Evaluating Family Caregivers' Memorable Messages of Social Support in the Context of Cancer

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EVALUATING FAMILY CAREGIVERS’ MEMORABLE MESSAGES
OF SOCIAL SUPPORT IN THE CONTEXT OF CANCER

by

Alexis Zoe Johnson

A DISSERTATION

Presented to the Faculty of
The Graduate College at the University of Nebraska
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Caring for a loved one with cancer can be physically and emotionally difficult. Research has established that social support can improve overall mental health (Albrecht & Goldsmith, 2003; Sarason et al., 1994). To understand how caregivers make sense of the supportive messages they receive and the links between those messages and caregiver well-being (e.g. stress, depression, and affect), this study used the communicated sense-making model (CSM, Koenig Kellas & Kranstuber Horstman, 2015). Specifically, the current dissertation focuses on memorable messages, as one significant form of CSM, in order to identify the understudied nature of supportive message content and the ways in which message content relates to how caregivers feel in the context of cancer caregiving. In addition to CSM, the study of social support lends insight into how people cope with trauma. Therefore, the current dissertation investigated the links between quality of social support and message content to obtain a richer understanding of sense-making and coping for caregivers. An area of study within social support is verbal person centeredness (VPC), which focuses on characteristics of message outcomes, such as empathy. Memorable messages help to link VPC to message content because they are short, discursive messages that people recall. VPC is also linked to quality of support; therefore, this study sought to uncover the memorable message content that is most person centered. The purpose was to understand what types of message content was most effective in
helping caregivers cope and contributing to overall health. The long-term goal of this project is to develop educational materials (e.g. pamphlets, websites) for family caregivers’ social networks.

156 current or former (e.g. bereaved or remission) self-identified primary family caregivers of patients with cancer were recruited to participate in a survey. Participants were asked to share the most positive and negative memorable message they received from their social network as well as additional memorable messages. Inductive coding resulted in five Supra-types of memorable messages including: welcome contributions, messages of hope, thoughtfulness, dismissive, and unwelcome contributions. The implications for this study were to provide recommendations for future education and research in the context of cancer care.
DEDICATION

This dissertation is dedicated first to my devoted, loving, and incredible husband and family, without them I could not be where I am today. They have shaped and molded me into the woman I am.

First, I dedicate this dissertation to my beloved mother, Pamela. My mother passed away from Stage IV breast cancer in 2011 at the age of 60. She battled five years courageously and taught me to always keep fighting any adversity that should come my way. Without her battle, I would not be doing what I am doing. I research cancer caregivers so that I may help others cope with the many demands, sorrows, and challenges that follow a cancer diagnosis.

To my Mother:

My Mother was more than just a cancer diagnosis.
My Mother was a fighter, lover, and inspiration to all who met her.
My Mother was beautiful inside and out.
My Mother used to dance, sing, and shout.
My Mother was my best friend.
My Mother loved us so deeply, even until the very end.
My Mother had a beautiful, young soul.
My Mother made friends with all, whether young or old.
My Mother taught me to be the very best I can be.
My Mother is a part of me.

For anyone who never got an opportunity to meet the amazing person that she was. They will get to see a piece of her from my brother and I. We are her living legacy. We are the people she was most proud of, and will always be. I miss my mother every day. The pain will never really go away. To honor her and remember her, I have dedicated my life to helping other people faced with this same fate. I am proud to say I am researching, and working with anyone I can so that they may not feel as alone as I did. Cancer is a horrible disease, full of pain and suffering. However, we can and should continue to raise awareness and talk about the realities of the disease. I hope to open the conversation, help
others, and truly live my dream to be my mother’s daughter helping fight against this
disease.

Second, I dedicate this dissertation to my husband, Brandon. My husband has taught me
the true meaning of balance in life. Reminding me that I still have a life to live and that
life is short. We so often lose sight of what is truly valuable in life. Brandon has never let
me forget to take breaks and reduce stress. He has spent countless evenings helping me
and encouraging me when I felt I couldn’t continue. This dissertation would not have
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talk. He has been my biggest cheerleader and always believed in me. Brandon has been a
light amongst the darkness and has shown me the meaning of true love.

Third, I dedicate this dissertation to my Father, Steven. From when I was a little girl, my
dad always believed I was destined to do great things. Regardless of my insecurities, my
Father has countlessly reminded me of my capabilities and been encouraged that I will
and can create positive change in the world. He’s been the person who has picked me
back up when I have fallen down. Seeing the amount of care that he put into helping my
mother was what truly inspired this project. He’s made so many sacrifices for our family
throughout the years, and continues to be my hero.

Fourth, I dedicate this dissertation to my amazing, and beautiful siblings Nicholas, Tracy,
and Jason. Unfortunately, in the midst of writing this dissertation, I lost my older brother
Jason. The loss was traumatic and was another test of our strength as a family. He was
such an inspiring man who influenced the lives of so many. His love for music and his
musical capabilities were astonishing. He built a family around his music, and impacted
so many people in the process. I intend to expand my efforts to help others in honor of
my brother. To Nicholas, thank you for always being my best buddy. You were always
my partner in crime, and whenever I felt alone I knew I could run to you. I am proud to
be your sister and I hope that I can truly help people who have had to suffer the fate that
we did with mom. Mom would be proud of the person you are and I dedicate this work to
you. To my sister-in-law Brittany, thank you for bringing my brother happiness and for
the kindness you have shown me. Your notes and encouragement have been so special to
me. Finally, to my sweet sister Tracy. I know we have both experienced immeasurable
pain, but you have been like a mother to me. During all the times “mom” should have been there, you have stepped in. I could not have gotten through all of this without you.

Finally, I’d like to thank all of the strong and brave family caregivers who participated in my study, sharing difficult, but meaningful messages. This study would not have been possible without your time and participation. Know that I am doing this research, so that family caregivers find better ways to cope with and make sense of the process of cancer caregiving. I dedicate this dissertation to you.
ACKNOWLEDGEMENTS

It’s hard to believe and come to terms with the notion that this journey has come to an end, and another is just beginning. The many nights spent plugging away seem so distant now as I press forward into my career as a scholar. There have been countless mentors that have come into my life who have made this dream of mine possible. Arthur Bochner wrote a note to me in his book entitled Coming to Narrative: A personal history of paradigm change in the human sciences “to take the road to narrative” and I’ve done just that.

My academic journey began with one of the most life-changing and inspiring mentors any young academic could ask for, Dr. Tony Adams. As I transitioned, and went through difficulty he always encouraged me, provided criticism, and believed. The first NCA I attended in my doctoral program, he said “your mom would be so proud” and gave me one of the warmest hugs. I remember trying to contain the tears from the sheer kind heart of this man.

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“All of our dreams can come true, we just have to have the courage to pursue them”—Walt Disney
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CHAPTER ONE
RATIONALE AND PREVIOUS RESEARCH

INTRODUCTION

“Learning to live with cancer is clearly no easy task. Learning to live with someone else’s cancer may be even more difficult precisely because no one recognizes just how hard it really is” (James, 1985, pg. 56).

Each year, millions of patients and family members face a cancer diagnosis. In fact, in 2014, the American Cancer Society reported 1,665,540 new cancer diagnoses in the United States. It comes as no surprise that cancer is one of the leading causes of death and affects millions of families each year (American Cancer Society, 2014). As a result, the number of cancer diagnoses has overwhelmed hospital services and promoted a movement toward outpatient care (Given, Given, & Kozachik, 2001; Weitzner, Haley, & Chen, 2000; WHO, 2000). Consequently, family caregivers are increasingly responsible for financial, emotional, and physical support for patients with cancer (Cagle, Wells, Lunda-Hollen, & Bradley, 2007; McCaughan & Thompson, 2000).

The diagnosis of cancer often leaves family caregivers, relatives, or partners who are involved in patient care feeling overwhelmed. Caregivers must adapt to a myriad of new information, decision-making, and adjustments to their lives (Northouse et al., 2010). For example, foundational work by Burish and Lyles (1981) found that families struggle to adjust to the disease, because they do not realize the intensity of treatment and the amount of care needed by patients with cancer. Caregivers have also reported interruptions in their daily routines, which impact their emotional, physical, and social quality of life (McCaughan & Thompson, 2000). These interruptions and changes result
in feelings of burden (Hunt, 2003), depression, and anxiety (Giarelli, McCrorckle, & Munturo, 2003). Sales et al. (1992) found that approximately 30% of family caregivers experience high levels of stress that often require professional help. Evidence continues to emerge in support of the negative effects that cancer can have on caregivers (Goldstein et al., 2004; Grunfeld et al., 2004).

Despite the negative consequences associated with cancer care, family caregivers often do not communicate about their experiences with others. Rees and Bath (2000) assert that communication within the family is largely dependent on the desire of the patient. Husbands of women with breast cancer ranked needs to overcome communication issues as most important (Kilpatrick et al., 1998), yet family caregivers may not receive information regarding communication, self-care, or coping. This is significant because caregivers perceive communication as fundamental to self-care, which in turn could improve coping. However, information regarding cancer is co-owned between patients and their primary caregivers. This creates potential struggles for caregivers, as they consider what information to share and/or withhold with patients and their social networks. Thus, boundaries, or expectations, of what information can be shared and with whom it can be shared are created within the family (Petronio, 2002).

Cancer-related communication can be problematic (Weber & Solomon, 2008) – in part—because family caregivers seek to create positive environments, reduce anxiety, worry, and uncertainty for patients with cancer (Caughlin & Golish, 2002). Thus, family members silence themselves and may engage in topic avoidance (Afifi, Caughlin, & Afifi, 2007) when communicating to patients and their social networks. Although topic avoidance can be desirable when preserving and protecting patients’ information, it has
been found to stunt the communal (e.g. patients, caregivers) nature of coping within cancer contexts (Berg & Upchurch, 2007).

One way to facilitate the coping process and create an environment through which family caregivers can voice their concerns, is by maintaining a balance between openness and disclosure of private information (Petronio, 2002). Open communication is the act of sharing thoughts, feelings, and information with others (Goldsmith et al., 2007). Open communication occurs within our close personal relationships, or social networks, which can contribute to improved outcomes such as reduced stress, increase in relational satisfaction, and improved coping (Frattaroli, 2006).

A social network can be an extended family member, friend, co-worker, neighbor, etc. that provides relief from caregiving duties (Selleappah et al. 2001). Without a social network, caregivers may not find relief. For instance, Houldin (2007) found that caregivers report social networks as being imperative in their ability to maintain their role with a positive attitude. Caregivers may be unable to continue to provide care and support without the assistance of a close family friend (Perreault et al., 2004). Social network members are able to assist caregivers because they are familiar with caregiver’s unique situation and needs (Nijboer et al., 2001). Furthermore, caregivers may feel more comfortable seeking support outside the family, because caregivers may not share as much with patients in attempt to protect their feelings. Thus, engaging in supportive interactions is important with social networks because caregivers who receive support also report fewer feelings of isolation and depression, than those that do not (Clukey, 2007; Grbich et al., 2001). In other words, people who have access to support with social
networks are better able to cope with and manage problems associated with cancer care (Holahan, Moos, & Bonin, 1997).

Despite these benefits, only recently have scholars begun to consider the role of social support between social networks and family caregivers (Clukey, 2007; Grbich et al., 2001; Holahan, Moos, & Bonin, 1997). For example, Nijboer et al. (2001) found that caregivers who receive daily support from others experience less disruption to their schedules and lower depression over time. This suggests that caregivers who have social networks, who provide support, can better assist them in adapting to the caregiver role. Despite this empirical support, to date, research has not explored the messages that constitute enacted support. Instead, the focus has been on the benefits and drawbacks of accessibility of support related to health, (Northfield & Nebauer, 2010) and not on what social network members say to make caregivers feel supported. Therefore, there is a lack of research that seeks to understand the function of support related to message content. This gap is problematic for several reasons, which are discussed below.

First, few educational programs, or interventions, have been developed to help family caregivers cope with the demands of caregiving. While we know that caregivers who cope have a greater ability to provide care, less is known about the specific supportive message content that social network members share. This is important because social network members have potential to greatly impact caregiver well-being, either positively or negatively (Daly et al., 2009; Longman et al., 1992). Therefore, understanding the message content that helps caregivers cope could be useful for social network members who may not know what to say. If educational tools are created they could provide concrete examples of the different types of positive supportive message
content for social networks. Given that memorable message content is influential and sticks with people for extended periods of times (Knapp et al., 1981), this message content could provide long-term social support. Subsequently, this type of research could help to improve caregiver’s quality of life (Molassiotis, 2011). The current study examines memorable messages sent from social network members in order to redress the gap in the research and take a first step toward developing tools that might help social network members support cancer caregivers.

Second, the majority of literature on social support has not investigated specific supportive message content or how that content relates to different types of support. Support types (e.g. emotional, tangible, network, informational, esteem) have differing characteristics from one another that may be more memorable than others. Research has consistently found that emotional support is most beneficial for caregivers in cancer (Smith et al., 2009); however, less is known about the impact of types of support other than emotional support. Moreover, additional research on the messages that characterize types of social support could lend insight into their features and functions. The current dissertation explores memorable messages in relation to types of enacted social support.

**Theoretical Framework: CSM and Social Support**

To uncover these influential messages, the current dissertation is grounded in the communicated sense-making model (CSM), which theorizes the ways in which people communicate to make sense of difficulty (Koenig Kellas & Kranstuber Horstman, 2015). This model also relates to this study because it recognizes how the sense-making process affects and reflects well-being and health during trauma (Koenig Kellas & Kranstuber Horstman, 2015). CSM may offer insight into the ways family caregivers make sense of
their experiences related to cancer care. Understanding the sense-making process for caregivers has potential to explain health outcomes, which could be used to improve caregiver’s health. The CSM model posits that people communicate in a variety of ways to make sense of our lives, identities, and difficulty, including through memorable messages, accounts, attributions, storytelling, and communicated perspective-taking (Koenig Kellas & Kranstuber Horstman, 2015). Given the focus on message content, the current study focuses on memorable messages – a construct within the CSM model that can lend insight into the lasting impact of socially supportive communication.

