CALIFORNIA STATE UNIVERSITY, NORTHRIDGE

SAVING FIRST RESPONDERS: PARAMEDICS’ PERSPECTIVES OF SOCIAL SUPPORT

A thesis submitted in partial fulfillment of the requirements
For the degree of Master of Art in Communication Studies,
Communication Studies

By

Jacqueline Ann DeGrandis

May 2013
The thesis of Jacqueline Ann DeGrandis is approved:

_____________________________________          _______________________
Dr. Darlene Drummond

_____________________________________          _______________________
Dr. Rebecca Litke

___________________________________          ________________________
Dr. Sakilé K. Camara, Chair

California State University, Northridge
DEDICATION

First and foremost, I want to dedicate this to my parents! You have walked beside me for the past 21 years I have devoted to learning. I do not know what I would do without your guidance, support, and love! In times of massive doubt, you always encourage me to keep going, and to never give up. Thank you for every little thing you have done to help me get to this point and supporting every wacky idea I have. You are the best people in the universe and I strive to be more like you every single day! Thank you for all your support in my seemingly never ending school journey!

I cannot forget to thank my siblings, Michael and Victoria for your support in this quest as well. Michael, although I may act annoyed at your wise sarcastic comments, they always lift my spirits and remind me not to take things so seriously sometimes. Victoria, thank you for gentle, kind, and loving support. You have such a good heart and I am so grateful that you share it with me! I could not have finished this without you!

Finally, this is dedicated to the person who inspired it all, my amazing husband-to-be, Cody. I know you have been anxious for me to end school and get a job. Guess what?! It is about to happen! I want to thank you for inspiring this study, and also providing endless support when I felt I could not keep going. You are my rock, my stability, my best friend. Thank you for wiping away my tears of fear and doubt and replacing them with hope, drive, and love.

I love you all more than you will ever know!

This thesis marks the ending of an amazing adventure, but it also marks the beginning of a new journey...“Adventure is out there!”
ACKNOWLEDGEMENTS

This project would have never made it to the finish line without my amazing committee members and their intellectual and personal support! First, I would like to thank my chair, Dr. Camara. I must start with thanking you for being the chair of this dream. Since day one of this adventure, you have not only advised me academically on how to handle this challenge, but also helped me work through the moments of self-doubt. You pushed me back up when I was falling, and planted me back down to earth when I was floating into space. Thank you for all of your words of wisdom, guidance, hope, and support. I am so grateful for all that you have done to get me here! Meeting you was truly a blessing!

To my other wonderful committee members, Dr. Litke and Dr. Drummond, you both have contributed immensely to my success. Dr. Litke, you were my first Communication Studies instructor when I started attending California State University, Northridge as an undergraduate. You have always been a source of support that I am grateful to have, thank you for your open ears and wisdom. Dr. Drummond, thank you for being willing to come on-board this journey with me. Your wealth of knowledge on this topic has helped me become the strongest academic I can be!

Again, thank you all for making this happen! I will forever look back on this experience with the happiest of thoughts and the feeling of great accomplishment. You all not only showed me how to be a scholar, but also have shown me things about myself I never knew possible!
# Table of Contents

Signature Page.................................................................................................................. ii  
Dedication......................................................................................................................... iii  
Acknowledgements.......................................................................................................... iv  
Abstract............................................................................................................................ vi  
Chapter 1-Introduction...................................................................................................... 1  
Chapter 2-Review of Literature......................................................................................... 6  
  Conceptualizing Dilemma of Social Support................................................................. 6  
  Types of Social Support................................................................................................. 9  
  Communication Studies and Social Support............................................................... 11  
  Benefits of Social Support......................................................................................... 17  
  Social Support and Emergency Providers................................................................. 19  
Chapter 3-Methodology.................................................................................................... 24  
  Participants................................................................................................................. 24  
  Procedures.................................................................................................................. 25  
Chapter 4-Results............................................................................................................ 30  
  Qualitative Results..................................................................................................... 30  
  Quantitative Results................................................................................................... 38  
Chapter 5-Conclusions.................................................................................................... 43  
References....................................................................................................................... 50  
Appendix A Flyer.............................................................................................................. 66  
Appendix B Interview Protocol....................................................................................... 67  
Appendix C Survey.......................................................................................................... 68
ABSTRACT

SAVING FIRST RESPONDERS: PARAMEDICS’ PERSPECTIVE OF SOCIAL SUPPORT

By

Jacqueline Ann DeGrandis

Master of Art in Communication Studies

This study was a first step in understanding the social support that paramedics, who work in the 9-1-1 system, receive from their relational others. Quantitative (n=102) and qualitative (n=17) methods were used to explore the types of supportive messages paramedics received after experiencing a high stress call. Findings suggest that paramedics do receive supportive and non-supportive messages from their relational others specifically co-workers, in the form of listening and the use of humor. In addition, five essential themes related to supportive and non-supportive messages were revealed: (1) brothers in arms, (2) “…better to laugh than to cry,” (3) give me your ears and I’ll give you a story, (4) second guessing and (5) losing your credibility. The manuscript concludes with a discussion of limitations and directions for future research.
Chapter 1

Introduction

On April 18th, 2013 a fertilizer plant in West Texas exploded injuring more than one hundred and sixty people and killing fifteen; eleven of those killed were first responders. Unfortunately, this is a potential outcome of 9-1-1 emergency calls. First responder is a term that describes individuals responsible for handling emergencies such as firefighters, paramedics, and emergency medical technicians. However, incidents like the aforementioned and the notable September 11 attacks reveal that first responders are not only faced with witnessing high-stress traumatic situations, but they are also exposed to dangerous situations, which potentially lead to their own demise. First responders are surrounded by physical and psychological stress from the moment they clock into work until the moment they clock out.

In the past decade, there has been an increase of trauma research focusing on first responders (see Declercq, Meganck, Deheegher, & Van Hoorde, 2011; Finch, Gow, & Smith, 2005; Gallagher & McGilloway, 2007). The increased incidents of certain cancer among first responders call attention to the need for further monitoring and observation. Recent research about high stress jobs placed paramedics first in terms of negative impact on physical health and fifth in terms of psychological distress (Rowe & Regehr, 2010). Paramedics are usually the first to respond to emergency situations in which people are ill and sometimes expire due to accidents or sicknesses. Emergency medical technicians and paramedics both respond to 9-1-1 medical calls; however, the difference between paramedics and emergency medical technicians is the length of training received. All paramedics must be emergency medical technicians first, and then they can attend more
training that widens their skill set which includes giving medications to patients and starting intravenous lines on patients (“What’s the difference?”, 2012).

Because paramedics are routinely exposed to high-stress, traumatic situations, receiving supportive messages can help them cope with the stress of accidents, death, illness, emergencies, and disasters (Moran & Britton, 1994; Prati & Pietrantoni, 2010b; Rowe et al., 2010). Having to perform CPR on the dying, preserving limbs that have been detached, transports people with contagious diseases are among many duties of paramedics. Their chosen profession centers around their ability to save lives on the scene, as well as, swiftly transporting their patients to local hospitals. Alexander and Klein (2001) investigated the relationship between regular exposure to traumatic incidents and mental well-being in Scottish ambulance personnel. Results showed that the most traumatic accidents include those situations that include children, when there is miscommunication about the patient’s status, when working with unmotivated co-workers, feelings of helplessness, and when there are severe injuries. Unfortunately, paramedics face these situations on a regular basis, so it is inevitable that stress is an outcome of the job.

Individuals who experience stress on a regular basis also have other physical and emotional problems like posttraumatic stress disorder (PTSD), depression, and alcoholism (Regehr, Goldberg, Glancy, & Knott, 2002; Smith, Ortiz, Steffen, Tooley, Wiggins, Yeater, & Bernard, 2011). PTSD is a psychiatric disorder that can occur after experiencing a traumatic event (“What is PTSD?”, 2007). Bryant and Harvey (1996) note that posttraumatic stress disorder is correlated with extreme stressors and traumas, including exposure to grotesque death, injury, and participation in massive disasters.
Interestingly enough, PTSD is directly correlated with the paramedic occupation. Unlike many working professionals who are confined to an office atmosphere, paramedics work in public and private environments where death and injury are always present, which is why they are more likely to develop physical and emotional health symptoms (Jonsson, Mattsson, & Segesten, 2003). The threat of potential physical and psychological effects of stress is a reason for which why supportive messages are needed.

According to Prati and Pietrantoni’s (2010b) analysis of social support and mental health of first responders suggests that when faced with psychological and physical harm, social support was a resilience factor in the aftermath of potentially traumatic events and that it may influence first responders’ interpretation of the event helping them cope more effectively. Researching verbal and nonverbal communication that paramedics identify as a comforting or supportive message can deepen our understanding of the complexities of social support. There is a gap in the literature regarding the types of supportive messages that paramedics receive when they are faced with coping with traumatic events. Hence this research is generated because of this gap.

