.

| Sub-theme | Quote |
|-----------------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Social Support as Weakness</i> | <i>And I think if we, we're always afraid as firemen, if we talk about it, we show our emotions, we show our vulnerable sides, we weaken ourselves I think that's the perspective. So you hide it... It just it is a stressful job. And as much as we try to hide that fact, sometimes we don't have tools to deal with it. And I think it kind of goes back to the circle of: we are just too stubborn... you are just too independent to let anybody help you through it. (Mark)</i> |

Cognitive Coping Styles

Each of the five firefighters mentioned and described their thoughts after a difficult call. The thoughts were organized into sub-themes and describe the how firefighters cognitively cope after each traumatic situation. Participants stated that they attempt to use logic and reason and learn from past situations in order to improve for a call that is similar in the future. The first sub-theme was the *Locus of Control*.

| Sub-theme | Quote |
|-------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Locus of Control</i> | <i>Hey I am going to do my job and that's what I am going to do. And I am going to do my best with every run, then you really don't have any regret for any of the calls. You know you did your best, bottom line. You can't fight God's will. (Ted)</i> |

Firefighters also mentioned that following difficult calls, they often assess whether they could have done something differently, in order to improve for future calls. This sub-theme was labeled *Examining Alternative Possibilities*.

| Sub-theme | Quote |
|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Alternative Possibilities</i> | <i>If I have a call that I didn't feel like went right, I want to talk about it, talk to other guys and say "Hey, what would you do in this situation?" And see if I can do better the next time it comes by... And you want to go back and reflect on that call and say where did it go wrong, what sent it down the wrong path? Usually that comes from talking with the rest of your crew, "Hey what did you see?" Or talking with a lieutenant who isn't really involved in the call... (Ted)</i> |

During the interviews, firefighters frequently responded that they found themselves perplexed about accidents and preventable situations. They mentioned that they analyze the event and wonder if it was preventable. This sub-theme was labeled *Questioning Why Events Happen*.

| Sub-theme | Quote |
|--------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Questioning Why Events Happen</i> | <i>You think about it sometimes when you come home and it is in and out of your brain. Just had a call that basically overdosed on everclear and cocaine, and he was young, he was a young person. And it was again, they just over did it, they were guys out having fun, up in the mountains and they just don't understand the danger of doing stuff in excess. And what a waste that a 25 year old, and that was my last shift. I guess it didn't have to happen. It's not an accident where somebody falls asleep in a truck and hits another car. Well part of that is an accident, because he should have stayed awake I guess. But in this case it could have been prevented, had they backed off. (John)</i> |

Firefighters explained the importance of removing oneself from calls. They stated that they cannot dwell on one particular event, because it is important to maintain competence for the next shift. This sub-theme was labeled *Removing Self from Situation*.

| Sub-theme | Quote |
|-------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| <i>Removing Self from Situation</i> | <i>So I try to keep a step back from the situation. I think that helps me now also, so I don't actually get drawn into the situation. But I have already had more of an even attitude or temper, kind of a calm demeanor. People screaming and hollering, it doesn't bother me much anymore. I'm not much fun anymore. I told my wife, we had a guy who jumped out of a second story window. . . . It's ridiculous" (Bill)</i> |

Discussion

This study examined coping responses that are typically endorsed by firefighters responding to traumatic calls. The firefighters in this study related the importance of social support to emotionally process and cope with traumatic calls. Social

support was an imperative tool that most of the firefighters utilized routinely. Previous research supports the finding that social support is a protective factor against developing PTSD. In this study, social support and discussing difficult emergency calls with spouses and peers served as re-exposure to the call and prevented the firefighters from avoiding difficult memories. Preventing avoidance of memories of traumatic experiences is an important aspect of the prevention and treatment of PTSD (Foa, Steketee, & Rothbaum, 1989). For instance, firefighters reported that they talk to both their spouses and other firefighters regarding a difficult call. On the other hand, one of the firefighters spoke about the importance of protecting one's family from stories about traumatic events, and also thought that discussing the situation with other firefighters was a weakness. Incidentally, this particular firefighter had higher scores of PTSD symptomatology compared to the other four firefighters. This firefighter's refusal to talk to his family about difficult calls can also be viewed in the context of prosocial and antisocial coping behavior. Prosocial coping behavior is defined as coping with stress through positive uses of social resources (Monnier et al., 2000). Antisocial coping behavior can meet the individual's needs but harm those he or she has relationships with, such as friends, a spouse, or children (Monnier et al., 2000). Although this firefighter feels comfortable with this adaptation, it is possible that this has been a negative way of adjusting to a perceived loss of trust, and he is less able to access critical social support from his spouse.

Another crucial aspect to remaining healthy despite exposure to traumatic events is maintaining balanced cognitions regarding the trauma. The firefighters in this study reported multiple coping cognitions that served to maintain emotional distance from the

traumatic event and provide a realistic sense of the amount of control they can exert when responding to traumatic scenes. These cognitions include removing themselves from the situation, questioning why certain events happen, examining alternative possibilities for future reference, and being able to realize one's own responsibility. Several firefighters mentioned that they knew that they cannot control certain situations, and even leave it up to their respective faiths. Cognitions have been identified as playing a major role in the development and maintenance of PTSD symptoms (Foa, Ehlers, Clark, Tolin, & Orsillo, 1999). Edna Foa and colleagues have identified two cognitive distortions that lead to the development of PTSD, which include "the world is *completely* dangerous, and one's self is *totally* incompetent (Foa et al., 1999). The coping cognitions that help them maintain realistic beliefs and assumptions about their person competency hold at bay unreasonable and debilitating assumptions that can surface after difficult calls, such as expecting to save every injured person or being solely responsible for the outcome. By maintaining these coping cognitions the firefighters are essentially preventing some of the cognitions that mediate the development of PTSD, hence remaining healthy and able to do their jobs well. This is a significant finding of the current study because it provides valuable insight into the cognitions of well-adjusted firefighters without PTSD, who have received little attention from prior studies as the focus has been individuals who have developed PTSD.