Memorable messages are short, discursive messages that are long lasting and help get at the content that is particularly influential during socialization and difficulty (Knapp et al., 1981; Koenig Kellas & Kranstuber Horstman, 2015). Some messages stick with us, stored in our long term memories, making them memorable (Knapp et al., 1981). Holladay (2002) suggests that these messages are important because they strongly impact the sense-making process and our behavior during times of difficulty. In this regard, both positive and negative memorable messages can be used to examine messages that are meaningful (Knapp et al., 1981) to family caregivers and have the strongest effects on well-being (e.g. stress, depression, affect).

Because of the proposed link between the memorable messages cancer caregivers recall receiving from their network members and social support, one way to uncover the effects of positive and negative memorable messages is to examine which types of messages are verbal person-centered (VPC). VPC refers to the extent to which messages of support acknowledge, legitimize, elaborate, and contextualize the feelings and perspectives of a distressed individual (Burleson, 1994). Burleson (1994) argues that
effective support is highly person-centered (HPC) and both legitimizes and invites support recipients to explore and elaborate on their feelings. On the other hand, low person-centered (LPC) messages deny others’ feelings by both challenging and criticizing legitimacy of their problem. LPC messages tell others how they should feel or act rather than allowing the support recipient to express how they feel. Studies indicate that the degree of VPC influences evaluations and outcomes of support (Burleson & Goldsmith, 1998) as well as support recipients’ emotional state (Jones & Guerrero, 2001). Burleson (2003) reports messages that are HPC are evaluated more positively than those that are LPC.

VPC provides a framework through which to understand different types of memorable messages. In other words, examining the content of memorable messages offers insight into the type of communication surrounding caregivers. However, by introducing VPC, scholars may uncover the degree to which caregivers perceive certain messages as (un)helpful. In addition, the focus of VPC contributes to literature because uncovering message content provides concrete examples of HPC and LPC messages. Studies have explored supportive and unsupportive message content in cancer contexts in the past (Krishnasamy, 1996; Gurowka & Lightman, 1995; Manne et al., 2007). However, few studies have focused on supportive and unsupportive messages that social networks share to family caregivers in cancer. This connection is valuable because it can impact people’s abilities to cope and express their feelings. For instance, Lehman, Ellad, & Wortman (1986) found that people who had lost a child in a car accident felt support was helpful when they had an opportunity to express their feelings. However, these individuals found support to be unhelpful when social networks gave advice or
encouraged recovery. Lehman and colleagues argued unhelpful support is a result of social networks not knowing what to say. This may also be relevant to social networks in cancer. For example, social networks may not be informed on how to provide effective support.

While the impact of social support is an important area to explore, considerably less research has focused on the connection between VPC and message content. To date, the study of VPC has predominantly focused on the degree to which people cognitively process or evaluate comforting messages (Bodie et al., 2011) and outcomes of VPC (Goldsmith, 2004). In order to make this research translational scholars should address this gap between VPC and message content so that social networks understand what types of message content are perceived as most helpful. This would contribute to educational materials, because it would paint a more complete portrait of effective message content for social networks. Additionally, providing person centeredness may be challenging for some in this context, leading to further complications.

Specifically, HPC messages are desirable messages that are often considered more sensitive toward a person’s experiences. However, HPC messages can be significantly more difficult to deliver. Being person centered and sharing quality support can be difficult for caregivers because cancer is a long-term, progressive disease that requires ongoing care (Nijboer et al, 1998). Therefore, providing good social support for caregivers may be challenging because it is a long, unpredictable, and difficult process which contains multiple layers of individual and relational complexity.

Given the unpredictable nature of cancer, examining memorable message content may lend insight into a variety of types of messages that may be helpful in facilitating
coping. This would offer a more comprehensive view of how social networks can provide effective social support. Research on the content and evaluations of social support messages in the context of cancer, may help researchers translate scholarship into practice (e.g. websites, pamphlets). In short, we need to better understand what messages are considered effective in providing different types of support. The long term goal of this research is to create translational materials that will educate people on the role social networks play in providing effective support to caregivers. The dissertation is an initial step toward this goal and its purpose is to examine the types of messages and types of support caregivers report and the links between message type, VPC, and caregiver well-being.

In the remainder of this chapter, I first discuss why family caregivers are an important and insightful population to study in the context of cancer. Second, I review CSM, with emphasis on memorable messages, as a theoretical framework useful for understanding how making sense of social support might predict caregiver well-being. Third, I outline the study of social support and how it has been examined in health contexts, focusing on VPC. Chapter two reviews the methods and measures that were used for the current study. Chapter three reviews the results of the inductive coding of memorable messages and statistical analyses. Finally, Chapter four focuses on a discussion and interpretation of the findings from the study, and presents limitations, recommendations for future research, and practical implications.

**Family Caregiving in the Context of Cancer**

The landscape of cancer caregiving has begun to change, as caregivers find themselves in a role of providing care that—in past decades—was provided by healthcare
professionals. In fact, the National Alliance for Caregiving and AARP (2004) reported there are approximately 44 million cancer caregivers in the nation. Because cancer is a progressive and chronic disease, cancer care is characterized by short hospitalizations, outpatient procedures, and extended survival (Honea et al., 2008). Additionally, health care costs are at an all-time high, which have impacted the demand for family caregiving (Pasacreta & McCorckle, 2000). Thus, family caregivers, who are involved in patient care, play an integral role in cancer care. As a result, research on family caregiving has grown. Caregivers are considered a valuable population to study because they often relinquish their needs for the ill family member (Given et al., 2001; Smith, 2004). This self-sacrifice can take its toll on caregivers.

For example, scholars have sought to address negative outcomes of family caregiving, which is referred to as caregiver burden. Caregiver burden is a result of negative outcomes associated with care (e.g. cancer) (Calhoun, Beckham, & Bowsworth, 2002). The study of caregiver burden, has measured individuals’ feelings and perceptions of their experiences (Brannan & Heflinger, 2002). Caregiver burden is often associated with psychological distress, anxiety, and depression (Nijboer et al., 1998). Specifically, a longitudinal study of breast cancer patients and their primary caregivers found that caregiver burden is the most significant predictor of anxiety and depression experienced by cancer caregivers (Gunfeld et al., 2004).

In some cases, caregivers experience higher levels of anxiety and distress than patients with cancer. For instance, Oberst & Scott (1988) conducted a study related to surgical interventions for patients and found that their partner’s levels of anxiety were higher than the patient’s. This resulted because caregivers reported having similar
complaints as patients such as fatigue, aches, and pains. Additionally, psychological problems post-surgery peaked approximately 60 days after the patients were discharged from the hospital, and were found to continue for nearly six months. McCorkle et al. (1993) conducted a follow up study that found, despite patients showing improvement after surgery, caregivers continued to experience burden and pain. Caregivers often act as observers, because they are not able to help the patient during medical procedures. Thus, caregivers experience less control over the disease, which complicates managing the illness, and results in greater psychological distress, especially for those close to the patient.

The current study focused on primary caregivers because of their close connection to patients. I define primary caregivers as a person who takes on full responsibility of managing a loved one’s care. These caregivers may benefit from the opportunity to share their distress with others. Unfortunately, primary caregivers have been found to use protective buffering, hiding feelings, and concerns to protect a loved one (Vess, Moreland, Schwebel, & Knaut, 1988; Hagedoorn et al., 2008). Caregivers do this under the belief that they should create optimistic environments for patients (Peters-Golden, 1982). In addition, caregivers may not want to acknowledge a loved one’s potential demise, further silencing themselves (Vess, Moreland, Schwebel, & Knaut, 1988; Edwards & Foster, 1999). Caregivers who do not share their feelings may experience further complications when transitioning into their role.

This is significant, because caring for a patient with cancer presents unique challenges on caregivers when managing their newfound role. Beesley and colleagues (2011), for example, found that caregivers experienced challenges related to managing
their daily routines. Although caregivers are generally unprepared to take on the role of caregiving, preparedness for this role can influence a caregiver’s overall quality of life. For example, Shyu et al. (2012) found that family caregivers who were more prepared to provide care experienced more caregiving rewards (e.g. personal enrichment, meaningful interpretations, and increased insight). However, caregivers who were not prepared saw a decline in their quality of life (Bevans & Sternberg, 2012) including stress, anxiety, and depression (Del Campo, Del Campo, DeLeon, 2000).

**Summary**

As illustrated above, researchers have found that cancer caregiving is a challenge and those caregivers who are unprepared to provide care, experience negative outcomes as a result of the demands of cancer care. However, given the amount of people affected by cancer, clearly more research needs to focus on ways to ameliorate these negative consequences. Caregivers may feel more prepared to take on their role, if they have effective support from social network members. Yet, research shows that support can be perceived as both helpful and unhelpful (Burleson, 1994), particularly in contexts when it is difficult to know what to say. Despite social network member’s good intentions when providing support, messages may not always be perceived as positive. Social support perceived as being negative may cause caregivers to feel even less able to maintain their role. This could result in a decline in health. In order to better understand how family caregivers make sense of the support they receive, the current study examines the role of social network members in providing social support by looking through the lens of communicated sense-making (CSM) and memorable messages. The next section examines the role of social support in assisting cancer caregivers and the importance of
network members before examining the role of memorable messages in evaluating the
support network members provide.

**Supportive Interactions**

Our social networks (e.g. close friends, colleagues, co-workers, family members, etc.) provide support during difficult and traumatic life experiences, such as cancer (Burleson & Goldsmith, 1998). For example, Goldsmith (2004) found that approximately 86% of people report that they are unable to come to a resolution to a problem before they discuss it with a close relational partner. To truly understand how people cope with difficulty, scholars suggest that it is imperative to understand communication and relationships surrounding trauma (Cutrona & Russell, 1990). Supportive interactions illustrate communicative modes through which people make sense of and cope with their experiences. The following section provides an overview of the study of social support and the important role social networks members play in cancer.

**Social Support.** The conceptualization of social support emerged in the 1970s, when scholars recognized a need to discover why some people experiencing stress succumbed to negative psychological and physical outcomes (Cassel, 1976; Cobb, 1976). Researchers—at this time—were interested in understanding negative mental and physical consequences related life stressors. In their search, scholars found that social support moderated the impact of stress on health and overall quality of life (Cassel, 1976; Cobb, 1976). The concept of social support grew as scholars began to test the effects of social support in a variety of different contexts, exploring the nature of supportive interactions. A study by House, Landis, and Umberson (1988) found that a lack of social relationships resulted in major health risks including high blood pressure and obesity.
Furthermore, scholars recognized that social support could also be stress-buffering depending on how it was conceptualized within supportive interactions (Cohen & Wills, 1985).

Although broad and consisting of multi-dimensional definitions, the study of social support was refined over the years. Researchers worked toward understanding how to effectively measure social support, and what the outcomes of social support were. For instance, Barrera (1986) argued that definitions of social support were insufficient and therefore could not effectively be measured. Thus, scholars focused on different contexts of support including ways to help people who have experience with child abuse (Bishop & Leadbeater, 1999), substance abuse (Fiore et al., 2000), and public health issues (Seeman, 2000), just to name a few in an attempt to further develop research in social support.

As scholars worked toward developing the study of social support, new—more concrete—definitions began to emerge. Burleson and MacGeorge (2002) defined social support as the “verbal and nonverbal behavior produced with the intention of providing assistance to others perceived as needing that aid” (p. 374). Social support was also described as an “interpersonal transaction” through which people address emotional concerns and provide information to evaluate trauma (Goldsmith, 2004, p. 3; Uchino, 2004). The aforementioned definition alludes to the notion that social support is often shared and understood through our close personal relationships; and therefore, recognizes the importance of how support can influence our relationships with others and our ability to cope with difficulty. This idea has motivated the current study, in that the focus is on
social networks as fundamental sources of different types of support for cancer caregivers potentially in need of aid.

**Importance of Social-Networks of Cancer Caregivers.** Social networks (e.g. networks of friends, co-workers, and family members) provide structural support that is often used as a resource during a life crisis, such as caring for a loved one with cancer. Research has shown that health functioning is linked to feeling supported and socially connected, influences the ability for people to cope and recover (Black, Cook, McBride, & Cutrona, 2005). Extant research shows that social networks are largely beneficial, but can also be potentially harmful.

First, by and large, social networks help family caregivers cope in the context of difficulty, stress, and illness. In a study by Tang et al. (2009) greater levels of emotional support from social networks enhanced caregivers overall quality of life. Other researchers have also found that perceived satisfaction of social support from family and/or friends predicts lower levels of caregiver strain and burden (Bainbridge et al., 2009), depression, (Gaugler et al., 2009), and psychological distress (Daly et al., 2009). These studies reveal the importance of social networks toward helping caregivers reduce health problems and alleviate emotional distress (Daly et al., 2009).

Caregivers have also been found to show higher levels of physical functioning and lower amounts of vulnerability to mental disorders, when they have access to a diverse population of networks (Bergman & Haley, 2009). For example, a study related to diverse social network groups (e.g. race, religion, and ethnicity) by Tang et al. (2009) found that cancer caregivers experienced less depression and anxiety when they have access to effective social support, maintain their health, and are spiritual. In addition to
diversity, empirical evidence suggests that caregivers who have larger social networks report being less lonely and more satisfied than those who do not have large social networks (Ekwall et al., 2005). Thus, social networks can ameliorate negative effects of caregiving, which contribute to improving positive health outcomes for those providing cancer care (Berkman, 1984, 1986).

Social networks also have been found to reduce and even prevent the proliferation of stress in different areas of caregiver’s lives (e.g. work, relationships). This is significant because general caregiver research indicates that caregivers often provide more than 20 hours a week of care (National Association of Caregiving and AARP-NAC, 2004). Moreover, approximately 35% of caregivers report having difficulty finding time for themselves and an additional 29% struggle to manage emotional and physical stress related to balancing work and family responsibilities (NAC, 2004). Members of social networks have potential to buffer negative effects related to the demands of cancer care, such as caregiver burden. Because research has consistently found that caregiver burden results in negative consequences, understanding how social networks provide support may help caregivers overcome challenges related to cancer care.

Although social networks can boost positive outcomes for caregivers, the absence of supportive networks create potentially negative outcomes. Specifically, cancer caregivers who have less access to support or social networks have been found to be at an increased risk for depression (Daly et al., 2009). Thus, attention to family caregiver’s ability to cope is a critical proponent to helping prevent a decline in caregiver health (Longman et al., 1992). Therefore, uncovering effective social support could further help
educate social networks. This education could lead to a positive impact on health of caregivers and assist social networks in improving their supportive behaviors.