Although a number of studies have focused on coping strategies of first responders (Brown, Mulhern, & Joseph, 2002; LeBlanc, Regehr, Jelley, & Barath, 2008; McCammon, Durham, Allison, & Williamson, 1987) very little research has focused on the verbal support that paramedics receive to help them cope with a traumatic incident. These types of supportive messages play a critical role and could help alleviate the tremendous amount of stress experienced by paramedics on the job as it is related to occupational support and the increased health problems that first responders as it relate to therapeutic and health intervention.
This study focuses on social support, the most commonly researched form of coping in the field of communication studies utilizing interpersonal communication lens. Most social support research in this branch of communication studies focuses on familial relationships and individuals coping from medical ailments (Hovick, Goen, & Amason, 2012; Peterson, 2009); however, this study will apply concepts of supportive messages to paramedics and their counterparts, emergency medical technicians and firefighters. Using a mixed methods approach this research will explore the types of social support paramedics receive from their relational others. More generally, this study will deepen our understanding of verbal features in supportive messages that mark them as supportive and unsupportive and as a function of what relationship type (e.g. family members, friends, and co-workers).
Chapter 2

Review of Literature

Social support has its foundation in the fields of sociology and psychology, and communication. Since social support has been explored in several disciplines, there has been an academic divergence in developing a standardized definition of social support. This, in turn, has caused a lack of cohesion in the research and results that are produced, as well as a lack of a theoretical background for the concept. In the subsequent pages, the following is provided: an overview of the conceptualization of social support, a summary and synthesis of the research of social support in communication major highlights of the benefits of social support, and details of social support research on medical staff and first responders.

Conceptualizing Social Support

Research on social support transcends the boundaries of the field of communication. This research explores support networks, support quality and support messages. Yet these studies use different conceptualizations of social support that determines the outcome generalizations. Research in social support started in psychology and sociology in the 1970s and grew quickly and immensely because of the contributions that were made, such as receiving supportive messages can lessen psychological and physical diseases by protecting distressed individuals (MacGeorge, Feng, & Burleson, 2011). At this time, conceptualizing social support branched across disciplines.

Sociologists research social support at the aggregate level emphasizing social group memberships as an attribute of the collective and that which is good for the community (Putnam, 2000). For example, the number of connections an individual has
with others coupled with socioeconomics determines and frames their social support and attachment to the social network (Stack, 1974; Vangelisti, 2009). Essentially, social support is completely entangled in collective efficacy—the relationships of individuals with their interconnected groups of people and how those groups work together to provide support to members in need (Kissane & Clampet-Lundquist, 2012). More specifically, sociologists examine how macro structures (e.g., government agencies and public policy) as well as social networks and ties make support available to another (Hupcey, 1998).

Psychological researchers, on the other hand, emphasize how social support increases psychological well-being in distressed and lonely individuals and how personality factors influence perceived social support (Perlman & Peplau, 1981; Zhao, Kong &Wong, 2013). Earlier research shows that individuals with low social support report more clinical symptoms of anxiety and depression than those who have high levels of social support (Barrera, 1986; Cohen & Willis, 1985). However, psychologists have researched how social support functions during bereavement (Boyraz, Horne, & Sayger, 2012), pregnancy (Campos, Schetter, Abdou, Hobel, Glynn, & Sandman, 2008), unemployment (Reynolds & Gilbert, 1991), and during terminal or life-threatening illnesses, such as HIV (Simoni, Frick, & Huang, 2006).

The sociological and psychological perspectives clearly demonstrate that social support has not been cohesively defined. The academic community has not agreed upon a standardized definition of social support. One of the earliest definitions of social support was defined as a person’s sense of belonging, being cared for, being needed, and feeling accepted (Moss, 1973). One of the most widely used definitions, also referred to as
comforting communication, is communication that attempts to manage or alter distressed psychological emotions of another individual (Burleson, 1984a; Burleson 1984b; Burleson, 1994; Burleson & Goldsmith, 1998). This definition did not clearly define communication, meaning that it did not differentiate between verbal and nonverbal communicative characteristics in the context of social support. The later definition is one that some communication scholars use because it allows researchers to add the communicative features that they wish to study as it relates to support.

Social support’s definition went through a brief period where it transformed to include communicative aspects within it. Specifically, social support was defined as verbal and nonverbal communication between the sender of the message and the recipient to achieve less uncertainty about the components involved in the distressing situation and to restore a sense of control in the recipient’s life (Albrecht & Adelman, 1987). One such description illustrated this change in which social support was the financial, emotional, and instrumental product sent to a distressed individual from their network of acquaintances (Query & James, 1989). In the late 1980s, social support’s definition evolved to include a slightly more specific definition, in which researchers chose to include verbal and nonverbal communication, as well as add an extra descriptor about how it affects a distressed individual’s life.

Within the field of communication, there has been some discrepancy as to whether social support is equivalent to supportive communication or whether social support is one (of many) facets of supportive communication (Frisby & Martin, 2010; Goldsmith, 2004). Supportive communication has been described as verbal and nonverbal actions that people send to help distraught others to cope with their situation (Frisby &
Martin, 2010), while social support has been defined as an individual’s verbal communication or behavior that is a response from someone in need that has many goals, such as supplying comfort, encouragement, compassion, and problem solving skills (Koerner & Maki, 2004). The heart of the discrepancy as to what social support is rests on if supportive messages should focus on their resources, actions, or outcomes (Somera & Ellis, 1996). For example, social support has been correlated with lowering uncertainty and allowing individuals to feel that they are in control of their life (Rains & Keating, 2011). Basically, the main difference between supportive communication and social support are the end goals, such as feeling that support was provided to a distressed individual or a distressed individual feeling that support was received.

In discussing the plethora of definitions of social support, it becomes clear that there is no consistently developed or conceptualized definition of social support across or within disciplines, there lacks standardized elements or components of it that can be researched. Williams, Barclay, and Schmied (2004) suggested this lack of conceptual cohesion remains an ambiguous area because the only thing in common between all definitions is social interaction. Having only one element common in the definitions of social support does not provide a strong foundation for social support research to stand because each researcher is placing his or her own opinion on what social support is. One of the consequences of not having a standardized definition of social support is that researchers have enumerated several different types of social support.
Types of Social Support

One of the most researched subsets of social support is enacted support. Enacted social support looks at the messages and actions individuals do to help a distressed individual and how those messages are received (Goldsmith, 2004). More simply stated, social support from an enacted perspective is support received by others (Chen & Feeley, 2012). Enacted support allows researchers to understand the relationship between message and receiver from the perspective of the recipient of the support. Enacted support is a relatively new perspective for looking at this concept; however, it has become linked with helping people to cope from traumatic and stressful situations. Dirks and Metts (2010) found that enacted support is successful with aiding distressed individuals to cope because often in their time of stress, they will seek out relational others for advice on the situation.

Besides enacted support, there are many other subsets of supportive communication. Goldsmith (2004) lists six other subsets of supportive communication: emotional support, informational support, tangible support, appraisal support, esteem support, and network support. Robinson, Turner, Levine, and Tian (2009) briefly define four of these types. Emotional support is when a message sender is compassionate. Esteem support is when a message makes a person feel confident and that they are able to competently complete a task. Tangible support is when someone provides physical support to someone. Informational support is when we provide guidance to someone in need. Robinson, Turner, Levine, and Tian (2009) addressed how informative and tangible support affected diabetic patients’ use of an online blood glucose log. They defined tangible support as support that is concrete assistance, such as helping someone take out
their garbage, and concluded that both informational support and tangible support played a key role in having patients routinely log their glucose levels. In other words, an individual’s life can benefit from receiving support depending on the type of supportive communication received.

In their study on the burnout of domestic abuse advocates, Babin, Palazzolo, and Rivera (2012) explored emotional and informational support. Emotional support is support that contains a message indicating that the sender is concerned about the distressed individual and informational support uses facts, statistics, advice, and the like to express concern. They surveyed sixty-nine individuals in a domestic violence agency. Results of their study showed that a combination of perceived emotional support, perceived informational support, communication anxiety, and communication competency contributed to variance in the advocates’ level of exhaustion and level of accomplishment.

Another study conducted also aimed to correlate emotional and informational support to critical appraisal and isolation in terms of drug, alcohol, and mental disorders. In this study, Oetzel, Duran, Jiang, and Lucero (2007) surveyed four hundred and eighty-nine women and interviewed two hundred and thirty-eight of those that participated in the questionnaire portion. The results of their study indicated that both social undermining and social support relate to mental disorders. More specifically, instrumental support was negatively correlated to substance abuse and mental disorders. McKinley (2009) also researched the effects of social support and how it relates to health outcomes. He surveyed two hundred and forty-eight college students on their experience with receiving obesity threats and social support and how it influences their eating habits. The analysis
showed that informational supportive messages about nutrition correlated with positive eating habits and behaviors. In all, these studies demonstrated the diversity and benefits that the different types of social support provide.

**Communication and Social Support**

Communication researchers focus explicitly on the verbal and nonverbal messages that are sent during the supportive interaction (Knapp & Daly, 2011; Vangelisti, 2009). According to Knapp and Daly (2011), the communication perspective is different than the sociological and psychological perspective in five ways. First, the meaning of verbal and nonverbal messages that is intended to help a distressed individual. Secondly, messages sent must be directly connected to the distressed individual’s well-being. Third, understanding the person providing the support is intentionally sending messages to help. Fourth, communication research is not solely focused on the quantity of supportive messages, but rather the quality of the supportive communication. Finally, there is a focus on relationship outcomes as a component of well-being.