The firefighters' beliefs contribute to the meaning they make regarding the deaths of patients. The firefighters reported being better able to emotionally process and move on from calls that their beliefs help them make sense of, such as an older adult with a history of heart trouble dying from a heart attack. However, those calls that seem

senseless are more challenging to cope with, as the firefighters' beliefs do not help them make sense out of the accidental death of a child, or the death of a child due to physical abuse. The firefighters reported that these are times they find themselves asking questions like "Why?" The violation of prior held meaning and beliefs in response to a traumatic event has been found to mediate the development of PTSD (Park et al., 2012). A study by Park et al. (2012) tested the theoretical assumptions of cognitive theories of PTSD, such as that of Edna Foa and colleagues, referenced above, of which the theoretical underpinnings have rarely been explored quantitatively (Park et al., 2012). Additionally, Park et al. reported that violation of meaning predicted negative views of the self and the world, as assessed by the Posttraumatic Cognitions Inventory (PTCI; Foa, Ehlers, Clark, Tolin, & Orsillo, 1999). Although most of the current first responders do not report symptoms of PTSD, they did describe increased difficulty of coping with those deaths that violate prior held meaning. These men likely did not enter their career with the belief that children are killed by physical abuse. Responding to this type of tragedy, particularly for the first time, would have violated the responders' prior held beliefs about the right to safety and protection as a child, which is why they report increased difficulty making sense of this type of call. The firefighters in this study reported that they continue to struggle with the sadness of truly tragic calls that challenge their meaning of the world. Their previously explored coping cognitions and the utilization of social support can serve to ease some of this distress, but the firefighters acknowledged that following some of the most challenging calls it takes a period of time to fully move through the emotion of the call.

Due to these firefighters embrace of social support and development of healthy coping cognitions regarding traumatic exposure they have been able to have lengthy careers, up to 30 years, and have achieved success in their departments - two are currently in administrative positions and three are officers in the department.

Future Research Directions

Though this study is primarily useful in identifying how firefighters implement social support systems and adaptive coping responses after a tough call, future research needs to identify further coping strategies employed during shift work. For instance, some firefighters in this study reported that the use of “dark humor” is beneficial, in order to carry out the necessary duties. Other firefighters mentioned that they create emotional distance during calls. Previous studies have identified that coping responses differ depending on the temporal location of the stressor (Moring, Fuhrman, & Zauszniewski, 2011). The firefighters in this study related coping cognitions that serve to create emotional distance and maintain a realistic attitude about their personal responsibility when responding to calls. Future research involving the development and maintenance of coping cognitions could provide firefighters with the knowledge of the process of creating and focusing on coping cognitions related to personal responsibility and maintaining emotional distance from calls.

Additionally, future research regarding the maladaptive cognitions of first responders who quit the job due to stress or who develop PTSD would provide valuable insight into potentially preventable burn out of first responders.

Limitations

Limitations of the study included the self-selection of firefighters in the study. Participation in the study was voluntary, which likely led to participants who were confident in the way they cope with traumatic events and who were willing to talk with a researcher about these coping skills. Participants were also required to have been in the field of firefighting for at least five years, which resulted in a sample of experienced firefighters. The men in this study have learned how to cope with distress related to the job, which has allowed them to continue to successfully work as a first responder. Had this sample included rookie first responders or those who quit the job, the findings could be different. The readers of this article are cautioned to remember the context of the sample, which was overall healthy, career firefighters willing to discuss psychological trauma.

Table I
Demographics of Participants

| Firefighter Code Number | Pseudonym | Age | Years as a firefighter | Ethnicity |
|-------------------------|-----------|-----|------------------------|------------------|
| 01 | Ted | 41 | 6 | Caucasian |
| 02 | Bill | 48 | 30 | African American |
| 03 | Ben | 42 | 19 | Caucasian |
| 04 | Mark | 46 | 17 | Caucasian |
| 05 | John | 47 | 17 | Caucasian |

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APPENDIX F

IRB Approval




February 11, 2011

TO: Susan Collins
Gerontology

FROM: Maria Lahman, Co-Chair 
UNC Institutional Review Board

RE: Expedited Review of Proposal, *A Look Inside the Families of Firefighters: A Qualitative Study*, submitted by Catherine Phillips (Research Advisor: Mary Sean O'Halloran)

First Consultant: The above proposal is being submitted to you for an expedited review. Please review the proposal in light of the Committee's charge and direct requests for changes directly to the researcher or researcher's advisor. If you have any unresolved concerns, please contact Maria Lahman, Applied Statistics and Research Methods, Campus Box 124, (x1603). When you are ready to recommend approval, sign this form and return to me.

I recommend approval as is.  3/7/11
Signature of First Consultant Date

The above referenced prospectus has been reviewed for compliance with HHS guidelines for ethical principles in human subjects research. The decision of the Institutional Review Board is that the project is approved as proposed for a period of one year: 3-19-11 to 3-19-12.

 3-19-11
Maria Lahman, Co-Chair Date

Comments: *See revision request, all revised
LoC attached
S. Collins
March 10 email M/L*