One way to understand the positive and negative impact of support for family caregivers is to uncover the content of messages and conversations. How cancer caregivers make sense of the support they receive should affect and reflect their experience as caregivers. Communicated Sense-Making (CSM, Koenig Kellas & Kranstuber Horstman, 2015) lends insight into the ways in which communicating to make sense of difficulty can impact health and well-being. In the current study, the memorable messages shared by network members, as recalled by family caregivers, are positioned as a central source of CSM and support that should be further investigated.

**Communicated Sense-making and Memorable Messages**

In the following section, I outline the communicated sense-making model (CSM) as a framework which guides this study, current literature on memorable messages, how memorable messages have been studied in health contexts, and ways in which memorable messages can be used to better understand caregiver well-being. Specifically, I pay close attention to how memorable messages can be used as a means to uncover message content and be used to understand how caregivers make sense of the social support they receive from network members in the context of cancer caregiving.

**Communicated Sense-Making (CSM).** Communicated sense-making (CSM) refers to the ways in which people make sense of their experiences through communication. To be specific, CSM is defined as “how people communicate to make sense of their identities, relationships, and difficulties” (Koenig Kellas & Kranstuber Horstman, 2015, p. 81). According to Koenig Kellas and Kranstuber Horstman, there are
several ways to communicate to make sense including attributions, accounts, storytelling, and communicated perspective-taking; however, this study focuses on memorable messages as CSM. Memorable messages are a part of the larger CSM body of research. Memorable messages contain content that is particularly impactful for people experiencing difficulties or attempting to make sense of their experience. What makes memorable messages unique is that the content shared within them is considered to have a long-lasting impact on the recipient (Knapp et al., 1981). Memorable messages in the cancer caregiving process are important to study because they could have long lasting effects on caregivers’ ability to cope with the demands of care. Thus, understanding what types of memorable messages are particularly memorable and meaningful in this context could help social network members get a better sense for what types of messages to share. Furthermore, memorable message content could be translated into practice and be used to create educational tools in hospitals. Caregivers may not have information to provide social network members that would be helpful. Therefore, if we understood the specific message content that is helpful, we could provide examples that are useful for social network members. Below I discuss literature in memorable messages and the impact they can have on caregivers.

**Memorable Messages.** Foundational work by Knapp, Stohl, and Reardon (1981), characterized memorable messages as short, discursive statements—shared during interpersonal interactions—that are internalized and continue to influence a person’s life long after the message is received (Stohl, 1986). Stohl posits that approximately 55% of messages include prescriptive markers that suggest what behaviors should and should not be acted upon. He further asserts that memorable messages provide “rich sources of
information about ourselves and our ways of communicating and socializing” (Stohl, 1986, p. 232). Foundational work by Barge et al. (1994) found memorable messages related to issues of work, family, and professional behavior have recurring message content patterns such as “fitting in.” This literature brings forward the notion that memorable messages have potential to uncover patterns of behavior related to specific issues—or in this study—stressed associated with cancer care.

In addition to having an impact on human behavior, memorable messages serve as a means to capture critical message content that shape who we are and how we make sense of our experiences. Medved et al. (2006) suggests that memorable messages are “pulled forward in an ongoing process of individual and societal sense-making” (pg. 164). Therefore, memorable messages are prevalent across a variety of populations and topics. For instance, scholars have studied the impact of memorable messages in identity construction (Heisler & Ellis, 2008), family relationships (Koenig Kellas, 2010; Medved et al., 2006), health and illness (Keeley, 2004, Smith et al, 2009), and socialization for college students (Kranstuber Horstman, et al., 2012; Wang, 2014). During difficult processes, such as cancer, memorable messages can help people make sense of their individual and relational coping. Coping—in turn—could result in more positive health outcomes.

There has been a considerable amount of emergent research investigating links between memorable messages and health. For example, studies have examined memorable messages about breast cancer. Specifically, Smith et al. (2009) discovered that the most common sources of information about breast cancer were families, close friends, and the media. Their study suggests that memorable messages in the context of
breast cancer have been about early detection, awareness, treatment, and prevention of breast cancer. These researchers also suggest that memorable messages of hope were most common and speech acts (e.g. providing hope) were considered a form of emotional support. Smith and colleagues encourage scholars to continue to explore patterns between memorable message content and support. In this study, I seek to uncover the types of memorable message that are most common for caregivers in cancer.

Memorable message content is pervasive and serves as guides for behavior (Smith et al., 2009). Although Smith and colleagues have studied memorable messages in the context of breast cancer patients, little is known about memorable messages reported by cancer caregivers. Uncovering message content could help us understand caregivers’ experiences of social support during cancer care and act as guides for social networks when they share messages to caregivers. These messages then could have potential to have a strong effect on sense-making, coping, and become an important unit of communication for caregivers and social network members.

Memorable messages have potential to be considered both positive and negative by caregivers. For example, Holladay (2002) looked at message effects about aging. In the study, messages were divided into categories that led participants to view aging as positive, and messages that led participants to view aging negatively. Specifically, half of participants’ reported positive messages and one third of participants’ messages were negative (p. 695). Much like conversations on aging, caregivers likely receive both positive and negative memorable messages in the context of cancer caregiving. In other words, although friends and family often have the best intentions when trying to support cancer caregivers, their messages are likely memorable precisely because they are
particularly positive or negative. I am interested in the types of messages caregivers find helpful or unhelpful. Therefore, in the pursuit of translating this research into practical solutions for social networks of caregivers, it was important to look at the content of memorable messages that participants experienced as positive and negative. Therefore I pose the following research question:

RQ1: What types of positive and negative memorable messages do family caregivers recall?

Bridging Memorable Messages and Social Support

Memorable messages of support are often received during critical or confusing times in a person’s life (Stohl, 1986, Medved et al., 2006; Burleson, 1994). Charon (2006) suggests that health and illness occur during pivotal times when we begin to discover and become our embodied self. That is, family caregivers experience a difficult and life-altering transition from engaging in daily routines to balancing these routines alongside the demands of cancer care. McCaughan & Thomas (2000) found that caregivers did experience disruptions in daily routines, which consequently impacted their emotional, social, and quality of life. Caregivers refer to cancer as “devastating”, “tough”, “rough”, “brutal”, and “awful” (Williams & Bakitas, 2012, pg 777). Therefore, illness can—and often does—inhibit our ability to communicate in meaningful ways because of the demands, fears, and uncertainties associated with cancer care. Social support is a way to buffer against the uncertainties and difficult experiences as they relate to cancer. In addition, social support can function as a sense-making process, helping caregivers adapt to and better balance the many demands that come with providing cancer care. Taken together, memorable messages and social support both are
exceptionally important toward understanding how people can provide quality support that help caregivers cope.

It is important to understand what messages can be supportive, because it can help to open the conversation about effective and ineffective modes of support during difficulty. Indeed, interpersonal communication is rich with meanings and can be linked with, not only the quality of support, but the quality of people’s lives (e.g., Koenig Kellas & Kranstuber Horstman, 2015; Stewart, 2012). Therefore, this project seeks to determine what types of supportive memorable messages caregivers receive from social networks that have either helped or hindered the coping process to provide educational research for family caregivers and their social networks.

In doing so, scholars may become familiar with specific features of supportive messages that define people’s relationships and identities during stressful events related to cancer care (Clark & Delia, 1979). Memorable messages may function as different types of support. Different types of support have different functions/serve different purposes. Therefore, understanding what memorable message types are related to different support types may lend insight into the supportive function of memorable messages. Given that memorable messages are long-lasting, different types of support may also stick with us. In addition, it is important to not only consider the message content, but what function the message content has within different types of supportive communication. This could further uncover a connection between social support types and memorable messages. That is, some support types may be most linked to message content. This—in turn—could provide social networks with a greater understanding of how to enact support while sharing message content.
Types of Social Support. Social support can be provided in a multitude of different ways. This is why it is important to consider which of these types is most effective within the context of cancer. Specifically, some types of support may be seen as more common or memorable for cancer caregivers. For example, Smith et al. (2009) suggests memorable message content could serve as a function of support types. Smith and colleagues found that messages of hope could be most associated with emotional support. To understand whether other types of support are prevalent in a cancer context, I examine whether these connections exist within other types of support. Understanding these connections are important, because communicated narrative sense-making (CNSM), which is part of the primary function of communicated sense-making, creates coping and socialization. Therefore, if we understand the ways in which certain types of memorable messages can be characterized as certain types of support, we can understand the functions of social support and memorable messages. This is significant because supportive behaviors may be considered more or less helpful to caregivers. Ultimately, this could further impact caregivers’ health and socialization within their networks. Focusing on social support types and memorable messages could lead to further development of educational tools for social network members that provide content and behavior that is linked to successful supportive interactions.

Scholars in social support have created six typologies. These include: (a) emotional support, (b) informational support, (c) network support, (d) esteem support, (e) tangible support, and (f) appraisal support (Goldsmith, 2004; Cutrona & Suhr, 1992). To understand the function of different support types as they relate to memorable message
content, I outline each of the above types of support. In doing so, this provides a richer understanding of what the role each type of support plays during the coping process.

**Emotional support** is commonly known as expressions of caring, concern, empathy, and sympathy (Goldsmith, 2004). Albrecht and Adelman (1987) argue that emotional support is important for those who are unable to alter their situation and are required to adjust. This is relevant to cancer research, because cancer is often incurable and requires ongoing care (Nijober et al, 1998). Preece and Ghozati (2001) surveyed 100 online cancer communities and found that emotional support was the most common type of support. These studies suggest that emotional support may be important in helping people that provide cancer care. Therefore, emotional support may also be most memorable, given its relevance to cancer caregiving. Emotional support has been found to be most related to memorable messages for breast cancer patients (Smith et al., 2009). This study sought to determine whether memorable message content could be categorized as a function of emotional support for cancer caregivers (Smith et al., 2009).

In addition to emotional support, **informational support** can also have a great impact in cancer contexts. Informational support provides an opportunity for people to connect to multiple sources that contain information on health issues and gain insight from others experiences (Wright, 2000). Ultimately, access to this information can help caregivers feel more knowledgeable and less alone. Roter and Hall (1992) found that informational support is used to help people who experience health problems because it gives people a sense of control over their situation and, in turn, helps them feel more secure when making decisions related to coping with the illness (Roter & Hall, 1992). Given that the current dissertation recognizes that caregivers may seek to maintain
control over situations, informational support may be present. Informational support relates, because it provides caregivers with a sense of control when making decisions and balancing their daily routines. Informational support increases in access when people have diverse social networks to share information (Sultan et al., 2014).

**Network support** is defined as positive relationships shared between groups of people during difficult and traumatic experiences (Cassel, 1976). Sultan et al. (2014) found people who have regular contact with friends were more likely to use mental health services. In addition, people with larger social networks sought out more information on available support. Today, people are finding network support through online groups which allow members to connect at home to overcome problems at their leisure (Weinberg et al, 1996). This offers an opportunity for people to share information and seek support in a private, less formal environment. These online communities may offer advice and words of encouragement, boosting caregivers’ self-esteem. In addition, having network support may be particularly memorable, because it provides information regarding networks that may be useful for them. For example, a social network member may suggest joining a cancer caregiving online support group that they saw. Therefore, social network members may suggest joining a group that ended up being an important source of comfort for caregivers. Given the focus on social network members in this study, it seems that this type of support may be most relevant.

**Esteem support** are the messages that promote people’s skill, abilities, and intrinsic value (Cutrona & Suhr, 1992). Empirical evidence suggests that effective esteem support can contribute to the mental and physical health of people who face esteem-threatening illnesses (Swift & Wright, 2000), such as cancer. For example, esteem
support aims to enhance how people feel about themselves. For cancer caregivers, this type of support can boost their self-esteem, contributing to their ability to provide proper care for patients. Esteem support may be memorable, because caregivers could recall compliments or acknowledgements for their efforts when they are having a bad day providing care. For instance, caregivers may receive messages saying “you do such a good job caring for them”. On a day where caregivers feel that they are not able to provide the most effective care, they may recall that message, thus making it memorable and helpful to the caregiver.

Caregivers may also receive tangible support, or the act of physically providing needs and goods (Cutrona & Suhr, 1992), such as gifts or food. Caregivers also may value when social network members attend their appointments and arrange logistics for them. For instance, social networks may send a card, a present, or money to show caregivers they are thinking of them. To receive this type of support, it is imperative for caregivers to have access to social networks. Tangible support may constitute memorable messages insofar as message content that is memorable may also be accompanied with a present. Specifically, a social network member may say “I’m really sorry, here’s something I hope will help” when handing the caregiver a present. Therefore, presents may accompany a message, making both the message and the act of giving the gift most memorable. In addition, social network members may share messages saying that they are always there for them, and demonstrate support for this message by taking them to a doctor’s appointment with their loved one.

Finally, appraisal support refers to the reframing of experiences to help in self-evaluation during transitions and health crises (Cutrona & Suhr, 1992). This type of
support has been found to be beneficial when dealing with different stressors and situations (Cohen et al., 1985). In addition, appraisal support is important in helping others adjust to cancer care. Therefore, this support may benefit cancer caregivers while they transition to a new daily lifestyle. Appraisal support can be connected to memorable messages because messages that help caregivers adjust may stick with them during times they feel they are unable.

The study of social support has been predominately focused on the characteristics of support types. Therefore, less is known regarding the specific content that is most common in different types of support. For example, literature has successfully distinguished that social support has the best outcome when the type of the support matches the coping demands for the stressor (Cutrona & Russell, 1990). For example, someone may view a neighbor bringing a meal (tangible support) as being a positive type of support, in turn making it most memorable to them. Likewise, caregivers may feel that a story about a loved one beating cancer provides emotional support, which is the type of support they remember as being most memorable. By linking memorable message content to types of social support we can better understand what kind of message content provides different types of support. Scholars may be able to translate the findings of the current study by categorizing message content by types of social support and effectiveness in order to allow caregivers to adapt effective message content to particular situations, caregiver needs, and support-provider style. Therefore, to understand what types of messages content are related to support types, I pose the following question:

RQ2: Are memorable message types related to different types of social support?
As suggested, evaluations of support type and memorable message content could provide a more complete picture of specific message content as it relates to supportive behaviors. Other areas of research in social support suggest certain types of behaviors, when providing social support, may be evaluated as more or less helpful. Therefore, in the following section, I provide an overview of verbal person centeredness. Verbal person centeredness is another construct in social support research that may be used to explain why some messages are more helpful than others. Understanding whether a message is confirming and legitimizes a person’s feelings may be found within the message content itself. In addition, VPC may also impact health outcomes for caregivers. Therefore understanding the message content that is most VPC may offer insight into why some message content is perceived as being more or less helpful toward coping.