Researchers on social support seem to focus on certain characteristics of social support. The two features that are consistently brought up in research on social support are person-centeredness and nonverbal immediacy. One of the most researched elements of social support is the idea of person-centeredness. Applegate and Zimmermann (1992) were the first researchers to find the correlation between comforting communication and person-centeredness. Their study explored comforting communication among hospice team members through observations, focus group interviews, and a questionnaire. Results of their study found supportive messages within this team contained elements of person-
centeredness, such as care and concern with others. Another researcher who has taken interest with person-centeredness is Burleson, who has done a surplus of research on person-centeredness and even developed a coding hierarchy about it, contributes to the conversation many times expressing that people prefer high person-centeredness in their comforting messages (Burleson, 1984; Burleson, 2009; Burleson, Samter, Jones, Kunkel, Samter, Jones, Kunkel, Holmstrom, et al., 2005).

Person-centeredness refers to the sender’s ability to consciously adapt communicative messages to meet the relational and contextual needs of a distressed individual by legitimizing and acknowledging their feelings and experiences (High & Dillard, 2012). Jones (2004) examined types of messages that made people feel better and that were also a more satisfying interaction. In this study, two hundred and sixty-four college students participate in an experiment which had confederates enact different forms of supportive messages. Results of their study indicated that person-centeredness and nonverbal immediacy did make a distressed individual feel better and appear more communicatively competent.

Rack, Burleson, Bodie, and Holmstrom (2007) investigated bereavement strategies that people find helpful or not helpful. One hundred and five college students completed a questionnaire that addressed their experience with death and grieving strategies. Results found that person centeredness is a comforting communicative tool that has been shown to help those that are in bereavement feel helped. Cappella and Klein (2006) also explored person centeredness. In their study, four hundred and thirty-one women where half were diagnosed with breast cancer, evaluated breast cancer support
group message. Results of their study revealed that messages that were more person centered were seen as more effective as support.

Another attribute of support is nonverbal immediacy, which refers to behaviors, such as smiling and gazing that express closeness, warmth, interest, and empathy towards an individual in need (Jones, Fitzpatrick, & Wirtz, 2006). These behaviors are an important part of supportive interactions because they signal that a helper is ready to communicate (Anderson, 1999). Dolin and Booth-Butterfield (1993) had ninety-three college students complete a measure that had them describe a comforting situation. Results found that common nonverbal messages during comforting communication include hugs, close proxemics which verbal and nonverbal messages provide support and emotional distancing from a distressed individual which was seen in individuals who were attempting to protect themselves from the situation at hand. All of these results are nonverbal messages that convey support.

Jones and Burleson (2003) studied whether the sex of a person providing help and the person receiving the message mitigate the effects of the comforting messages. Results of their study show that men and women felt comforted by messages that were high in nonverbal immediacy and they also felt that helpers that used nonverbal immediacy and person-centeredness were most competent. Another study, which also looked at the influence of nonverbal immediacy and person-centeredness in emotional support, found that helpers that have both of these characteristics are perceived as good comforters (Jones & Guerrero, 2001). Overall, person-centeredness and nonverbal immediacy provide structure in understanding social support. Both of these elements allow
researchers to understand what makes distressed individuals feel that they are being comforted.

Many researchers in communication agree that supportive communication is an interpersonal communication construct. Social support is a social process where individuals accomplish shared goals and meanings through a communicative relationship produced and maintained by those individuals (Virtanen & Isotalus). Therefore, supportive communication fits that concept because messages are sent with a goal to alleviate stress of another individual (Trobst, 1999). Frisby and Martin (2010) discuss social support as an interpersonal communication construct because research has shown that successful supportive communication comes from intimate friendships or relationships and that effective social support relies on interpersonal communication skills, such as the ability to empathize.

One area of social support research in communication studies focuses on medicine. Drummond (2005) researched how supportive and non-supportive messages influenced the management of diabetes. In this study, thirty diabetic women were interviewed. She found that acts and messages of encouragement and compliment reinforced positive behavior with those with diabetes. Therefore, messages that contain encouragement, reassurance, and were complimentary were supportive messages. Robinson and Tian (2009) also applied supportive communication to medicine. They surveyed eight hundred and seventy-three individuals diagnosed with cancer to understand the benefits of cancer patients providing support to others. Results revealed cancer patients provide support to others with the rationale to receive support back. These
studies demonstrate the influence that social support has when it comes to individuals and their medical treatments: the greater the support, the more positive the outcomes.

Social support research in communication studies has not only contributed to the conversation of support and medicine, but many other subjects as well. Research has looked at social support in many areas including: education and students (Strom & Boster, 2011; Thompson, 2008), empathy in relationships (Pudlinski, 2005; Sato, 2009), supportive messages in marriage (Sullivan, Pasch, Johnson, & Bradbury, 2010; Xu & Burleson, 2003), and with advice giving (Feeley & Hung, 2005; Thompson & O'Hair, 2008). The communication discipline has examined social support in many contexts, as discussed above. In investigating social support, researchers have used theoretical foundations to further understand the phenomenon they are studying.

The first theoretical framework was developed by a psychiatrist, Bowlby. Attachment theory postulates that affectionate bonds between a mother and her child affect how her child will behave during the entire life span of the child. At the heart of this theory lies attachment behaviors which are the responses from children when their primary attachment figure departs. This behavior has been correlated with a survival behavior or as a preparing factor of future independence of the child (Amundson, 2006). Furthermore, children who have attachment styles that lack security are more likely to view interpersonal relationships negatively (Jones, 2005). The results of a weak attachment can lead an individual to feel that others do not provide support (Bachman & Bippus, 2005).

Although this is a psychological theory, it has been utilized in the field of communication as a perspective to gain further insight into social support. From this
perspective, social support is seen as a facet of a person’s personality that influences how they verbally and nonverbally react to supportive messages. Mikulincer and Shaver (2009) explain in attachment theory, people exhibit support seeking behavior, such as pursuing supportive messages, in their times of need in order to eliminate their psychological and physical worry and anxiety. Also, secure attachments that are formed when people are children with their caregivers will result in an adult who is more competent in perceiving whether others are available to provide support (Mikulincer & Florian, 1995).

Bowlby’s attachment style theory was further developed by communication scholar Burleson (2009), in his dual-process theory of supportive messages. The attachment style of individuals determines how people will react or decode supportive messages from others that are close to them; close relationships that feel safe will be a strong source of support, unlike those that are not seen in that viewpoint will not feel a reliable source of support and comfort (Bodie, Burleson, Gill-Rosier, McCullough, Holmstrom, et al, 2011). Burleson, Hanasono, Bodie, Holmstrom, McCullough, Rack, and Rosier (2011) apply this framework to their two studies on gender differences in perceiving supportive situations and in message decoding. Both studies collected data through questionnaires by college student respondents. Results revealed that women, more so than men, have a higher ability and motivation to process supportive scenarios and to decode comforting messages.

Another way to view the dual-process theory is that the outcomes of supportive interactions is to look at the content and non-content of the messages sent, which includes examining the relationship of the individuals, characteristics of the sender, the recipient
and of the context of the message (Virtanen & Isotalus). Not only do people who are familiar with a secure attachment style have positive thoughts on the comforting process, but they are also better at providing support, such as being able to empathize more and have greater skills in validating emotions (Mikulincer & Shaver, 2009).

**Benefits of Social Support**

Social support can be viewed as protection from stress and seeks to lessen negative effects on an individual’s well-being that is caused by stress (Goldsmith, 2004; Sarason & Sarason, 2009). Basically, the negative effects associated with stress can be eliminated or prevented if the distressed individual believes that those she is connected with in social networks has the means to help cope with the stress (Ashida & Heaney, 2008). Goldsmith provides a model for understanding this process in terms of a communicative context. Simply stated, this is a four step model: first, a distressed individual receives support enacted to them in the form of a conversation. From there, the distressed individual evaluates the support attempt, either negatively or positively. If the enacted support is seen in positive form, the distressed person can then begin coping with the stress. Finally, the end result for the distressed person will be a restored sense of psychological and physical well-being (Goldsmith, 2004).

Thorsteinsson and James (1999) conducted a meta-analysis to determine whether social support was positively correlated to benefitting cardiovascular functioning. Their results show that social support acts as a mediator in cardiovascular health. Another health benefit of social support is that it is linked to lowering mortality rate, by having immunosuppressive effects, which help defend against cancerous tumors, and helps the immune system function at its potential (Uchino, 2006). In her social support and health
review, Ell (1984) found that social support was connected to helping patients during their recovery periods, such as with heart attacks and cancer.

Researchers have various reasons for how social support influences the physical health of individuals. The first reason falls into behavioral choices that encourage healthier lifestyle choices, such as exercising and eating healthier. Another example is that it encourages patients to regularly follow the medical plans, such as prescriptions, delegated by physicians. The second reason claims that social support has positive health outcomes due to the psychological choices of an individual, such as wanting to feel in control of oneself (Uchino, 2006). Callaghan and Morrissey (1993) contribute to this conversation by discussing three ways that social support improves physical health. The reasons that social support benefits physical health includes: having an individual self-regulate their physical and psychological actions so that it promotes health by alleviating symptoms and illnesses related to stress, meaningfulness, finally social support positive behaviors that promote good health, such as following prescription directions. The positive, supportive messages that are sent to a distressed individual encouraged them to have higher life satisfaction and higher self-esteem that leads them to make these choices.

Besides physical improvement, there is documentation that social support benefits psychological well-being. Reported psychological improvement includes a decrease in loneliness (Rankin & Monahan, 1991; Segrin & Domschke, 2011), lower depression symptoms (Manuel, Martinson, Bledsoe-Mansori, & Bellamy, 2012), and being more satisfied with life (Constantine, Alleyne, Wallace, & Franklin-Jackson, 2006). For example, Sherman, Skrzypek, Bell, Tatum, and Paskett (2011) surveyed two hundred and forty-nine African American, Native American and European American women’s
experience with symptoms of depression and perceived social support. They found that supportive interactions that had high support ratings aided in lowering the depressive symptoms of the distressed other.

The availability of social support improves physical and psychological well-being, and interpersonal relationships. Barbee, Rowatt, and Cunningham (1998) briefly discuss long term relational benefits of providing support. One of the benefits they discuss is an enhanced attachment between the sender of the supportive message and the recipient of the message. This occurs when the sender of the message(s) are nurturing, provide a multitude of solutions, and show acceptance of the distressed individuals’ feelings. Other benefits of social support that impact interpersonal relationships including friendships (Agne & White, 2004), for control and affection in the relationship (Frisby & Martin, 2010), and act as an accomplishment for the relationship meaning that the individuals in the interaction believe that their relationship has successfully overcome an obstacle (Botschner, 2001).

Social Support and Emergency Providers

In the past twenty years, social support research has broadened its focus to include studies on workers in the emergency services, in-hospital care providers, such as nurses and pre-hospital care providers, paramedics and firefighters. This section highlights research that is found throughout all perspectives to give a snapshot of what is being researched on these groups of professionals.

Research has shown that social support has contributed in multiple ways to benefiting the medical profession. Chen, Fu, Li, Lou, and Yu (2012) investigated the correlation between social support and nursing career development by having nine
hundred and twenty-five nurses complete a questionnaire. Results revealed that the more social support received was correlated with a more successful career. Ellis and Miller (1994) found that supportive communication contributed in three ways to the nursing profession. First, it relieves stress and the feeling of being burned out. Secondly, it improved the nurses’ caring of others in an acute care setting. Finally, supportive communication provided nurses with a sense of personal control.

More recent research by Cleary, Horsfall, O'Hara-Aarons, and Hunt (2012) found that nurse participants deemed it necessary to have supportive interactions after traumatic situations and that they each had access to at least one other hospital staff member to provide support when a traumatic situation occurred. Wright, Banas, Bessarabova and Bernard (2010) examined how communication competency alters views of social support from the perspective of Veteran Administration hospitals’ nurses. They conclude that the higher another nurse’s communication competency, the social support was more satisfying and decreased the nurse’s perceptions of stress. Overall, research shows when perceiving social support, nurses are able to combat burnout by gaining control over their work experience. Another occupational benefit of social support in the nursing context is the care they provide becomes better if they have support (Hamaideh, Mrayyan, Mudallal, Faouri, & Khasawneh, 2008).

Most research on social support and emergency providers focuses on nurses; very few researchers have examined how social support impact paramedics and their counterparts. Regeh and Millar (2007) explored the support paramedics receive. They surveyed eighty-six paramedics and interviewed seventeen paramedics on their experience with occupational demands, control, and with receiving support; and found
that work peers were their greatest source of emotional support, while supervisors provided the least amount of supportive messages. Prati and Pietrantoni (2010a) further examined social support and paramedics to determine if social support provides paramedics a better quality of life. They focused on testing a model that would see if received and perceived social support balanced involvement in traumatic incidences and quality of life. The results show that social support plays a pivotal role as a resilient factor after paramedics have been exposed to a tragic situation.

Besides looking at the individuals who are in these professions, Regehr, Dimitropoulos, Bright, George, and Henderson (2005) studied fourteen wives of firefighters to determine how and if social support from wives to their firefighter husbands impacts their familial relationships. Many of the wives in this study believe it is of vital importance that their firefighter husbands have peer debriefing after traumatic events and that other firefighters play a huge role in fulfilling that need.

There are similarities between the literature on nursing and first responders. The connection is that supportive messages assist in alleviating occupational stresses. Supportive messages provide a way for nurses and first responders to recharge mentally and physically for their job duties. Although there are similarities in the research, there is a clear gap in social support research with paramedics and firefighters.

Most research focuses on paramedics focuses on the relationships between first responders and how their occupation affects their families. There is also research concerned with the coping strategies these professionals use. Interestingly, social support comes up often in the literature because of its coping capabilities. Humor is one of the most frequently researched coping strategies of ambulance personnel. One of the reasons
that humor is such a pervasive coping technique in this field is because of its ability to build camaraderie among crews that then causes resiliency and psychological well-being (Dean & Major, 2008; Scott, 2007). Regehr, Goldberg, and Hughes (2002) found that cognitive coping strategies, such as visualization, were most common among their paramedic participants. Paramedics’ strategy, which they described as emotional distancing, is not common among literature on this topic. Basically, this technique involved shutting out the emotions of those at the scene of the trauma, as well as their own feelings. The researchers of this study found that supportive communication was also a coping mechanism, but not as often as the distancing technique.

In all, studies on emergency providers and social support are not extensive. Most of the research centers on the benefits of social support with most of it examining nurses. There is a severe lack of research that focuses solely on paramedics and the types of messages they receive. Because there is a lack of studies on supportive messages and paramedics in the field of communication, this study will attempt to answer the following question regarding the messages sent to paramedics from their relational others when in the process of coping from traumatic calls:

RQ1: What types of support messages do paramedics receive?

Additionally, research shows that when people are faced with adversity, they are naturally drawn to talk to and confide in others (Rime, Corsini, & Herbette, 2002). Unlike other medical professionals, first responders work in medically unique situations in which they might have to confide in their medical partner. Firefighters and paramedics typically work ten, twenty-four hour shifts each month. This environment allows this group of people to evolve into a close knit social network. Work environments with positive
organizational behavior, such as co-worker support creates employees with greater work motivations and personal growth (Bakker & Schaufeli, 2008).

To further support the idea that ongoing relationships produce different types of communication, Beaton and Murphy (1997) conducted a study that looked at the bonds of paramedics and firefighters. The authors expressed that social support may differ as a function of working long shifts together, having the same occupational cultural norms, and relying on each other in times of life and death. Beaton and Murphy continue this conversation by suggesting that firefighters and paramedics have a deeper, more intimate and supportive network with each other than with their spouses, family, and non-network friends. Camara and Orbe (2010) suggest that communicative messages vary by relationship type. Thus, this study seeks to answer a second research question related to supportive messages and relationship type:

RQ2: Do social support messages vary as a function of relationship type? If so, how?
Chapter 3

Methodology

This study explores first responder’s perspectives on supportive messages; more specifically, what type of supportive messages are sent to them and from whom. The inquiry of this topic used a mixed methods approach: a quantitative study that surveyed 102 paramedics, emergency medical technicians, and firefighter personnel and a qualitative study investigating the support experiences of 17 paramedics and emergency medical technicians. Both studies aim to describe and assist us in understanding how paramedics and emergency medical technicians perceive supportive messages from their relational others.

Participants

For the qualitative study, a total of 17 paramedics ($n=11$) and emergency medical technicians ($n=6$) working within Los Angeles County were interviewed. Participants ranged in age between 18-24 ($n=3$; 17%), 25-34 years of age ($n=12$; 70%), and 35-54 ($n=2$; 11%). Unlike the quantitative portion of the study, no participants were 55 years of age or older ($n=0$; 0%). The marital status of the participants was: now married ($n=4$; 23.5%) and single ($n=13$; 76.4%). The majority of participants were male ($n=14$; 82.3%), leaving a small group of females ($n=3$; 17.6%). Paramedics and emergency medical technicians reported an average of 5.9 years of experience working the in 9-1-1 system.

For the quantitative data, data was collected from 102 individuals including paramedics ($n=17$), emergency medical technicians ($n=32$), firefighter/paramedics ($n=13$), fire captains ($n=11$), fire engineers ($n=9$), and fire battalion chiefs ($n=3$) working
within Los Angeles County. First responders ages ranged from 18 years old to 55 years old and older: responders between 18 to 24 years old \((n = 11; 10.8\%)\), between 25 to 34 years old \((n = 39; 38.2\%)\), between 35 to 44 years old \((n = 30; 29.4\%)\), between 45 to 54 years old \((n = 21; 20.6\%)\), and 55 years of age or older \((n = 1; and 1\%)\). There were 91.2% males \((n = 93)\) and 8.8% females \((n = 8)\) in this study.

Length of time working in the 9-1-1 system varied: less than 1 year \((n = 2; 2\%)\), 1 to 2 years \((n = 16; 15.7\%)\), 3 to 4 years \((n = 11; 10.8\%)\), 5 to 6 years \((n = 16; 15.7\%)\), 7 to 9 years \((n = 18; 17.6\%)\), and 10 or more years \((n = 38; 37.3\%)\) (range=<1-10+ years).