**Verbal Person Centeredness.** Researchers have made an effort to identify the qualities and behaviors that influence the perceptions of supportive messages. MacGeorge et al. (2011) called for research that pays particular attention to identifying characteristics of social support and how they buffer stress during traumatic experiences. This call brought forth the study of verbal person centeredness (VPC), which focuses on characteristics of message delivery that influences perceptions of the degree to which a message is considered supportive or unsupportive.

In understanding memorable message content, scholars can make connections between the message content and the quality of support. However, as alluded to, supportive message exchange is complex (Goldsmith, 2004) and therefore requires a more in-depth investigation of what is helpful in the context of cancer care. Indeed, interpersonal communication is rich with meanings and can be linked with, not only the
quality of support, but the quality of people’s lives (e.g., Koenig Kellas & Kranstuber Horstman, 2015; Stewart, 2012). Therefore, this project seeks to determine what types of supportive memorable messages caregivers receive from social networks that have either helped or hindered the coping process to provide educational tools.

One way to understand which messages are perceived as memorable and (in)effective is to draw from social support research on verbal person centeredness. As reviewed above, together, memorable messages and VPC allow for an examination, both of what is memorable and useful about the content of those messages. Research on message content is underrepresented in the literature on VPC. Thus, marrying memorable messages and VPC allows for a unique investigation that provides insights that neither approach does alone.

Research in VPC assesses the quality of comforting messages. Specifically, VPC messages are assessed by attributes such as helpfulness, sensitivity, appropriateness, and effectiveness (Burleson & Samter, 1985; Goldsmith & MacGeorge, 2000; Jones & Burleson, 1997). However, not all messages are considered comforting and can cause support recipients to feel worse because they dictate how a support recipient should feel or react to trauma (Jones & Burleson, 1997). High person-centered (HPC) messages, are considered messages that legitimize and encourage support recipients to elaborate on their feelings. Support recipients feel that supportive communication is uplifting, and is generally evaluated as being more positive. This has been found to lead to better health outcomes. However, messages that are low person-centered (LPC) are prescriptive, telling support recipients how they should feel, react, or behave. LPC messages do not allow the support recipient to express how they feel, and often are considered judgmental
and unhelpful, leading to poorer health outcomes (Burleson et al., 2005). When evaluated as HPC, supportive messages are often associated with having long-term relational (i.e. relational satisfaction) and instrumental effects (i.e. improved coping skills). In addition, Burleson (2008) indicated that the degree of stress that is generated from trauma moderates the impact of VPC on evaluations of message helpfulness. Burleson (2008) found that VPC has a large effect on message evaluations, especially during more stressful situations as opposed to comparatively more mild forms of stress. Cancer caregiver research in the past has demonstrated that the process of caring can lead to significantly greater levels of stress and depression (Hunt, 2003). Therefore, understanding VPC for caregivers may be useful in alleviating stressors associated with care.

VPC has been well-established within literature on social support (MacGeorge et al., 2001; Burleson 1994; Bodie & Burleson, 2008). Bodie et al. (2011) suggests that people who are motivated will scrutinize supportive messages, which can have a large impact on the message effects. Specifically, Bodie et al. (2011) suggests that:

“there is growing evidence that indicates that the effect of VPC is moderated by several qualities of the individual (e.g. personality traits, cognitive capacities, demographic variables) and the situation (e.g., characteristics of message source, aspects of the topic, features of the interactional setting) thought to primarily impact processing ability and/or motivation” (p. 537).

Theoretically, the more stressful or difficult the situation, the more it will negatively impact the person. This may help to explain why people who are in difficult
situations seek social support to mitigate these negative effects (Bodie et al., 2011). VPC has potential to help people overcome negative effects—in part—because VPC has been linked with the quality of supportive messages (Burleson et al., 2009). Burleson (1994) argued that messages that are person centered (e.g. compassionate, encouraging, and acknowledging) are considered relatively supportive and helpful (Burleson & Samter, 1985). Furthermore, messages that are not person centered (e.g. discouraging, delegitimizing) are considered less supportive and unhelpful. Thus, verbal person centeredness could lend insight into the effectiveness of memorable message content.

However, when assessing VPC, researchers have predominantly focused on message evaluations (perceptions and thoughts about a message) and message outcomes (positive and negative outcomes) (Bodie et al., 2011; High & Dillard, 2012) rather than the content of VPC messages. Extant research shows that higher levels of VPC lead to more positive supportive outcomes, such as an increase in meaningful caregiving experiences and reduced levels of stress, illuminating the value in receiving VPC messages.

Although literature on message evaluations and message outcomes is well-supported in the literature on VPC, considerably less is known on what message content of VPC is, generally, or in the context of cancer caregiving. Without knowing what types of specific messages that are viewed as more or less person-centered in the cancer care context it is difficult to translate research findings into practice. Therefore, because HPC message are perceived as being supportive (Burleson, 1994), they may inform the current literature on cancer caregivers. Specifically, HPC messages, in this context, may be linked with greater levels of support, which have been linked to more positive health outcomes (Burleson, 2003). The current study focuses on the messages that cancer
caregivers report receiving in order to paint a portrait of what messages are helpful for caregivers. In order to understand the helpfulness of certain types of memorable messages, the links between VPC and memorable messages are explored:

RQ3: What types of memorable messages are verbal person centered?

Jones and Guerrero (2001) found that VPC is effective because it can help people re-appraise distressing thoughts (p.591). VPC has also been found to provide comfort during distress (Jones & Burleson, 1997). Because VPC has been found to provide comfort, and quality support, this may explain why VPC has potential to improve well-being. In order to replicate previous studies on the links between VPC and well-being, the following hypothesis is also proposed:

H1: VPC will be positively related to self-efficacy, and positive affect and negatively related to stress, negative affect, and depression.

Summary. Research on social support has made an important contribution to understanding the way people cope with difficulty and trauma. Therefore, examining the content of support messages may be an important step in understanding the ways that family caregivers cope with stressors associated with cancer care. Social support literature, however, focuses less on the impact of different types of message content than it does on message evaluation for family caregivers. The majority of the current literature focuses on supportive and non-supportive messages of support for cancer patients (Krishnasamy, 1996; Gurowka & Lightman, 1995; Manne et al., 1997). This gap is important, because uncovering what social networks can say to cancer caregivers can impact caregiver’s well-being. This, in turn, can help caregivers overcome negative consequences (e.g. burden, anxiety, and depression) related to cancer care. Indeed, message content may lend insight into the complex process of supportive message
exchange between social networks and family caregivers. Message content provides information, perspective, and support. Memorable message content is often thought about extensively and can have an important function during supportive interactions. The person-centered quality of memorable message content has potential to influence the evaluations of effective social support (MacGeorge, Feng, & Burleson, 2011). VPC focuses on the evaluations of these messages, seeking to understand how distressed others make sense of their feelings. Given that social support and memorable messages both focus on communicated sense-making, taken together they may paint a clearer portrait on effective message content in helping caregivers in cancer cope. This is important because the higher person centered the comforting message the more likely it is to have more positive outcomes in significantly distressing life experiences. VPC may help to explain why some message content is more effective than others and provide scholars with the most impactful messages within the cancer caregiving context.

**Collection of Memorable Messages**

Finally, to obtain a more holistic view of memorable message types, and what messages are considered most helpful, this study also looked at the collection of memorable messages as they relate to caregiver well-being. In other words, I was interested in not only the most memorable positive or negative message, but the portrait of messages caregivers report receiving. Therefore, in the current study, participants were asked to recall multiple memorable messages so that any patterns of messages might be discerned and used to explain links between CSM and caregiver well-being (e.g. stress, depression, affect).
Types of memorable messages will lend insight into the specific message content for family caregivers. However, people often recall a wide range of different memorable messages in their relationships. Given that there are many types of messages that could be recalled by caregivers, it is important to consider the impact of the collection of memorable messages that caregivers report receiving.

In a similar investigation, Koenig Kellas (2010) examined the collection of memorable messages daughters received from mothers about romantic relationships by asking daughters to report up to three memorable messages. She first identified categories of memorable message types and then created a variable that identified the majority type (i.e., participants were assigned a “collection of messages” code based on the majority type in their three messages). Consistent with previous research, positive messages were the most reported collection of memorable message. Koenig Kellas found that these collections of messages were significantly related to individual outcomes. Specifically, daughters who reported a collection of value of self-messages were most likely to be independent in their relational worldview than those who were more traditional. Additionally, daughters were more likely to report messages that were value of self rather than warning messages. She also found that more traditional daughters were more likely to receive a mixed collection of messages than value of self-messages.

In the current study, I will also examine the collection of messages cancer caregivers report receiving to understand the possible link between supportive messages and caregiver well-being. Because memorable messages may be positive or negative, understanding the collection of messages caregivers receive should lend insight into the landscape of memorable messages and social support.
The focus on message content and collections has potential to provide insight into how communicated meanings impact caregivers overall well-being and their ability to care, not only for the patient, but themselves. Understanding what collection of messages relates most to caregiver well-being is important. This is because social networks have been found to reduce the likelihood of mental disorders, improve overall quality of life, and play an integral role in providing support for cancer caregivers (Bergman & Haley, 2009). Therefore, social network member’s messages have potential to not only be memorable, but also could have a major impact on caregiver health. Thus, it is important to understand what message content contributes to or hinders caregiver’s ability to cope to understand how these messages impact health. Thus, I pose the following research question:

RQ4: What collection of memorable messages help to explain differences in family caregiver’s stress, depression, and affect?

While the collection of memorable messages has potential to impact caregiver well-being; it may not be the only factor that contributes to health outcomes. In this study, I also accounted for other factors that could impact this connection, such as self-efficacy. Self-efficacy refers to an individual’s beliefs on how well they are able to exert control over their own behavior (Bandura, 1994). A strong sense of self-efficacy can enhance well-being for a variety of different populations, especially for caregivers in cancer. For example, feeling capable of caring for oneself despite the difficulties faced may give caregivers a sense of control. However, a weaker sense of self-efficacy has potential to threaten health and increase chances of depression and stress. Those who doubt their capabilities may dwell on their experience negatively, or feel not able to perform tasks (see Bandura, 1994). Caregivers who are persuaded or encouraged by their
social networks that they are capable of getting through their difficulties may experience benefits, but if they doubt themselves, the effect of messages may be dampened. Alternatively, if they do not have strong memorable messages of support, but believe in their ability to care for their loved ones, self-efficacy might help bolster them against a negative collection of messages. Thus, self-efficacy could be important to favorable health outcomes and an overall better sense of their experiences. Therefore, while memorable message type and well-being may relate, it is important to also consider the role self-efficacy plays. As discussed, support in cancer presents multiple layers through which to understand what types of message content that is most useful. Therefore, understanding different supportive behaviors as they relate to memorable message type may provide further insight into the coping process for caregivers. Thus, I pose the following research question:

RQ5: To what degree does self-efficacy moderate the relationship between the collection of memorable messages caregivers report receiving and stress, depression, and affect?

Caregivers’ collection of messages have potential to also affect caregivers’ overall well-being. Therefore, it is important to not only consider positive and negative memorable message types and support, but also the collective view of memorable messages for family caregivers. This could help to obtain a more holistic picture of the impact of message content for caregivers.

Chapter Summary

Cancer diagnoses continue to increase and put strain on hospital systems and services. Thus, family caregivers are becoming a pivotal part of a patient’s cancer care. However, family caregivers are not fully trained, developed, or transition well to the
strains that caring for a loved one can cause. As a result, caregivers may suffer from negative consequences. Therefore, social support can be valuable for caregivers of patients with cancer. Despite this idea, many caregivers’ needs continue to go unmet, and some support is considered unhelpful towards helping them cope. Caregivers often seek help from social networks, who may be unfamiliar with how to provide adequate support. Verbal person centeredness is one way for social networks to provide effective social support. However, verbal person centered literature has focused predominantly on message evaluations and outcomes rather than message content. Thus, we know much about what constitutes effective support, but little about the message content. To uncover message content in the social support reportedly received by cancer caregivers, a memorable messages framework is used to uncover meaningful messages that have been particularly influential to family caregivers. These messages will show what content is considered helpful or unhelpful by caregivers to help them cope. In addition to message content, understanding the collection of memorable messages could provide a more holistic view that helps to explain what types (e.g. messages of hope) are particularly impactful on caregiver well-being and self-efficacy. The goal, is to uncover message content to create translational research to help social networks share memorable and helpful messages of support.
Table 1

*Summary of Current Dissertation Proposal Research Questions and Hypothesis*

<table>
<thead>
<tr>
<th>Research Questions</th>
<th>Hypothesis</th>
</tr>
</thead>
<tbody>
<tr>
<td>RQ1: What types of positive and negative memorable messages do family caregivers</td>
<td>H1: VPC will be positively related to self-efficacy, and positive</td>
</tr>
<tr>
<td>recall?</td>
<td>affect and negatively related to stress, negative affect, and depression.</td>
</tr>
<tr>
<td>RQ2: Are memorable message types related to different types of social support?</td>
<td></td>
</tr>
<tr>
<td>RQ3: What types of memorable messages are verbal person centered?</td>
<td></td>
</tr>
<tr>
<td>RQ4: What collection of memorable messages help to explain differences in family</td>
<td></td>
</tr>
<tr>
<td>caregiver’s stress, depression, and affect?</td>
<td></td>
</tr>
<tr>
<td>RQ5: To what degree does self-efficacy moderate the relationship between the</td>
<td></td>
</tr>
<tr>
<td>collection of memorable messages caregivers report receiving and stress,</td>
<td></td>
</tr>
<tr>
<td>depression, and affect?</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
</tbody>
</table>
CHAPTER 2

METHODS

To develop future family caregiver and support network education about effective supportive communication strategies when helping caregivers cope, the current dissertation examined perceptions of memorable messages of different types of support. Specifically, I explored what messages family caregivers report receiving from their social networks as memorable, in their experiences of providing cancer care. The current chapter explains the recruitment of participants, procedures, and measures that were used to answer the research questions and hypothesis.