The marital status of paramedics, emergency medical technicians, and fire department personnel were: now married \((n = 53; 52.5\%)\), single \((n = 42; 41.6\%)\), widowed \((n = 1; 1\%)\), divorced \((n = 4; 3.9\%)\) and no response \((n = 1; 1\%)\). Participants of this study were majority male \((n = 93; 91.2\%)\), with a lower female rate \((n = 9; 8.8\%)\). Race also varied, with the majority being white \((n = 81; 81\%)\), next Hispanic \((n = 8; 8\%)\), then black \((n = 3; 3\%)\), and other \((n = 8, 8\%)\). Finally, the majority of participants work in Santa Clarita Valley \((n = 74; 73.3\%)\), Beverly Hills \((n = 24; 23.8\%)\), and other \((n = 3; 2.9\%)\).

**Procedures**

**Qualitative Data Collection Procedures**

Snowball sampling was applied. The researcher solicited a sample group that started with two individuals, both of whom the researcher knew. From there, those individuals told their friends and co-workers and it expanded from there. In addition, a flyer was hung up at multiple stations, which asked potential paramedics and emergency medical technicians to contact the researcher if they were interested in participating (see
Appendix A). After the researcher was contacted by each participant, interviews were then scheduled.

Prior to conducting the interviews, interested participants of the study were asked to fill out two forms. The first form was an eligibility screening document. This form was to ensure that participants had the required characteristics needed, such as confirming they currently worked as a paramedic or emergency medical technician and that they worked in the 9-1-1 system. Also, the researcher asked participants if they had ever received messages from close friends and family that did not help them cope after a high-stress call. This question was asked to make sure that participants were able to provide substantial data to the study in order to shed light on the topic of social support.

The second form asked demographic information including age, sex, race, ethnicity, what county they work in, years on the job, years working on a 9-1-1 car, and relationship status. All participants chose to interview at a local coffee shop that offered a quiet atmosphere. All interviews began with an introduction, the completion of consent forms and agreement for interviews to be recorded followed by the semi-structured interview that asked each participant open-ended questions that address the stresses of the job and about relational others (see Appendix B).

This study used one-on-one interviews as its primary method of data gathering over a one-month period between February and March 2013. Each participant had one interview session which had an average length of forty five minutes. With permission from participants, interviews were audio recorded to ensure that the transcription process during the data analysis period would be as accurate as possible.
Participants were served cookies and ice cream on the evenings of their interviews. The researcher asked each participant three open-ended questions that addressed the stresses of their job, specifically, asking them to recall a stressful event that they experienced on duty and then to recall messages that were helpful or not from those that they have an ongoing relationship. This format allowed for greater discussions involving social support and revealed important components and experiences from the perception of paramedics and emergency medical technicians. This strategy also provided information about the relationships of those they received a supportive message from and asked them to draw on specific situations that caused a need for support, as well as what messages received.

**Qualitative Thematic Analysis**

A thematic analysis is ideal for identifying patterns and themes through the transcription of interviews (Taylor & Bogdan, 1984). Tracy and Munoz (2011) described a thematic analysis as an interpretive process where the researcher is on the periphery of the narratives told by participants and finds the connections between responses to glue together a large picture of what is occurring within the sample population.

In conducting a thematic analysis, the three-step process of Lanigan (1988) was employed. The first step was to transcribe all interviews. From there, the second step was to search narratives for words and phrases that reoccurred throughout each interview that were deemed supportive from the perspective of the interviewees. Each additional interview listed and identified types of supportive messages. Supportive messages came from direct quotes and paraphrased common ideas. The third step combined similar terms into subthemes. After each individual analysis was completed, themes were combined.
into units related to what was said or done. Seven initial themes were collapsed into five final themes: brothers in arms, “…better to laugh than to cry,” give me your ears and I’ll give you a story, second guessing, and losing your credibility.

**Quantitative Data Collection Procedures**

For the quantitative portion of this study, surveys were dispersed to a sample of paramedics, emergency medical technicians, and firefighters within Los Angeles County. To recruit this convenient sample, the researcher contacted paramedics and emergency medical technicians by visiting local stations to hand out surveys to complete questions about the types of support messages they received and from whom. Surveys were dispersed to medical technicians and to the fire department in Beverly Hills. As an incentive to participate in this study, paramedics, emergency medical technicians, and firefighters were told that they would receive baked goods after they completed the survey.

**Quantitative Study Measures**

Paramedics, emergency medical technicians, and firefighters answered general questions regarding demographic information (e.g. employment history, sex, and marital status). The survey was a modified version of the UCLA Social Support Inventory (Schetter, Feinstein, & Call, 1986). The original survey looked at types and satisfaction of social support received and given by college students. Two major alterations of the original survey included: (1) discarding sections of the survey that addressed sending of supportive message to others, since this study only looked at receiving supportive messages and (2) changing the context of the support, this study addresses support as it relates to a high-stress call.
The quantitative instrument required respondents to rate their need of a supportive message using a Likert Scale 1 to 7, regarding statements such as “I usually don’t show that I need support, nor do I ask for support” or “I usually ask for support” (see Appendix C). The following question asked participants to respond to a seven item question that had them determine a call that they experienced as high-stress. Participants then responded to a five item question in regard to who provided a supportive message after the call they marked above. Next, participants responded to a twelve item question that had them select the type of supportive message they receive. Then participants were asked to indicate an individual who, if anyone, sent them a non-supportive message in the form of a five item question. Finally, participants responded to a thirteen item question that addressed the type of non-supportive message, if any, they received.

All surveys collected were entered into SPSS (Statistical Package for Social Sciences), a statistical analysis program for quantitative data. Descriptive statistics were run to describe the sample and to provide numerical summaries of the type of social support received and by whom. Specifically, basic descriptive statistics were calculated and included frequencies and cross tabulations.
Chapter 4

Results

This chapter presents findings centered on the supportive messages received by paramedics, emergency medical technicians, and firefighters within Los Angeles County. It is organized to present the data according to the type of method that was used. As mentioned previously, this study used a mixed method approach to answer the research questions in regard to the type of supportive messages received and the sender of the supportive messages. Research questions asked: What types of support messages, if any, do paramedics receive? Do social support messages vary as a function of relationship type?, If so, how?

Qualitative Results

Emerging themes from participant narratives included the following for supportive and non-supportive messages: (1) brothers in arms and understanding; (2) “…better to laugh than to cry”; (3) give me your ears and I’ll give you a story; (4) second guessing; and (5) losing your credibility.

Brothers in Arms and Understanding

The reality for all paramedics in the study was that they had to develop a community of support with their medic partner’s and other co-workers partner’s who understand what they go through on a day-to-day basis. One essential theme that emerged from the inquiry of supportive messages received by paramedics most often was Brothers in Arms and Understanding. The theme Brothers in Arm and understanding describes the co-worker as a source of support who is aware of and identifies with the job and its stressors. Paramedics overwhelming stated that the partnership influences how the
supportive message would be received. Respondents felt that sharing the same experiences allowed them to understand the situation much better. One male paramedic discussed the relationship between partners as critical to understanding their situation:

With your partner, it is a kind of unspoken bond. Because again, you get the call and you know you and this person are going to have to run the call. And when you and this person have been in this for a while...you automatically support this person and automatically bond with the other person.

Another paramedic illustrated the relationship between co-workers,

We’ve been through a lot [together]. We’ve run so many calls together, we understand. When you get with your partner, it is almost like a marriage, you get to a point where you function as a single unit.

Although these two responses highlighted the unique relationship between paramedic the brothers in arms theme also demonstrate a type of supportive message that is unique to that relationship: understanding. The relationship suggests that the role of peer support is to understand the shared experience whether it is the same or different and assist them in their time of need. The concept of understanding is the most prevalent response from paramedics in why the majority of received supportive messages come from co-workers. Many respondents revealed that a family member, friend, or others, who do not work in the 9-1-1 system, simply do not understand the feelings and experiences they endure. When asked if he received any supportive messages from family or friends one male paramedic responded:

Honestly, no. Not because they didn’t want to be supportive, but because they didn’t get the 9-1-1 system and how it worked or how we dealt with emotions.
Another paramedic addressed the idea of understanding in regard to the sender of the supportive message:

The best way is to talk it out through co-workers because they understand the situation, other people don’t. I like to talk to someone who understands, who has been there, who has been in my shoes.

Overall, first responders generally acknowledged that the amount of time spent together with their peers who understand the situation played a key role and facilitates social support.

*Better to Laugh than to Cry”*

The most common type of supportive message received by paramedics was humor. Humor, as discussed by Romero and Cruthirds (2006), is a communicative message that is seen as humorous or funny whether it is intentional or not. Respondents discussed humor as a form of support they received after experiencing a high-stress call. Interestingly, the type of humor used was specifically described as black humor. Rowe and Regehr (2010) note that gallows or “black” humor used in the medical community is often considered an inappropriate humorous response that is typically seen in moments or experiences of hopelessness. One example expressing humor is clearly seen in this example:

To an outsider, it would sound like the most morbidly, inhumane thing you have ever heard in your life, but when you get back in the rig and everything slows down and your partner turns to you and says, “Whoa, did you see that chick’s brain dude?” Laughing is something that gets you through this job.
As shown above, gallows humor allows emergency professionals to manage the stress of their job which contains death and gruesome scenes by having a light-hearted outlet. Another paramedic provided a rationale for why he uses humor:

We joke around about it, like not making fun of anybody or making fun of anybody’s feelings, but it helps us cope with the situation. So like you and your partner go on a call, and it is someone seriously really sick, and he saw something that was really funny on the call or saw something on the side and you just laugh about after the call. Not to hurt anybody’s feelings or bring anybody down, it just helps us cope with the situation. You got to make it enjoyable; you got to laugh about stuff. It helps us get through the day; that’s the biggest thing I think.

Someone calls 9-1-1 for a reason, they are hurt, they are sick, but if you are always stressed about it, always sad about every single one of the calls, how do you live? You can’t live to mourn for every single one of the patients because you just got to move onto the next.

Humor appeared to be the most salient supportive message because it allowed for the releasing of stress and tension in a positive way. Humor was perceived by respondents as a supportive message because it is a way for emergency medical technicians to distract themselves from a traumatic situation and as one paramedic puts it, “to alter the mood.” Humor, as suggested by the paramedics in this study, is a coping strategy that reduces the stress of the job by providing distance between what is seen, as well as lowering mental exhaustion (McCreaddie & Wiggins, 2007) by taking “their minds off the bad part of the call” making light of the situation. As one paramedic said, “It is better to laugh than cry.”
Give me Your Ears and I’ll Give You a Story

Give me your ears and I’ll give you a story, represents the second most prevalent type of supportive message, listening. Supportive listening is comprised of self/other focused, being empathic, being involved, giving verbal response, and being friendly (Bodie, Vickery, & Gearhart, 2013). Often times, participants described listening as a way for them to talk through the situation that they experienced which translates to the receiver focus on them and the first responder’s needs. Respondents discussed their experience with receiving listening as a supportive message by having a relational other provide an ear to listen to their high-stress call. Listening was a form of support provided by any relationship type. Bodie, Vickery, and Gearhart (2013) recently researched the concept of supportive listening which contained notions of being available to the person in need, positivity, being honest, being friendly, being encouraging, being understanding, and being conversational. Although many participants talked about having someone to provide an ear, others got more in-depth with the idea of supportive listening. An emergency medical technician stated, “He gives me an ear for my words to fall on, he’s always really supportive and reminds me we can’t save all of them.” Another paramedic also contributed to this idea:

I guess most of it is listening, but also like a sounding board because obviously, I understand that people are going to die. It is just easier to handle knowing that you did everything you could…so I could rationalize it.

A third example as stated by a paramedic with his experience on listening:

Just listening and encouragement and what not. I think what was nice was that they weren’t denying that even though I work in this field and it is kind of
expected that I am able to function, they didn’t deny my credibility that it might affect me as it did.

All three of these examples illustrated how listening was the type of supportive message that they received. Interestingly, each of these scenarios highlights Bodie, Vickery, and Gearhart’s (2013) view of supportive listening. Listening in these cases all had extra, underlying forms of support. Not only was listening a way for respondents to express their experiences and stresses, but it also allowed for them to rationalize their experiences and it reassured participants that the decisions they made during the situation were the proper ones. In all, listening is not only therapeutic support by just getting the words out of what they saw and felt out, but it provided a place for an encouraging conversation to start. These examples also demonstrated the multiple benefits of receiving listening as a supportive message. Respondents noted that their listening experience was not only having a place to talk about their experience, but also where there was involvement, an attempt to understand the situation they just experienced and expressed care. Also, these examples exemplified the concept of supportive listening by demonstrating empathic, involved messages.

Second Guessing

Although the research question was based on supportive messages paramedics receive, the topic of non-supportive messages also came up during interviews. Second guessing was the result of almost every non-supportive message participants received; whether it was second guessing career aspirations, masculinity, or occupational ability. Interestingly, the majority of non-supportive messages were sent by co-workers. Unlike
supportive messages, where work partners were the sender of the message; non-supportive messages were most often sent specifically by supervisors.

Responses from respondents revealed that the most common non-supportive message was disrespectful comments. Disrespectful messages were those that expressed a lack of admiration, consideration, acceptance, and approval. Consider the following example of an emergency medical technician receiving a disrespectful, non-supportive message from a supervisor:

We have this one supervisor…he notices if you do something wrong on-scene. He is not there to support us, what he’s there for is to nit-pick everything we do. Right as you close the doors on the ambulance after you load up your patient, he pulls you aside and tells you what you did wrong or he will tell you afterwards and will write you up for it.

This example displayed the use of a non-supportive message because it is over critical and shows a lack of consideration of the knowledge and work experience of the emergency medical technician. This message is also disrespectful on behalf of the patient; the supervisor criticized the abilities and capabilities of the paramedic in front of the patient, therefore, reducing his credibility as an emergency medical provider.

Two other paramedics also provided insight into receiving a disrespectful, non-supportive message. The first was received from the paramedic’s grandfather. He stated:

He ended up calling me after and I wasn’t in a great mood, he was like “What’s wrong, what’s going on?” I talked to him for a minute and told him what happened and he said if you are going to get this attached and you are going to
have this much of a hard time separating yourself; maybe this isn’t the career for you. I actually took a long, hard look and almost left because he was right.

The second paramedic had a similar incident, but with a partner who he did not typically work with.

I worked with one partner once, I forgot his name, but we had a call with some kid’s dad and he was really sick and it bummed me out cause of seeing the father and son together. And after the call I was like “That kind of sucked, didn’t it?” And he was like “You know, it’s your job and you are going to have to deal.” I felt that maybe I am not going the job correctly; maybe I am not capable of it.

Both of these examples demonstrated receiving a disrespectful, non-supportive message. The two were categorized as disrespectful because both of the messages were not considerate the feelings of the paramedic that he was dealing with, which in turn, caused both paramedics to second guess their careers.

*Losing Your Credibility*

A fifth theme that was found in the narratives of paramedics and emergency medical technicians was the stigma in their field with receiving and/or needing supportive messages. Although this was not as widely discussed, it came up as an interesting disclosure. One paramedic described why there is a stigma, “I mean it’s just that sometimes you feel you shouldn’t need help because this is your job, like you are not good enough to do this.”

A second respondent had a similar response:

They expect you to be able to perform in the work environment and they understand that it’s stressful and stuff, but if you kind of open up to them and say
“This really bothers me” every single time you have that kind of call, I don’t really know it is all kind of hearsay and speculation, but I feel like you might start losing your credibility as someone who is able to function in this environment.

Even though there was overwhelming evidence that paramedics receive support from one another, there seems to be a secret shame in needing supportive messages in the first place. Both of the examples exemplified this concept by discussing that needing a supportive message will have the individual in need of the support be seen as not a credible first responder. Matud, Ibáñez, Bethencourt, Marrero, and Carballeira (2003) discussed that there are gender differences in perceiving social support. They noted that masculine socialization, in which the first responder field is overwhelmingly male, does not emphasize the need of expressing feelings, but rather focusing on being independent and self-reliant. Their idea relates to this concept because even though respondents may have wanted supportive messages, they felt that expressing it will tarnish their credibility as a strong, autonomous paramedic.

**Quantitative Results**

Qualitative results were supported by the quantitative portion of this study. The first and second research question queried the types of supportive message and how they vary across relationship type. Descriptive statistics were run to examine those questions. Overwhelmingly, there were two prominent types of supportive messages that were received by participants (see Table 4.1). Results showed that 36% \((n = 37)\) of participants noted that listening was the most common supportive type of message received. The second most common type of supportive message was humor which had 19% of total survey respondents \((n = 20)\). These results indicate that first responders most often

8
Table 4.1

Types of Supportive Messages

<table>
<thead>
<tr>
<th>Types of Supportive Message</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>37</td>
<td>36.3</td>
</tr>
<tr>
<td>Humor</td>
<td>20</td>
<td>19.6</td>
</tr>
<tr>
<td>Emotional Support</td>
<td>6</td>
<td>5.9</td>
</tr>
<tr>
<td>Empathy and Understanding</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>Encouragement/Reassurance</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>Information</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Minor Assistance</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Major Assistance</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Advice</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Caring</td>
<td>1</td>
<td>1.0</td>
</tr>
<tr>
<td>Number of Subjects</td>
<td>76</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note. Frequencies and percentages of types of supportive messages. $n = 76$.

listening and humor the most as specific communication practices that represent supportive communication. Although there are no specific type of listening articulated in detail, the use of jokes and humorous statements related to the 9-1-1 emergency are a distinct kind of message of support that makes the situation light hearted.