Recruitment

After securing IRB approval, I recruited self-identified primary family caregivers of patients with cancer. Participants consisted of current or former (remission or bereaved) self-identified primary family caregivers of patients with cancer, who were at least 19 years of age in Nebraska and Alabama, 21 in Mississippi, and 18 in all other states. I approached this project with an inclusive scope, including remission and bereaved caregivers, recognizing that this population is difficult to recruit. Additionally, I intended for this study to be an exploratory analysis of all types and stages of caregivers. I viewed this approach as a jumping-off point to explore more narrowed participation in the future.

I collected a purposive sample of family caregivers in the context of cancer. Purposive sampling has been found to be an important component in health communication research to successfully obtain a rich data sample (Devers & Frankel, 2000). I also used network and snowball sampling (Lindloff & Taylor, 1995) by asking
members of my network and those interested in the study to send my recruitment materials onto others in their social networks. In addition, I was granted approval to post my call for participation on Facebook support group pages which included: Cancer, Caregiving, Contentious Love, Ovarian Cancer Together!, Cancer Support: Patients, Survivors, Caregivers, and Arizona Caregiver Support Services, as well as on my own personal Facebook and LinkedIn pages. I also gained approval to post recruitment flyer materials at the oncology center at Saint Mary’s Regional Hospital and the Washington Regional Cancer Support Home.

Participants

156 caregivers completed the survey. Of these individuals, 139 were females (89.7%), 15 were males (9.7%), and one did not identify biological sex (.6%). Participants ranged in age from 19 to 78 years old ($M=48.00$, $SD=12.9$). 94 (60.3%) participants reported being married, 24 (15.4%) participants reported being single, 12 (7.7%) participants were widowed, ten (6.4%) participants were divorced, seven (4.5%) participants were dating, three (1.9%) participants were separated, and two (3.8%) participants reported “other,” indicating that they were partnered. Of the participants who reported ethnicity, 143 (91.7%) were Caucasian, five (3.2%) were Asian, four (2.6%) were Hispanic, two (1.3%) were African American, and one (0.6%) was Native American. 57 (36.5%) reported a high school education, 39 (25%) held a bachelor’s degree, 32 (20.5%) reported “other,” (trade schools or associates degrees), 20 (12.8%) held a master’s degree, six (3.8%) held a doctorate, and two (1.3%) reported a grade school education. 94 (60.3%) of participants were currently working and 62 (39.7%) were unemployed.
Time spent caring ranged from one month to 90 months. 67 (42.9%) identified their caregiving role as a spouse, 50 (32.1%) reported being a child of the patient with cancer, 14 (9.0%) were parents, nine (5.8%) reported “other” (e.g. co-worker), eight (5.1%) were friends/close acquaintances, and six (3.8%) were siblings. Caregivers also identified their loved one’s cancer stage: 51 (32.7%) reported caring for a loved one with a Stage IV diagnosis, 44 (28.2%) reported having cared for a loved one who has passed, 27 (17.3%) reported having cared for a loved one who is currently in remission, 16 (10.3%) reported caring for a loved one with a Stage III diagnosis, eight (5.1%) reported caring for a loved one with a Stage I diagnosis, seven (4.5%) reported caring for a loved one with a Stage II diagnosis, and one (0.6%) reported caring for a loved one with a Stage 0 diagnosis, which is a non-invasive form of cancer commonly diagnosed in breast cancer.

Procedures

The data was derived from participant responses from an online survey administered through Qualtrics—a secure online software program. Participants that saw the call for recruitment were able to click on the survey and were then directed to the informed consent. They were required to have read the informed consent form, agreed on their qualifications, and understood their rights as a participant by checking an agreement box, then typing their name. They were not able to access the remainder of the survey without first providing consent. The online survey included Likert-type scales and open-ended questions (see Appendix G).

Instrumentation
Participants completed a questionnaire providing assessments of (a) demographic variables (e.g., participant age, gender, ethnicity, religion, level of education, etc.); (b) background factors related to the patient with cancer (e.g., relationship to patient, type of cancer, stage of cancer, diagnosis date); (c) memorable message content; (d) evaluations of the degree to which each message was verbal person centered; (e) self-efficacy and (f) perceived stress; (g) positive and negative affect, (h) depression. The questionnaire took participants approximately 20-30 minutes.

**Memorable Messages of Social Support.** Participants’ memorable messages of support were elicited through open-ended questions on the survey. In order to analyze the ways in which memorable messages could be both helpful and unhelpful, caregivers were asked to share the most positive and negative memorable message they received from social networks. After each MM, participants identified what member of their social network (e.g., family member, friend, neighbor, or co-worker) shared the message and were asked to evaluate the VPC of the message (see below). In order to allow for more in-depth thematic analyses of MM content, after sharing their positive and negative messages, participants were given an opportunity to share any additional MM that they recalled (the survey allowed participants to share up to three additional messages). Participants shared an average of 1.20 ($SD = .16$) additional messages.

**VPC Message Evaluation.** VPC was measured using the person centered (PC) scale developed by Jones and Guerrero (2001), which consisted of five, 7-point semantic differential scales that identify fundamental features of person centeredness. Items included: self-centered vs. other-centered, invalidates vs. validates, judges vs. empathizes, unconcerned vs. concerned, and disregards vs. acknowledges. For
consistency in the data, self-centered vs. other-centered were reverse coded. Research has established the reliability of this measure (α=.98, Jones & Guerrero, 2001). However, in the current study, the item “other-centered and self-centered” reduced the reliability of the overall measure in this study. Therefore, it was excluded in the analysis and reliability statistics. The current study revealed good reliability for the remaining VPC items for both positive memorable messages (α= .93) and negative memorable messages (α= .90). Therefore, the VPC items were averaged to create a composite score for both positive memorable messages (M=6.41, SD= 1.13) and negative memorable messages (M=2.38, SD= 1.69).

**Self-Efficacy.** To assess caregiver self-efficacy, the Caregiver Inventory (CGI, Merluzzi, 2010) was used. The CGI is a measure that was developed to understand the importance of self-efficacy, self-care, and in managing difficult communication to successfully navigate the demands of caregiving. This scale consists of 21 items on a nine-point Likert-type scales (1=not confident at all, 9=totally confident) to assess caregivers’ confidence in their own ability to perform each item; of these, only 20 were used. I excluded the item that asks participants to report on how confident they are in talking about death and dying. This item was excluded because the focus of this study was on cancer caregivers in all stages and types of cancer rather than only terminal patients. In addition, the scale was modified such that rather than using the word “person” as used in the original scale, the items read “loved one” in reference to the cancer patient. Sample items included, “talking openly and honestly” and “listening and learning from my loved one as to how to care about them”. Previous research (α = .91, Merluzzi, 2010) and the current study revealed good reliability (α = .89) for the CGI. Composites of data
Caregiver Well-Being. Caregiver well-being was operationalized by measuring perceived stress, depression, and positive and negative affect. These variables were used to get an overall sense of caregiver’s psychological well-being. Previous research has established links between caregivers’ psychological well-being with stress, depression, negative affect, and anxiety (Ferrell, Hassey Dow, & Grant, 1995). Additionally, caregivers have been found to have levels of depression that are similar to patients (Edwards & Clark, 2004). The below measures were used to get a general sense of caregivers psychological well-being as they relate to messages and support provided by social network members.

Perceived Stress Scale. The Perceived Stress Scale was developed by Cohen et al. (1983) and was used in this study to measure stress levels for caregivers. It is the most widely used instrument for measuring perceptions of stress. The scale helps to tap into how unpredictable, uncontrollable, or how overloaded the respondents find their lives to be. In addition, the scale was created to appraise stress related to major events and changes in coping resources, which can help to explain caregiver’s abilities to cope. The scale consists of 14 items such as “in the last month, how often have you been able to control the way you spend your time?” and “in the last month, how often have you felt you could not cope with things you had to do?” The items are rated on a five-point Likert-type scale (0=never to 4=very often). Cronbach’s alpha for previous research has ranged from 0.74 to 0.83 (Cone & Zimmerman, 2003). Item three “in the last month, how often have you felt nervous or stressed, and item 12 “in the last month, how often have
you found yourself thinking about things you have to accomplish” did not contribute to the reliability of this scale and were excluded. The subsequent Chronbach’s alpha was reliable (α = .71). Scores are calculated for the perceived stress scale by summing items to get the total perceived stress score (Cohen et al., 1983). Thus, composites of data were formed by summing across all scale items, excluding items three and 12 (M = 30.49, SD = 6.97).

**Depression Scale.** The 20-item Center for Epidemiologic Studies Depression Scale (CES-D, Radloff, 1977) has been used to categorize at-risk depression status caregivers. Items assess caregivers’ cognitive, affective, behavioral, and somatic symptoms for depression, and positive affect. Each item was rated on a four-point scale ranging from zero-rarely or none of the time to three-most or all of the time. The original scale assesses reports of depression that week. In this study, I expanded the scope of the scale to reflect a month. This was done so there was consistency between each of the scales (e.g. caregiver inventory scale, perceived stress scale) used in the study (SD = 9.76). The score is calculated by summing the 20 questions. Possible range is 0-60. A score of 16 points or more is considered depressed. Therefore, scores were calculated by summing the responses. Higher scores reflect greater levels of depression. Radloff (1977) reported good internal consistency for the measure, with Cronbach’s alpha falling between 0.84 and 0.85. In this study, Chronbach’s alpha was good (α = .77). Positive items on the scale were reverse coded such that higher scores reflected higher levels of depression.

**Positive and Negative Affect Measure (PANAS).** The Positive and Negative Affect Schedule (PANAS) is an instrument that includes ten negative affect items (e.g.,
distress, shame) and ten positive affect items (e.g., determined, interested) (Watson et al., 1988). For each descriptor term, respondents rated on a five-point scale (1=very slightly or not at all to 5=extremely) the degree to which they had experienced a particular emotion in the last month. Watson et al. (1988) reported a good internal consistency (α = .88). In this study, Cronbach’s alpha had solid reliability with positive affect items (α = .93) and negative affect items (α = .93). Higher scores indicate the degree of positive or negative affect related to how participants felt about their difficult experience.

Composites of positive and negative affect were formed by summing the ten positive items (M=32.16, SD=9.10) and summing the ten items of negative items (M=26.59, SD=9.90).

Data analysis

Memorable Message Coding. To identify family caregivers’ perceptions about social network members’ memorable messages, open-ended data was inductively coded (Bulmer, 1979) based on procedures similar to Koenig Kellas (2010) in her study on mother-daughter memorable messages. Specifically, as the primary researcher, I read the data and generated thematic categories. A final coding scheme was created that included different types (e.g. sub and supra) of messages. Next, two new independent coders, not associated with the study, were trained on how to code different types of messages. After training and achieving initial intercoder reliability, the assistants coded all of the data to completion. Reliability analysis was good for both positive memorable messages (κ=.77), negative memorable messages (κ=.88), and other memorable messages (κ=.89). The coders discussed inconsistencies and each message received a single supratype code (Koenig Kellas, 2010). In the current study, cancer caregiver participants reported on
memorable messages from their social networks. Table 2 provides the frequencies of the type of social network members participants reported receiving memorable messages from, along with a breakdown of the frequencies with which the reported messages from various social network members were cited as the most positive memorable message, the most negative memorable message, or any additional memorable messages (other) participants could recall receiving. Types of memorable messages are presented in the results.
Table 2  Frequencies and Types of Social Network Members from Whom Participants Received Memorable Messages (MM)

<table>
<thead>
<tr>
<th>Social Network</th>
<th>Most Positive MM Frequency</th>
<th>Most Negative MM Frequency</th>
<th>Additional MM Frequency</th>
</tr>
</thead>
<tbody>
<tr>
<td>Family</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Spouse</td>
<td>36 (13.2%)</td>
<td>41 (15.0%)</td>
<td>26 (9.6%)</td>
</tr>
<tr>
<td>Aunt/Uncle</td>
<td>1</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Parent</td>
<td>12</td>
<td>10</td>
<td>5</td>
</tr>
<tr>
<td>Sibling</td>
<td>8</td>
<td>10</td>
<td>4</td>
</tr>
<tr>
<td>Grandparent</td>
<td>1</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Child</td>
<td>8</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>In-law</td>
<td>1</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>Cousin</td>
<td>1</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Friend</td>
<td>40 (14.7%)</td>
<td>21 (7.7%)</td>
<td>23 (8.4%)</td>
</tr>
<tr>
<td>Co-worker</td>
<td>6 (2.2%)</td>
<td>10 (3.7%)</td>
<td>3 (1.1%)</td>
</tr>
<tr>
<td>Neighbor</td>
<td>3 (1.1%)</td>
<td>3 (.12%)</td>
<td>3 (1.1%)</td>
</tr>
<tr>
<td>Other</td>
<td>40 (14.7%)</td>
<td>39 (14.3%)</td>
<td>15 (5.5%)</td>
</tr>
<tr>
<td>Support Group</td>
<td>15</td>
<td>17</td>
<td>14</td>
</tr>
<tr>
<td>Nurse</td>
<td>5</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Doctor</td>
<td>6</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>Church Leader</td>
<td>5</td>
<td>3</td>
<td>0</td>
</tr>
<tr>
<td>Counselor</td>
<td>3</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Total</td>
<td>125 (45.8%)</td>
<td>114 (41.8%)</td>
<td>70 (25.7%)</td>
</tr>
</tbody>
</table>
Social Support Coding. To identify the types of social support for each of the memorable messages shared, open-ended data was deductively coded using Xu & Burlesons’ (2001) typology. Types of support including esteem, emotional, appraisal, tangible, informational, and network were defined with specific characteristics and examples in a codebook. The primary investigator coded for the type of support with each memorable message. Once the coding process was complete, two independent coders, not associated with the study, were trained on how to code for type of support with each memorable message. Reliability was solid for both positive memorable messages (κ=.77), negative (κ=.79) memorable messages, and other (κ=.81) memorable messages. Coders discussed any inconsistencies present and reconciled differences such that each message received one code for social support.