An interesting finding was related to supportive messages and relationship type. A cross tabulation revealed that humor as a type of supportive message was sent mostly ($n = 19; 95\%) by co-workers (see Table 4.2). Of the descriptive statistics, results showed
Table 4.2
Type of Supportive Message by Sender of Supportive Message

<table>
<thead>
<tr>
<th>Type</th>
<th>Family</th>
<th>Co-Worker</th>
<th>Friends</th>
<th>Totals</th>
</tr>
</thead>
<tbody>
<tr>
<td>Listening</td>
<td>12</td>
<td>21</td>
<td>2</td>
<td>35</td>
</tr>
<tr>
<td>Humor</td>
<td>1</td>
<td>19</td>
<td>0</td>
<td>20</td>
</tr>
<tr>
<td>Emotional Support</td>
<td>1</td>
<td>5</td>
<td>0</td>
<td>6</td>
</tr>
<tr>
<td>Empathy and Understanding</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Encouragement /Reassurance</td>
<td>0</td>
<td>3</td>
<td>0</td>
<td>3</td>
</tr>
<tr>
<td>Information</td>
<td>1</td>
<td>1</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Minor Assistance</td>
<td>0</td>
<td>2</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Major Assistance</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Advice</td>
<td>0</td>
<td>1</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td>Care</td>
<td>1</td>
<td>0</td>
<td>0</td>
<td>1</td>
</tr>
<tr>
<td><strong>Totals</strong></td>
<td><strong>17</strong></td>
<td><strong>55</strong></td>
<td><strong>2</strong></td>
<td><strong>74</strong></td>
</tr>
</tbody>
</table>

*Note.* Significant responses indicated that co-workers were the sources of humor, *n* = 74. That 72% of first responders (*n* = 55) do receive supportive messages from their co-workers. Although participants were not asked explicitly which co-worker they received supportive messages from included on the list were: partner, other co-worker, supervisor, and management. Often times, participants would stress that their partner was the co-worker who most commonly provided the supportive message.
Essentially, coping strategies allow an individual to reflect on their stressful situation and think positive thoughts about it and act in positive ways. Data suggest that humor as a supportive message provided a stressed individual an opportunity to turn their stress into positivity by helping them cope with their stressful situation in a playful manner with a co-worker that would understand the humor that might not be understood in any other relationship without being perceived as insensitive to the victim. The second type of supportive message received by relationship type was listening. Listening was often provided by family members \((n = 19)\). These numbers suggest that listening is a form of emotional support, but the type of listening support is unknown.

As for non-supportive messages received, 35\% of participants \((n = 36)\) provided responses on this topic. Results revealed that the most common type of non-supportive message received was “Did not show you respect, approval, and/or acceptance.” Of the thirty-six participants who indicated that they received a non-supportive message, 30\% \((n = 11)\) checked this type on the survey (see Table 4.3). The second most common type of non-supportive message that participants received was “Did not listen” 13\% \((n = 5)\).

Non-supportive messages received as a function of relationship type revealed that twenty-four (66\%) received a non-supportive message. Interestingly, 47\% \((n = 17)\) of non-supportive messages were sent by co-workers. Unlike the supportive messages, in which the majority of messages were specifically sent from his or her partner, the non-supportive messages were sent by supervisors. Other senders of non-supportive messages included family members (13\%), and friends and others (4\%).
<table>
<thead>
<tr>
<th>Types of Non-Supportive Messages</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>No respect, approval, and/or acceptance</td>
<td>12</td>
<td>11.8</td>
</tr>
<tr>
<td>Did Not Listen</td>
<td>5</td>
<td>4.9</td>
</tr>
<tr>
<td>No Empathy and Understanding</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>Inappropriate Joke</td>
<td>3</td>
<td>2.9</td>
</tr>
<tr>
<td>Did Not Provide Emotional Support</td>
<td>2</td>
<td>2.0</td>
</tr>
<tr>
<td>Did Not Provide Encouragement</td>
<td>1</td>
<td>1.0</td>
</tr>
</tbody>
</table>

*Note.* Frequencies and percentages of types of non-supportive messages. $n = 36.$
Chapter 5

Conclusions

This study explored perceived supportive messages sent to paramedics, emergency medical technicians, and firefighters from their relational others. To determine what types supportive messages, if any, are received and who those messages were sent from, a mixed-method approach was taken. For the qualitative approach, seventeen paramedics and emergency medical technicians were interviewed in which their narratives underwent a thematic analysis. As for the quantitative sample, a social support survey was utilized with a sample size of one hundred and two. In this chapter, the author discusses theoretical speculations, implications of the research, limitations that occurred within this research, and finally, directions for future research.

First, Burleson’s (2009) dual process theory helps us to understand first responder unique relationship that provides insight into understanding. Most first responders view their relationship with their work partners as close. This then causes first responders to view their co-workers as strong senders of support. Messages that are decoded as supportive from these senders can alleviate the negative feels correlated with stress if individuals know that they are connected in a social network with resources that will help them cope with the cause of the stress (Pauley & Hesse, 2009).

Respondents reported listening most often as the supportive message they received. Jones (2011) noted that emotional support is a communicative behavior that aims at attempting to help cope positively with stress. Bodie and Jones (2012) found that supportive listening is connected to higher levels of verbal person-centeredness and nonverbal immediacy. Paramedics used listening more than only telling about their
experience, but also as an avenue to justify the situation they were exposed to and how they reacted in the situation. Listening was interpreted as an emotional type of supportive message (Goldsmith, 2004) because the message expressed compassion. Listening illustrated this because it was used as a place to receive reassurance and encouragement, which in turn, allowed paramedics to cope with the stress they were exposed to. Verbal person-centeredness and nonverbal immediacy would have to be found in listening as a supportive message; therefore, the sender of the supportive message acknowledged the experience verbally (Applegate & Zimmermann, 1994) and provided empathy nonverbally.

Humor also was a supportive message received. Past research has shown that humor plays many roles in first responder relationships, such as a bonding mechanism between this group, hazing, and as a coping strategy (Rowe & Regehr, 2010). Folkman and Moskowitz (2002) explained that humor can create positive emotions in the darkest of times which can have results of building closer bonds with individuals in their times of stress. Both of these concepts relate in two ways: (1) humor helps with coping in stress and (2) humor creates bonds. Responses from participants noted both of these concepts when addressing humor. Humor was a way to take traumatic, high-stress experiences and make them light-hearted, as well as unite those in the similar experience through teasing and joking.

Listening and humor illustrate the strong bond that is formed from social support; however, strained relationships can also be formed from a lack of social support. Results showed that their supervisors do not create a supportive environment because they are the most common sender of non-supportive messages. Messages that focused on first
responders making mistakes on scene, as well criticizing them in front of others of others were examples of non-supportive messages. These messages destruct the relationship between employers and employees, effect esteem of employees, and create less productive employees.

Messages which lack person-centeredness are most often perceived as non-supportive (Drummond, 2005). Messages found to be non-supportive were disrespectful, and lacked acceptance and approval all of which show a lack of person centeredness. Paramedics, emergency medical technicians, and firefighters devote their lives to “fixing the broken.” When working tirelessly to save and treat people sick, injured, and dying, messages that express respect, approval, and acceptance from their relational others generate a supportive environment. When faced with these types of messages, paramedics are left second-guessing not only their careers, but themselves as paramedics; which in turn creates psychological damage.

Paramedicine is a male dominated field. This study illustrated that by having one hundred and eight male participants out of a total of one hundred and nineteen participants. Masculinity is communicated with being physically strong, forceful, fast, in-control, tough, and being able to dominate (Gibson & Heyse, 2010). It was found that many of the participants felt that they must live up to these hegemonic expectations of masculinity, especially since their profession is based on being mentally and physically strong. In staying consistent with this view, some participants expressed hesitancy when admitting to receiving supportive messages.

Johnson (2010) noted in her study that firefighters had the same reaction and continued with saying that they were concerned with looking “less heroic” when in need
of support. Haslam and Mallon (2003) discussed the idea of the “macho” firefighter which is when firefighters felt they are unable to seek support because they feel that they must uphold their masculine image. Many of the participants in the current study also described feeling this way; they felt that it is expected that they are constantly able to function both physically and psychologically the highest ability possible in order to be looked at as a true hero.

**Implications**

This study can have a significant impact on literature concerning supportive messages received by paramedics. The justification for this study was derived from the surplus of literature on social support, especially on types of supportive messages, and the absence of research addressing how supportive messages and paramedics are correlated. Many studies have looked at supportive messages as it relates to nurses, military personnel, firefighters, and police officers, but there is a lack of literature on medical first responders. The purpose of this study was to determine, what types of supportive messages were received by paramedics, and their counterparts, emergency medical technicians, and firefighters.

Results revealed that non-supportive messages are commonly sent by supervisors of paramedics. While working in such a high-stress environment, such as paramedics do, it is important that the relationship between supervisors and employees is positive. A negative work relationship in this field can have detrimental results, such as the death of a patient. Therefore, this study can provide the foundation in a training program designed for the administrative personnel in this industry. This could ensure that the circle of support for paramedics could broaden.
Additionally, this study can benefit the relational others, family members, friends, co-workers, and others that maintain a close relationship with paramedics. Many paramedics are hesitant to admit that they need a supportive message due to fear that they will no longer be looked at as a capable hero. It would be beneficial if their relational others also provided messages that would deflate this hyper masculine legend and become more accepting of having open discussions about the stresses they are exposed to. Finally, this study shows the need to develop a standardized support system program for paramedics. There were many paramedics who brought up the issue of substance abuse in their field to help them cope with the stresses that they are exposed to. However, with a formalized communicative program which could also be explained to their relational others, as well as each other, on how to provide adequate support, paramedics can cope more healthily.