VPC and Caregiver Stress, Depression, and Affect. To test H1: VPC will be positively related to self-efficacy, and positive affect and negatively related to stress, negative affect and depression. A Pearson correlation was run looking at VPC ratings shared in positive and negative memorable messages.

Collection of Memorable Messages Coding. To analyze RQ4 “What collection of memorable messages influence family caregivers of perceptions of stress, depression, and affect?” message types were coded further to uncover a more holistic portrait of the collection of memorable messages caregivers reported hearing from their social network members. The primary investigator assigned each participant a code for the majority type of message that they reported. If a caregiver reported only one type of MM (e.g. message of hope), they were assigned a code for “message of hope”. If the caregiver reported receiving one dismissive message and two messages of hope, they were coded in message
of hope because messages of hope represent the majority type of message. However, caregivers who had a mixed report of memorable message type were coded has having a mixed collection of messages. This resulted in five categories of collection of messages (Koenig Kellas, 2010) which includes: mixed messages (n= 62, 39.7%), messages of hope (n= 31, 19.9%), welcome contributions (n= 13, 8.3%), thoughtfulness (n= 12, 7.7%), and dismissive (n=6, 3.8%).

Chapter Summary

In this chapter, I reviewed recruitment, participants, procedures, and measures that were used to examine family caregivers’ memorable messages of support. In the next chapter, I provide an overview of the findings and data analysis process.
CHAPTER 3

RESULTS

The present dissertation investigated memorable messages of support to get an understanding of what types of messages were verbal person-centered and related to caregivers’ overall well-being (e.g. stress, depression, affect). This chapter provides an overview of the types of memorable messages that were uncovered and the statistical analyses that were run to answer the main research questions and hypothesis introduced in Chapter one.

Memorable Message Type

The first research question asked what types of memorable messages family caregivers in the context of cancer recalled receiving from social network members. Memorable messages were defined for caregivers as lasting messages that were impactful and stuck with them. In addition, because of the exploratory nature of the study and the potential for memorable messages to be helpful or hurtful, I collected from participants the messages they considered to be the most positive, the most negative, and any other memorable messages they recalled hearing. A total of 125 positive memorable messages, 114 negative memorable messages, and 79 other memorable messages were reported. During the coding process, it became clear that one overall coding scheme could be used to code all messages (e.g. positive, negative, additional). The inductive coding process revealed five supra-types of memorable messages including: welcome contributions, messages of hope, thoughtfulness, dismissive, and unwelcome contributions. Each of the major supra-type categories included several, more specific sub-type memorable messages ($n=12$). Supra and sub-type memorable messages are presented in Table 3 with
examples and frequencies reported for the most positive, most negative, and additional memorable messages. In addition, each supra and sub-type are defined and discussed with further examples below.
Table 3  Frequencies and Examples of Memorable Message (MM) Supra- and Subtypes

<table>
<thead>
<tr>
<th>Memorable Message Supra- and Subtypes</th>
<th>Frequency</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Messages of hope</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encouragement</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>44</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>14</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>17</td>
<td></td>
</tr>
<tr>
<td>Faith</td>
<td>30</td>
<td>We are praying for you.</td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td><strong>Dismissive</strong></td>
<td>53 (19.5%)</td>
<td></td>
</tr>
<tr>
<td>Disregard for caregiver feelings</td>
<td>31</td>
<td></td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td>Downplaying the illness</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>13</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Blaming</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>8</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td><strong>Welcome contributions</strong></td>
<td>46 (16.8%)</td>
<td></td>
</tr>
<tr>
<td>Acknowledgement of caregiver efforts</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>Positive advice</td>
<td>19</td>
<td></td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

Always keep trying and fighting, because some day we will win!

Stop being sad all the time about your husband. At some point you will need to accept his diagnosis and move on with your life.

You are so lucky it’s just prostate cancer and not one of the serious types of cancer.

You’re not doing enough.

It’s so good that you are very knowledgeable about your daughter’s disease. She is lucky to have you.

You need to take care of your family first.
<table>
<thead>
<tr>
<th>Memorable Message</th>
<th>Frequency</th>
<th>Example</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Supra- and Subtypes</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Good news</td>
<td>3</td>
<td>The cancer was caught early.</td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td><strong>Thoughtfulness</strong></td>
<td>44 (16.6%)</td>
<td>The future is not going to be easy and it’s going to be the hardest thing you have to go through, but we’ll always be here for you.</td>
</tr>
<tr>
<td>Being there</td>
<td>30</td>
<td></td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>18</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Presenting gifts</td>
<td>17</td>
<td>After my mom passed away, we received an envelope in the mail, unmarked, containing $1,000 cash. It helped my sister and I with a lot of the bills cancer treatment comes with.</td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>7</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>10</td>
<td></td>
</tr>
<tr>
<td><strong>Unwelcome Messages</strong></td>
<td>26 (%)</td>
<td>You have to realize he IS going to die.</td>
</tr>
<tr>
<td>Bad news</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Unsolicited advice</td>
<td>11</td>
<td>My mother and sister both told me I should leave my partner. They continued to say that to me until they finally stopped contact.</td>
</tr>
<tr>
<td>Most Positive MM</td>
<td>0</td>
<td></td>
</tr>
<tr>
<td>Most Negative MM</td>
<td>15</td>
<td></td>
</tr>
<tr>
<td>Additional MM</td>
<td>0</td>
<td></td>
</tr>
</tbody>
</table>
Messages of Hope. Perhaps not surprisingly, the most reported memorable messages were messages of hope ($n = 105, 38.5\%$). Messages of hope were reported both as the most positive ($n=57$), the most negative ($n= 23$), and additional ($n= 25$) memorable messages by family caregivers. These messages could be influenced by the divine or were meant to evoke hope and confidence. Under the Supra-type of messages of hope, emerged two sub-types.

The first sub-type were messages of encouragement ($n=75$). These messages made the caregiver feel hopeful and confident about their situation. In addition, these messages could include stories of hope or survival. Encouragement was illustrated well by a 29-year-old woman caring for her friend whose social network member said, “Stay positive and live your life like it’s the last” (#6). Participants encouraged caregivers to continue to live their lives and to always keep fighting. In addition, several other positive messages such as “stay strong,” “you’ll get through this,” and “there is hope” were found in positive memorable messages. Another theme of encouragement centered on being strong. For instance, a 47-year-old woman caring for her spouse reported her most positive memorable message from a social network member was “Stay strong” (#63). Additionally, a 35-year-old woman caring for her husband reported that her social network member said “You are so strong, you have so much on your plate, but yet you still find time to make others happy” (#45).

While encouragement messages were predominately viewed as positive, they also were considered negative by caregivers. For instance, a 36-year-old man, caring for his wife, reported as his most negative memorable message as a social network member saying “You just have to be strong” (#138). This demonstrates that while encouraging
words were often well-received, this was not always true. Some caregivers may not have felt that being strong was encouraging. A 44-year-old woman caring for her husband explained her most memorable negative message as, “Be strong, it’ll be ok. These words sound so cliché, no real feelings to them, just something you’ll hear a thousand times during this journey” (#51). Thus, encouraging messages, even those with similar content, were seen as both negative and positive.

The second sub-type in this category was messages of faith (n=30). Faith messages stressed the importance of focusing energy on faith and prayer. Similar to messages of encouragement, messages of faith were also viewed as both positive and negative. For example, a 44-year-old woman caring for her husband explained her social network member shared a message of faith as:

I'm a member in cancer caregiver group (cancer caregiver warriors) and the topic was asking how long they had to live. Because most Dr's [sic] don't tell you, you need to ask. But some said that they lived long past that time given. And a good friend once said "OGK". Only God Knows! I now tell this to everyone when I hear they were just diagnosed! This gives hope! (#84).

Unlike the participant above, other caregivers found faith based messages to be their most negative memorable messages. For example, a 41-year-old woman caring for her parent reported a social network member saying, “God only gives us burdens that we can handle” (#33) as her most negative message. Thus while in some situations caregivers felt prayer could help them cope, others felt that prayers did not provide the same level of comfort.
Overall, many of these messages demonstrated the importance of hope, encouragement, and prayer in the context of cancer. In addition, these messages also recognized that message of hope are often considered functionally ambivalent. Specifically, while some social networks may try to encourage or pray for caregivers, this encouragement or prayer may not always be welcome.

**Dismissive.** Many family caregivers’ \( n = 53, 19.5\% \) most negative memorable message of support were coded as being dismissive of their feelings. That is, caregivers seemed to feel as though their feelings were unworthy of consideration, or that their situation was not acknowledged in the manner it should be, by members of their support networks. Three sub-types were prevalent within this supra-type. In addition, all sub-types within this supra-type were reported as being caregivers’ most negative memorable message.

First, *disregard for caregivers feelings* \( (n = 31) \), were messages that dismissed how the caregiver felt. Caregivers were told that they need to move forward, get over it, or deal with it. Several messages illustrated this sub-type well such as a message shared by a 37-year-old woman caring for her child. She recalled a social network member saying, “I did not have a right to be stressed when I’m not the one with cancer” (#43). These messages did not acknowledge how the caregiver felt, and in some situations told them how they should feel. Many participants reported social network members telling them that they needed to get over themselves, and deal with the illness.

The second sub-type was messages that *downplayed the illness* \( (n = 13) \). These messages reportedly suggest the type of illness they had was “the good kind,” or that they were lucky it was in early stages. For example, a 57-year-old woman caring for a close
friend identified her most negative message from a social network member as, “Prostate cancer is the “good” cancer to have. They caught it early, didn’t they? He’ll be fine. Then looked at me with an uncomprehending stare when I said it was stage III” (#114).

Another 23-year-old woman caring for her spouse explained that her social network said,

Not a direct relative, but in general we hear a lot of downplaying about one cancer vs the other. For example, when being talked to about prostate cancer we have heard many times now "at least it's the good kind of cancer”. Very hard to hear and not lash out. No cancer is "good kind" and all cancers come with very many struggles (#37).

The final sub-type included messages that were blaming (n= 9). This category involved prescriptions about responsibility and fault associated with care. Specifically, caregivers were told that they “don’t do enough” or “don’t spend as much time caring as someone else”. A 67-year-old woman recalled a social network member sharing a message about her husband, “He (husband) could have been at peace if you weren’t taking care of him by yourself for so long” (#42). Caregivers were blamed for how much time they spent caring. In addition, caregivers were also told that they were not doing enough to provide care. For example, this was illustrated well with a 42-year-old woman, who was caring for her parent. She recalled a social network member saying, “You need to stay longer because you haven’t been here for the past months and mom listens to you more than she listens to us” (#152).

Overall, participants who experienced a dismissive message reported these as negative. These messages were difficult, often not providing caregiver’s space to express their feelings or concerns related to an illness. In addition, these messages did not account
for how serious some types of cancer have potential to be. Caregivers also felt that they were being blamed for not providing enough or adequate care to patients. Many social network members did not consider the caregivers’ feelings when sharing dismissive messages. These types of messages also seemed to skate around the topic of cancer at what seemed like an attempt to move on from the conversation.

**Welcome Contributions.** Several family caregivers \( n = 46, 16.8\% \) recalled their most positive memorable message of support as welcome contributions. These messages focused on providing caregivers with positive feedback related to the process of care. Three sub-types emerged once inductive coding was complete. Welcome contributions were only found in positive memorable messages and additional memorable messages for caregivers.

The most frequently reported subtype of welcome contributions was *acknowledgement of caregiver efforts* \( n = 25 \). These messages focused on recognizing caregiver’s abilities, efforts, and time spent caring for their loved one, including sharing messages that focused on the positive attributes of the caregiver and compliments. A 46-year-old woman caring for a friend was told by her social network member, “you take real good care of them” \(#38\). A 55-year-old man, caring for his wife reported his social network sharing a positive message of, “We were told how brave we were and that the battle was fought with dignity and honor” \(#48\). These messages recognize how well the caregiver does despite the difficulties associated with cancer care. Support networks also shared gratitude for their caregiving efforts. For instance, a 67-year-old woman caring for her husband was told by her social network, “We love you for taking such loving care of our father!” \(#80\). Another 48-year-old woman caring for her husband recalled her social
network member saying, “I was doing a good job taking care of my husband…that it was OK to take some time to myself” (#102). Caregivers were reminded that they were appreciated for all of the time spent providing care. They were also reminded that they deserve time for themselves.

In addition to acknowledgement of caregiver efforts, some participants also remembered their most positive messages that were related to advice. Specifically, positive advice \((n=19)\) included messages that were focused on advice related to efforts of providing care. A 63-year-old-woman caring for her brother recalled a social network saying to her “Just do what you CAN do. Your brother is about as resilient as anyone can be” (#16). Messages like these specifically focused on the efforts to provide care and what caregivers could and should do to overcome obstacles. Positive advice also included messages that shared ways to manage care and gain access to resources for coping. For example, a 55-year-old woman caring for a close friend reported a message from a social network member as “Resources are available to you, support groups as well” (#14).

Finally, a few people reported good news \((n=3)\) memorable messages as being particularly impactful. These messages were when caregivers received positive information related to the cancer or diagnosis. For instance, a 53-year-old woman caring for her husband recalled a doctor saying “I feel comfortable declaring you cancer free!” (#32).

Overall, caregivers who received welcome contributions felt that advice shared by their social network members was positive. For instance, caregivers felt that being given options for resources was helpful. In addition, caregivers had a positive experience when social network members acknowledged their efforts of care. For instance, many
caregivers received praise such as “you are doing a good job” or “you work so hard”. Finally, not surprisingly, caregivers enjoyed being told good news related to the cancer. Together, welcome contributions accounted for positive memorable messages, suggesting that these types of messages may be more helpful to caregivers.

Thoughtfulness. Forty-four (16.1%) caregivers’ memorable messages were coded as thoughtful. Messages that showed consideration for caregiver’s needs, desires, and wants were coded as being thoughtful. These messages specifically focused on understanding the caregiver and providing him/her with what he/she needed to cope. Under this category, two sub-types emerged. Much like welcome contributions, thoughtfulness was only reported for positive memorable messages and additional memorable messages.

A majority of the participants in this supra-type reported messages of social network members being there (n=30) for them, or offering to be there. For example, a 28-year-old man, caring for his parent remembered a social network member saying, “I know how you feel, and it’s okay to be upset once in a while. We’re here for you” (#39). Similarly, a 41-year-old woman caring for her spouse recalled her social network member saying, “I honestly have no words for this, but I am here for you, whenever, wherever, however” (#40). These messages tell the caregiver that social network members will be there no matter what. Being there messages also included messages where the participant offered to help or take a caregiver in. A 70-year-old woman caring for her husband recalls being told from her social network member, “You can stay with us as often and as long as you need” (#83).
In addition, thoughtful messages were nonverbal in nature. Specifically some caregivers reported that receiving presents ($n=17$) was the most memorable message they received. Therefore, actions or gifts that were particularly meaningful were coded as being thoughtful. A 23-year-old woman caring for her mother explained a message that her social network member shared:

My mom was a very well loved woman; from the moment of her diagnosis all the way to a year after her passing, my family has been nearly bombarded with well-wishes and support. We received hundreds of cards upon her passing and still have neighbors that help my sister and I out with inherited household maintenance from time to time. The most positive memorable message of support I received personally came from a friend I had during High School. Despite not talking much, he still visited my family whenever he returned home to Maryland from his current Iowa residence. When my mom passed away, he sent both my sister and I a package. In it we each found a card covered front to back in his sloppy handwriting, expressing his love for our family during that hardship. In each box he included a few gifts; in mine I got a stuffed character plush and a book I'd never read from my favorite author. The gift was personal, heartfelt, and had nothing to do with cancer. It helped my sister feel supported and gave each of us a bit of a break from the anxieties we'd endured the past four years in caring for my mom during her ailing years (#153).

Overall, thoughtful messages took into account the caregivers’ needs related to their cancer caregiving experiences. For instance, some caregivers valued when their social network members shared messages of being there. These messages were meant to
make caregivers feel as though they were not alone, by telling caregivers that they’d always be there for them. In addition, these types of messages also demonstrated social network members being present at doctor appointments and during times of distress. Caregivers also recalled meals and presents that they received. While these weren’t always a concrete message, many came with the message of thoughtfulness and care. Caregivers who got unexpected presents felt as though their social network member was thinking of what they needed and contributed to caregivers not feeling alone. Much like welcome contributions, thoughtful messages were solely reported as being most positive or additional memorable message types.

**Unwelcome contributions.** The remainder of the caregivers (n=26, 9.5%) reported messages that were unwelcome contributions. Unlike welcome contributions, unwelcome contributions were messages that were shared, but not desired by caregivers. Unwelcome contributions were only reported for negative memorable messages.

The first, includes bad news (n=15) related to the illness. Specifically, messages that focused on the reality of the situation, while offering little to no hope were considered to be unwelcome. For example, a 69-year-old caregiver caring for her husband reported having a social network member tell her “he is not going to survive, my mother suffered a long time with this cancer” (#97). Another 55-year-old woman also caring for her husband was told by a social network member, “You will be nursing an invalid the rest of your life” (#54). These messages reminded caregivers of the reality of their situations, and were not well received. In addition, these messages offered no hope, telling caregivers that they would have a long road of suffering.
The second sub-type, *unsolicited advice* \((n=11)\), were messages that told the caregiver what they should do. However, while positive advice was welcome, this type of advice was considered unwelcome, pushy, and hurtful. Specifically, when a loved one tried to tell a caregiver how they should provide care or what they should do in the situation. A 60-year-old woman caring for her husband recalled a message from her step-daughter, “My stepdaughter told me her mother has a life insurance policy on my husband to make sure he had the funeral he deserves” (#46).

Overall, unwelcome contributions were the least reported type of memorable message. In addition, these messages were reported as being negative memorable messages. Unwelcome contributions were the polar opposite of welcome contributions—in that—message content was not similar. Caregivers did not want to hear bad news related to the illness, or deal with the reality of the situation. For example, if a social network member said “they are dying” or if they heard that the cancer treatments were not working; caregivers reported this as being most negative for them. Unsolicited advice was also present for caregivers. This type of advice was prescriptive to caregivers, telling them what they should do in the situation. For instance, caregivers were often told by social network how to provide care.

**Summary.** Overall, family caregivers of loved ones with cancer offered a variety of positive and negative memorable messages that were shared by social networks. These inductive findings illustrate the complex nature of supportive messages in the cancer caregiving context. In addition, these messages offered insight into what types of memorable messages are considered positive toward helping a caregiver cope with the many demands of caregiving. Also, they provided further insight into what messages are
negative. Interestingly, messages of hope were present in both positive and negative reports of memorable messages. This provides a provocative notion, that messages of hope may be functionally ambivalent within the cancer context. Besides assessing memorable message supra and sub-types another goal of this study was to see if the collection of memorable messages caregivers reported were related to well-being (e.g. stress, depression, positive and negative affect). Thus, the following section discusses collection of memorable messages were related to well-being.

**Memorable Messages Types and Social Support Types**

To test RQ2, which asked are memorable message types related to different types of support, two separate Pearson chi-square tests (i.e., for positive and negative memorable messages) were performed to examine the differences between memorable message type and social support type. Table 4.1 shows the output for positive messages with cell frequencies and Table 4.3 shows the output for negative messages with cell frequencies. In addition, Figure 1.1 and Figure 1.2 illustrate the findings.

**Positive Memorable Message Types and Social Support.** The Pearson chi-square test revealed that positive memorable message type was significantly related to social support type \( \chi^2 (10, N=113) = 82.53, p< .001 \ \phi_c=.60 \). From Table 4.1, it can be seen that close to half (42.5%) of all positive memorable message types were considered a form of emotional support. Esteem (22.1%), network (11.5%), informational (9.7%), and tangible (12.4%) appeared with less frequency. In addition, tangible, emotional, network, informational, and esteem support were all found to be related to specific memorable message types, as described below.
The most notable finding the chi-square revealed was that messages of hope are most often considered emotional support. The bar chart in figure 1.1 indicates a pattern by which emotional support is prevalent in messages of hope. Further, Table 4.1 shows that the expected count for cases of emotional support found in messages of hope differed from the actual count. Alternatively, the observed frequencies in other cases (i.e. welcome contributions, thoughtfulness) were quite similar to the expected frequencies for each support type. Overall, these results suggest that messages of hope are more likely to be a form of emotional support than are other message types.

Follow up pairwise comparisons were conducted to evaluate difference amongst proportions. Table 4.2 shows the results of these analyses. The Holm’s sequential Bonferroni method was used to control for Type I errors at the .05 level across all 15 comparisons ($p = .05/15 = .003$). There were six significant pairwise differences between positive memorable message type and support type. The probability of tangible support being categorized as thoughtful messages was 12 times more likely than tangible support in messages of hope. There was a marginal probability of emotional support in messages of hope in that it was 2.8 times more likely than emotional support in welcome contributions. There was also a marginal probability of network support in thoughtful messages. Thoughtful messages were 1.4 times more likely than network support in messages of hope. Finally, another marginal probability of esteem support in welcome contributions was 1.6 times more likely than messages of hope and 6.5 times more likely than thoughtful messages. In sum, pairwise comparison findings suggest that tangible support is most common when social networks share thoughtful messages, rather than messages of hope. Additionally, there was marginal evidence that messages of hope are
more likely to be associated with emotional support versus welcome contributions. These findings suggest that memorable message type could be a function of social support type. Specifically, when social network members share a certain types of messages, they may also be viewed as enacting a certain type of support.

Negative Memorable Message Types and Social Support. The Pearson chi-square test revealed that negative memorable message type was significantly related to social support type $X^2 (8, N=96) = 16.50, p< .05, \phi_c=.30$. From Table 4.3, it can be seen that over half (59.4%) of all negative memorable message types were considered a form of emotional support. Esteem (6.3%), network (2.1%), informational (11.5%), and tangible (3.1%) support were present in fewer negative memorable message types. Figure 1.2 suggests that emotional support was frequently related to dismissive messages.

Follow up pairwise comparisons were conducted to evaluate difference amongst proportions. Table 4.4 shows the results of these analyses. The Holm’s sequential Bonferroni method was used to control for Type I errors at the .05 level across all 15 comparisons ($p = .003$). There was one significant pairwise difference between negative memorable message type and social support type. The probability of informational support in unwelcome contribution messages was 1.16 times more likely than informational support in dismissive messages. Additionally, the probability of informational support in unwelcome contributions messages was 4.67 times more likely than informational support in messages of hope. In sum, pairwise comparison patterns demonstrate that unwelcome contribution messages were most associated with informational support rather than dismissive message and messages of hope.
### Table 4.1

*Pearson’s Positive Memorable Message Type and Social Support Type Analysis Data*

<table>
<thead>
<tr>
<th>Social Support Type</th>
<th>Welcome Contributions</th>
<th>Messages of Hope</th>
<th>Thoughtfulness</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional</td>
<td>12 (10.6%)</td>
<td>34 (30.1%)</td>
<td>2 (1.8%)</td>
<td>48 (42.5%)</td>
</tr>
<tr>
<td>Esteem</td>
<td>14 (12.4%)</td>
<td>9 (8%)</td>
<td>2 (1.8%)</td>
<td>25 (22.1%)</td>
</tr>
<tr>
<td>Network</td>
<td>0 (0%)</td>
<td>5 (4.4%)</td>
<td>8 (7.1)</td>
<td>13 (11.5%)</td>
</tr>
<tr>
<td>Informational</td>
<td>6 (5.3%)</td>
<td>5 (4.4%)</td>
<td>0 (0%)</td>
<td>11 (9.7%)</td>
</tr>
<tr>
<td>Tangible</td>
<td>0 (0%)</td>
<td>1 (0.9%)</td>
<td>13 (11.5%)</td>
<td>14 (12.4%)</td>
</tr>
</tbody>
</table>
Table 4.2

Results for the Pairwise Comparisons for Positive MM’s Using the Holm’s Sequential Bonferroni Method

<table>
<thead>
<tr>
<th>Comparison</th>
<th>X^2</th>
<th>P-value (alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Thoughtfulness vs. Tangible Support</td>
<td>45.43</td>
<td>.000 (.003)</td>
</tr>
<tr>
<td>Messages of Hope vs. Emotional Support</td>
<td>16.65</td>
<td>.000 (.004)</td>
</tr>
<tr>
<td>Thoughtfulness vs. Emotional Support</td>
<td>16.32</td>
<td>.000 (.004)</td>
</tr>
<tr>
<td>Thoughtfulness vs. Network Support</td>
<td>12.82</td>
<td>.000 (.004)</td>
</tr>
<tr>
<td>Welcome Contributions vs. Esteem Support</td>
<td>11.63</td>
<td>.001 (.005)</td>
</tr>
<tr>
<td>Messages of Hope vs. Tangible Support</td>
<td>11.02</td>
<td>.001 (.005)</td>
</tr>
<tr>
<td>Welcome Contributions vs. Tangible Support</td>
<td>6.50</td>
<td>.011 (ns)</td>
</tr>
<tr>
<td>Welcome Contributions vs. Network Support</td>
<td>5.95</td>
<td>.015 (ns)</td>
</tr>
<tr>
<td>Welcome Contributions vs. Informational Support</td>
<td>3.92</td>
<td>.058 (ns)</td>
</tr>
<tr>
<td>Thoughtfulness vs. Esteem Support</td>
<td>3.88</td>
<td>.049 (ns)</td>
</tr>
<tr>
<td>Thoughtfulness vs. Informational Support</td>
<td>3.53</td>
<td>.060 (ns)</td>
</tr>
<tr>
<td>Messages of Hope vs. Esteem Support</td>
<td>2.07</td>
<td>.150 (ns)</td>
</tr>
<tr>
<td>Messages of Hope vs. Network Support</td>
<td>0.61</td>
<td>.435 (ns)</td>
</tr>
<tr>
<td>Welcome Contributions vs. Emotional Support</td>
<td>0.61</td>
<td>.435 (ns)</td>
</tr>
<tr>
<td>Messages of Hope vs. Informational Support</td>
<td>.05</td>
<td>.826 (ns)</td>
</tr>
</tbody>
</table>

*p value ≤ .003
Figure 1.1

*Bar Chart for Positive Memorable Message Type and Social Support Type*
Table 4.3

*Pearson’s Negative Memorable Message Type and Social Support Type Analysis Data*

<table>
<thead>
<tr>
<th>Social Support Type</th>
<th>Unwelcome Contributions</th>
<th>Messages of Hope</th>
<th>Dismissive</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>Emotional</td>
<td>12 (12.5%)</td>
<td>19 (19.8%)</td>
<td>26 (27.1%)</td>
<td>57 (59.4%)</td>
</tr>
<tr>
<td>Esteem</td>
<td>0 (0%)</td>
<td>1 (1%)</td>
<td>5 (5.2%)</td>
<td>6 (6.3%)</td>
</tr>
<tr>
<td>Network</td>
<td>0 (0%)</td>
<td>0 (0%)</td>
<td>2 (2.1%)</td>
<td>2 (2.1%)</td>
</tr>
<tr>
<td>Informational</td>
<td>13 (13.5%)</td>
<td>3 (3.1%)</td>
<td>11 (11.5%)</td>
<td>27 (28.1%)</td>
</tr>
<tr>
<td>Tangible</td>
<td>1 (1%)</td>
<td>0 (0%)</td>
<td>3 (3.1%)</td>
<td>4 (4.2%)</td>
</tr>
</tbody>
</table>
Table 4.4

Results for the Pairwise Comparisons for Negative MM’s Using the Holm’s Sequential Bonferroni Method