**Limitations**

While this study contributes to our understanding of social support in the context of first responders’ experiences, there were three major limitations. One of the limitations is that participants may not provide honest answers. There are a multitude of reasons for this limitation, such as being too comfortable or not comfortable enough with the researcher. A second limitation was the topic. It is important to note that during the qualitative interviews, some questions that addressed past high-stress calls caused respondents to relive their experiences leading to distress. The reactions of respondents caused the researcher to reconsider conducting further interviews and to add a quantitative portion of the study. These events were most likely a result of the inexperience of the interviewer in conducting these sensitive-type of conversations. A final
limitation was the sample size. The majority of the sample was male. An almost all male sample may not have provided a full picture as to what is occurring in this group. It is possible that female paramedics may experience support differently than their male colleagues.

**Future Studies**

While the results of the present study contributed to the rather minimal amount of research describing paramedics’ experience with receiving supportive messages, a replication of the present study involving a consistent population of paramedics and emergency medical technicians is needed from cities throughout the United States. A diverse group of participants in terms of demographic features will provide greater insight into the supportive types of messages that are received. Also, the present study had participants that worked in both private and public organizations; a future study that looked at each one of them individually can provide understanding into whether there are similarities and differences into how these sectors receive supportive messages.

It would also greatly benefit to have additional studies that were not mixed methods, specifically, having a completely quantitative study, as well as a completely qualitative study. This will allow researchers to fully understand the complex nature of supportive messages in this field by having the ability to garner larger populations. It is vital that quantitative studies urge participants to fill out the survey in its entirety. There were a substantial amount of surveys that were incomplete, which translates to a possible hesitancy in disclosing information of this type.

This study focused on the perspectives of paramedics and their experience with receiving support. Another study can look at family members of paramedics, specifically
looking at their perspective in giving support. Results of this study showed that most of
the supportive messages were sent by co-workers; therefore, another direction a future
study can go is to look at how paramedics provide verbal and nonverbal support to their
colleagues. This will allow for a larger picture of what is actually occurring in this
interaction. A final suggestion for future research would be to explore whether types of
supportive messages sent to females first responders differ from male first responders.
This study did not have a large enough female population to report if any differences
exist.

The findings from this study showed that paramedics, as well as emergency
medical technicians and firefighters, receive supportive messages from their significant
others. It appears that co-workers most often provided the supportive message and the
most common type of message sent are that of listening and humor. Results also showed
that paramedics receive non-supportive messages, most often from co-workers,
specifically supervisors, in the form of messages that lack respect, acceptance, and/or
approval.

When individuals are in a life-or-death situation, paramedics selflessly run to the
rescue no matter how dangerous the situation is. They are willing to risk their physical
and psychological health to see us live another day. It is imperative that researchers
come to understand how this group of heroic individuals successfully receives support
that helps them deal with stresses of their occupation in order to ensure their mental
health, so we can now save our first responders!
References


role of social support between personality and two construals of meaning. *Death Studies, 36*(6), 519-540.


Burleson, B. R., Hanasono, L. K., Bodie, G. D., Holmstrom, A. J., McCullough, J. D.,


*Communication Research Reports, 22*(2), 85-100.


Chen, S., Fu, C., Li, R., Lou, J., & Yu, H. (2012). Relationships among social support,


Jones, S., & Burleson, B. (2003). Effects of helper and recipient sex on the experience


Knapp, M.L., & Daly, J.A. (Eds.). (2011). *The sage handbook of interpersonal*


Duck & R. Gilmour (Eds.), *Personal relationships in disorder* (pp. 31–56). London: Academic Press.

Peterson, J. L. (2009). “You have to be positive.” social support processes of an online support group for men living with HIV. *Communication Studies, 60*(5), 526-541.


Rains, S. A., & Keating, D. M. (2011). The social dimension of blogging about health:
Health blogging, social support, and well-being. *Communication Monographs, 78*(4), 511-534


Robinson, J. D., & Tian, Y. (2009). Cancer patients and the provision of informational


What’s the difference between an EMT and a paramedic? (2012). In *UCLA Center for


Appendix A

Hey Paramedics and EMTs!

Do you work in Los Angeles County and work in the 9-1-1 system?

Would you be interested in sharing your experiences with receiving social support from your co-workers, family, and friends?

If so, I would love to interview you! It will only take about 30 to 45 minutes of your time.

-All interviews will be private, your names and any identifying information will not be collected or used-

Please call or text message me if you are interested.
Appendix B

GENERAL INTERVIEW PROTOCOL

This research is intended to provide insight into the supportive messages paramedics and emergency medical technicians receive from their relational others when they are distressed. I will ask questions about your experiences with receiving supportive messages. The interview will take 30-45 minutes and will be audio-taped. If for any reason you are uncomfortable, you are free to withdraw from participation in this study. Information obtained during these interviews will be summarized and your individual answers will be kept confidential.

1. Think about a time when someone said or did something to help you cope in a high stress situation, while on duty.

   Describe the high-stress situation you were in while on duty? Tell me what happened first, second, third?

   (Probe: Who was involved?)

2. In regard to this situation, did you experience a supportive message from your friends, family, a co-worker, or someone else?

   (Probe: How would you describe the relationship of the person to you who helped you?)

   (Probe: What did they say or do to help you?)

   (Probe: What was the outcome of the situation? How did you feel after the support?)

3. Think about a time when someone said or did something to that did not help you cope with a high stress situation, while on duty.

   Tell me what happened first, second, third?

   (Probe: How would you describe the relationship of the person to you who did not help you?)

   (Probe: Who was involved? What was the outcome of the situation? What was not supportive about it?)
Appendix C

This survey is concerned with supportive messages that have been sent to you from friends, family, and co-workers to help you cope with the traumas/stress of your job.

1. In general, which one of the following best describes you when you need support?

   1  2  3  4  5  6  7
   I usually don’t show that I need it, nor do I ask for it.  
   My need is probably obvious, but I usually don’t ask for it.  
   I usually ask for it.  

2. Think about a single high stress call you had while you were on duty. Please indicate the type of incident you are recalling by checking one of the following boxes.

   □ The incident involved a child.  
   □ The incident involved a child that died.  
   □ The incident involved an adult.  
   □ The incident involved an adult that died.  
   □ The incident was as multi-casualty situation where a large number of people died.  
   □ The incident was a multi-casualty situation where no one died  
   □ Other (briefly describe)________________________________________________________

3. In thinking about this high stress call, briefly describe what happened____________________
   ____________________________________________________________________________
   ____________________________________________________________________________
   ____________________________________________________________________________

4. Who did you receive a supportive message from? Please check all those that apply.

   □ Family: (includes Mother, Father, Stepmother, Stepfather, Foster-parent, Brother, Sister, Guardian, Husband, Wife, Partner) 
   Other Family Member (please write who)__________________________________________

   □ Co-worker: (includes Partner, other co-worker, Supervisor, Management) 
   Other co-worker (please write who)______________________________________________

   □ Friend
4. If you received a supportive message from a family member, co-worker, friend, or other person identify below the kind of supportive message you received by checking the appropriate box or boxes. If you did not receive a supportive message from a family member skip to question 4b.

☐ Minor assistance
☐ Major assistance
☐ Advice
☐ Information
☐ Emotional support
☐ Encouragement and reassurance
☐ Caring
☐ Listening
☐ Respect, approval, and acceptance
☐ Empathy and understanding
☐ Humor
☐ Other_______________________________________________________

4a-1. What did the family member, co-worker, friend, or other person say or do that was supportive: ______________________________________________

4a-2. In general, how satisfied or dissatisfied were you with the supportive message you received?

1  2  3  4  5  6  7
Very dissatisfied Neither satisfied nor dissatisfied Very satisfied

5. Think about a high stress situation when you were on duty in which someone did NOT provide a supportive message. Who did you receive a non-supportive message from? Please check all those that apply.

☐ Family: (includes Mother, Father, Stepmother, Stepfather, Foster-parent, Brother, Sister, Guardian, Husband, Wife, Partner)
   Other Family Member (please write who)_________________________________________

☐ Co-worker: (includes Partner, other co-worker, Supervisor, Management)
   Other co-worker (please write who)_________________________________________
☐ Friend

☐ Other (please write who)

___________________________________________

☐ No One gave a non-supportive message

6. If you received a non-supportive message from a family member, co-worker, friend, or other person identify below the kind of non-supportive message you received by checking the appropriate box or boxes? If you did not receive a supportive message from a family member skip to question 5b.

☐ Did not offer help with minor assistance

☐ Did not offer help with major assistance

☐ Did not provide advice or provided bad advice

☐ Did not provide information or provided bad information

☐ Did not provide emotional support

☐ Did not provide encouragement and reassurance

☐ Did not provide care or the right kind of care

☐ Did not listen

☐ Did not show you respect, approval, and/or acceptance

☐ Did not provide empathy and/or understanding

☐ Gave a bad joke or use inappropriate humor

☐ Other ____________________________

☐ Have not received a negative message

6a-1. What did the other person say or do that was non-supportive: ________________

________________________________________________________

________________________________________________________

________________________________________________________

6a-2. In general, how satisfied or dissatisfied were you with the non-supportive message you received?

1 2 3 4 5 6 7
Very dissatisfied Neither satisfied nor dissatisfied Very satisfied

Additional Comments: ________________________________

________________________________________________________