<table>
<thead>
<tr>
<th>Comparison</th>
<th>X²</th>
<th>P-value (alpha)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Unwelcome Contributions vs. Info.</td>
<td>8.41*</td>
<td>.000 (.003)</td>
</tr>
<tr>
<td>Messages of Hope vs. Emotional</td>
<td>6.76</td>
<td>.010 (ns)</td>
</tr>
<tr>
<td>Messages of Hope vs. Info.</td>
<td>3.24</td>
<td>.070 (ns)</td>
</tr>
<tr>
<td>Dismissive vs. Esteem</td>
<td>2.89</td>
<td>.090 (ns)</td>
</tr>
<tr>
<td>Unwelcome Contributions vs. Emo.</td>
<td>2.56</td>
<td>.110 (ns)</td>
</tr>
<tr>
<td>Unwelcome Contributions vs. Esteem</td>
<td>2.25</td>
<td>.130 (ns)</td>
</tr>
<tr>
<td>Dismissive vs. Net.</td>
<td>2.25</td>
<td>.130 (ns)</td>
</tr>
<tr>
<td>Messages of Hope vs. Tangible</td>
<td>1.21</td>
<td>.270 (ns)</td>
</tr>
<tr>
<td>Dismissive vs. Tangible</td>
<td>1.21</td>
<td>.270 (ns)</td>
</tr>
<tr>
<td>Dismissive vs. Info.</td>
<td>1.00</td>
<td>.320 (ns)</td>
</tr>
<tr>
<td>Unwelcome Contributions vs. Net.</td>
<td>.810</td>
<td>.370 (ns)</td>
</tr>
<tr>
<td>Dismissive vs. Emo.</td>
<td>.640</td>
<td>.420 (ns)</td>
</tr>
<tr>
<td>Messages of Hope vs. Net.</td>
<td>.640</td>
<td>.420 (ns)</td>
</tr>
<tr>
<td>Messages of Hope vs. Esteem</td>
<td>.160</td>
<td>.690 (ns)</td>
</tr>
<tr>
<td>Unwelcome Contributions vs. Tangible</td>
<td>.001</td>
<td>.920 (ns)</td>
</tr>
</tbody>
</table>

*p value ≤ .003
Figure 1.2

*Bar Chart for Negative Memorable Message Type and Social Support Type Analysis*
Memorable Message Types and VPC

To test RQ3, which asked what types of memorable messages are verbal person centered, two one-way ANOVAs were conducted on positive memorable messages and negative memorable messages. As previously noted, the independent variables were the positive (messages of hope, welcome contributions, and thoughtfulness) and negative (messages of hope, dismissive, and unwelcome contributions) supra-types of the memorable messages (welcome contributions, messages of hope, thoughtfulness, dismissive, and unwelcome contributions). The dependent variables in these one-way ANOVA’s were the caregivers’ reports of how VPC each memorable message was. Homogeneity of variances was not met for positive memorable message type (3.39, p<.05), but was met for negative memorable message type (9.09, p>.05), in this analysis. VPC was significantly predicted by the type of negative memorable messages $F(2, 86)=13.34, p<.05, n^2=.24$. However, VPC was not significantly predicted by the type of positive memorable messages $F(2, 91)=1.45, p>.05, n^2=.03$.

For negative messages, post hoc comparisons using the Tukey HSD test indicated that participants considered dismissive messages to be seen as less person centered than other message types. Specifically, family caregiver’s messages that were characterized as dismissive messages ($M=1.51, SD=.77$) had significantly lower ratings of VPC then messages that were characterized as messages of hope ($M=2.50, SD=1.32, p<.05$) and unwelcome contributions ($M=3.10, SD=1.84, p<.05$). There were no other significant differences present between different message types and VPC.
### Table 5

*Means and Standard Deviations of the Memorable Message Types and Verbal Person-centeredness*

<table>
<thead>
<tr>
<th>VPC of Messages</th>
<th>Memorable Message Types</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Positive Memorable Messages</td>
<td>Welcome Contributions</td>
<td>29</td>
<td>6.72</td>
<td>0.43</td>
</tr>
<tr>
<td></td>
<td>Messages of Hope</td>
<td>49</td>
<td>6.31</td>
<td>1.30</td>
</tr>
<tr>
<td></td>
<td>Thoughtfulness</td>
<td>20</td>
<td>6.59</td>
<td>0.84</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>94</td>
<td>6.48</td>
<td>1.05</td>
</tr>
<tr>
<td>Negative Memorable Messages</td>
<td>Messages of Hope</td>
<td>20</td>
<td>2.50</td>
<td>1.32</td>
</tr>
<tr>
<td></td>
<td>Dismissive</td>
<td>45</td>
<td>1.51</td>
<td>0.77</td>
</tr>
<tr>
<td></td>
<td>Unwelcome</td>
<td>24</td>
<td>3.10</td>
<td>1.84</td>
</tr>
<tr>
<td></td>
<td>Contributions</td>
<td>89</td>
<td>2.17</td>
<td>1.43</td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
VPC and Stress, Depression, Affect, and Self-efficacy

Correlation analyses were used to test H1 which hypothesized that VPC would be positively related to positive affect, and self-efficacy and negatively related to stress, negative affect, and depression. The perceived stress scale was reverse coded such that higher scores indicate lower levels of stress and lower scores indicate higher levels of stress. Results indicated that all dependent variables were significantly related to ratings of VPC on negative memorable messages and only one relationship existed between ratings of VPC for positive memorable messages.

VPC ratings of positive memorable messages were found to have a positive, albeit modest, relationship to self-efficacy ($r=.21, p<.05, r^2 = .04$). This suggests that as caregivers’ ratings of VPC in positive memorable messages increased, so did their reported self-efficacy in caring for their loved one. No other dependent variables were related to VPC ratings of positive memorable messages. Thus, H1 is only partially supported for positive memorable messages.

It was also hypothesized that VPC ratings of negative memorable messages would be positively related to positive affect and self-efficacy, and be negatively related to stress, negative affect, and depression. VPC of negative memorable messages was found to have a moderate relationship with negative affect ($r=-.31, p<.05, r^2 = .10$). This finding suggests that as VPC of negative memorable messages decreases, negative affect increases, which is consistent with the hypothesis. VPC of negative memorable messages also had a significant relationship with positive affect ($r=.21, p<.05, r^2 = .04$). These findings suggest that as VPC of negative messages increase, positive affect increases, thus supporting the hypothesis. VPC of negative memorable messages had a weak
negative relationship to depression \( (r=-1.46, p<.05, r^2 = .21) \). This finding suggests that as VPC ratings decrease, depression increases. This finding supports H1 that asserts that VPC is negatively related to depression. Another significant relationship was found between the VPC in negative messages and self-efficacy \( (r=.28, p<.05, r^2 = .08) \), indicating that as VPC ratings of negative memorable messages increase, self-efficacy increases, which supports the hypothesis. Finally, VPC had a weak, but significant relationship with stress \( (r=.21, p<.05, r^2 = .04) \). Thus, as VPC ratings of negative memorable messages increases, caregivers reduced stress increases, supporting the hypothesis (stress was reverse coded to be positive). Therefore it was concluded that H1 was partially supported for positive memorable messages and fully supported for negative memorable messages.
Table 6

Pearson Product Correlation for VPC of Positive and Negative Memorable Messages (MMs) With Depression, Positive Affect, Negative Affect, Stress, and Self-Efficacy

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>Positive Affect</th>
<th>Negative Affect</th>
<th>Stress</th>
<th>Self-efficacy</th>
</tr>
</thead>
<tbody>
<tr>
<td>VPC of positive MMs</td>
<td>-.15</td>
<td>.12</td>
<td>-.06</td>
<td>.06</td>
<td>.21*</td>
</tr>
<tr>
<td>VPC of negative MMs</td>
<td>-.19*</td>
<td>.26**</td>
<td>-.30**</td>
<td>.21*</td>
<td>.28**</td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (1-tailed).

*Correlation is significant at the 0.01 level (1-tailed)
Table 7

Correlation Matrix for VPC of Positive and Negative, and Additional Memorable Messages (MMs) With Depression, Positive Affect, Negative Affect, Stress, and Self-Efficacy

<table>
<thead>
<tr>
<th></th>
<th>Self-efficacy</th>
<th>Stress</th>
<th>Positive Affect</th>
<th>Negative Affect</th>
<th>Depression</th>
<th>Positive MM VPC</th>
<th>Negative MM VPC</th>
<th>Additional MM VPC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Self-efficacy</td>
<td>1.00</td>
<td>.55**</td>
<td>.55**</td>
<td>-.51**</td>
<td>-.35**</td>
<td>.21*</td>
<td>.28**</td>
<td>.10</td>
</tr>
<tr>
<td>Stress</td>
<td>1.00</td>
<td>.54**</td>
<td>-.49**</td>
<td>-.30**</td>
<td>.06</td>
<td>.21*</td>
<td>.01</td>
<td></td>
</tr>
<tr>
<td>Positive Affect</td>
<td>1.00</td>
<td>-.52**</td>
<td>-.51**</td>
<td>.12</td>
<td>.26*</td>
<td>.34*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative Affect</td>
<td>1.00</td>
<td>.77**</td>
<td>-.06</td>
<td>-.30*</td>
<td>-.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Depression</td>
<td>1.00</td>
<td>-.15</td>
<td>-.19</td>
<td>-.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Positive MM VPC</td>
<td>1.00</td>
<td>.04</td>
<td>.47**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Negative MM VPC</td>
<td>1.00</td>
<td>.12</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Additional MM VPC</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Correlation is significant at the 0.05 level (1-tailed).

**Correlation is significant at the 0.01 level (1-tailed)
Collection of Memorable Messages and Stress, Depression, and Affect

To test RQ4, which asked what collection of memorable messages was related to well-being, several one-way ANOVAs were conducted. This was done to see if the collection of memorable messages caregivers reported receiving from their social networks were associated with reduced levels of caregiver stress, depression, and positive and negative affect. As previously noted, the independent variable was the composite of the majority of all memorable messages reported by each caregiver, which resulted in 5 major categories (welcome contributions, messages of hope, thoughtfulness, dismissive, and mixed messages). The unwelcome contributions category was not reported enough to be constituted as a category of collection.

Perceived Stress. The dependent variable in the first one-way ANOVA was the caregiver’s reports of stress on the perceived stress scale reverse coded such that higher scores indicate lower levels of stress and higher levels of stress. Homogeneity of variances was met for the collection of memorable messages (4.0, \( p=0.88 \)) in this analysis. Caregivers’ perceived stress was significantly predicted by the collection of memorable message types \( F(4, 111)=3.44, p<0.05, n^2=0.11 \). Post hoc comparisons using Tukey’s HSD method was used to control for Type I error. The results of this analysis indicate that the mean score for thoughtfulness \( (M=36.70, SD=8.03, p<0.05) \) differed significantly from dismissive messages \( (M=26.67, SD=5.68) \). Thoughtfulness also significantly differed from mixed messages \( (M=29.03, SD=6.82, p<0.05) \). Thus, results of RQ4 indicate that participants who reported receiving a majority of memorable messages that were thoughtful were significantly more likely to report lower levels of stress than were
participants who received a collection of dismissive or mixed messages. All other comparisons were not significant.

**Depression.** The second one-way ANOVA tested the independent variable (e.g. collection of messages) against the dependent variable of depression. Homogeneity of variances was met for the collection of memorable messages (4.0, \(p=0.21\)) in this analysis, which indicates that the variance within the sample was equal. Caregiver depression was significantly predicted by the collection of memorable message types \(F(4, 111) = 2.89, p < .05, \eta^2 = 0.09\). Post hoc comparisons using Tukey’s HSD method was used to control for Type I error. The results of this analysis indicate that the mean score for dismissive messages (\(M=51.67, SD=8.66, p < .05\)) differed significantly from welcome contributions (\(M=38.08, SD=9.01\)) such that participants who reported receiving a majority of memorable messages that were dismissive were significantly more likely to report higher levels of depression than those who reported receiving welcome contributions. All other comparisons were not significant.

**Negative Affect.** The third one-way ANOVA tested the independent variable (e.g. collection of messages) against the dependent variable of negative affect. Homogeneity of variances was met for the collection of memorable messages (4.0, \(p=0.30\)) in this analysis. Caregiver negative affect was significantly predicted by the collection of memorable message types \(F(4, 115) = 4.89, p < .05, \eta^2 = 0.15\). Post hoc comparisons using Tukey’s HSD method was used to control for Type I error. The results of this analysis indicate that the mean score for dismissive messages (\(M=33.50, SD=9.48, p < .05\)) differed significantly from welcome contributions (\(M=19.46, SD=7.00\)) and thoughtfulness (\(M=20.42, SD=6.69\)). Therefore, results indicate that participants
who reported receiving a majority of memorable messages that were dismissive were significantly more likely to report higher levels of negative affect when compared to welcome contribution and thoughtful messages. All other comparisons were not significant.

**Positive Affect.** A fourth and final one-way ANOVA tested the relationship between collection of messages and positive affect. Homogeneity of variances was met (4.0, p=.57), indicating that the variance in the sample was equal. However, the ANOVA was not significant $F(4, 113) = 1.53, p>.05, n^2=.05$. Therefore, positive affect was not significantly different based on the collection of memorable messages.

Overall, the collections of memorable messages reported by caregivers are a significant predictor of caregiver stress, depression, and affect. In particular, thoughtful messages had lower ratings of stress, than dismissive and mixed messages. In addition, caregivers who reported dismissive messages were more likely to have higher levels of depression than caregivers who reported welcome contribution messages. Finally, caregivers who received a collection of dismissive messages were also found to have significantly higher reports of negative affect than those who had a collection of thoughtful and unwelcome contribution messages.
### Table 8

*Means and Standard Deviations of the Collection of Memorable Message Types and Well-Being Variables*

<table>
<thead>
<tr>
<th>Well-being Variables</th>
<th>Collection of Memorable Messages</th>
<th>N</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Positive Affect</strong></td>
<td>Welcome Contributions</td>
<td>13</td>
<td>35.38</td>
<td>8.51</td>
</tr>
<tr>
<td></td>
<td>Messages of Hope</td>
<td>29</td>
<td>32.14</td>
<td>8.05</td>
</tr>
<tr>
<td></td>
<td>Thoughtfulness</td>
<td>12</td>
<td>34.67</td>
<td>8.84</td>
</tr>
<tr>
<td></td>
<td>Dismissive</td>
<td>6</td>
<td>25.67</td>
<td>6.35</td>
</tr>
<tr>
<td></td>
<td>Mixed Messages</td>
<td>58</td>
<td>31.64</td>
<td>9.40</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>118</td>
<td>32.18</td>
<td>8.93</td>
</tr>
<tr>
<td><strong>Negative Affect</strong></td>
<td>Welcome Contributions</td>
<td>13</td>
<td>19.46</td>
<td>7.00</td>
</tr>
<tr>
<td></td>
<td>Messages of Hope</td>
<td>30</td>
<td>27.43</td>
<td>8.18</td>
</tr>
<tr>
<td></td>
<td>Thoughtfulness</td>
<td>12</td>
<td>20.42</td>
<td>6.69</td>
</tr>
<tr>
<td></td>
<td>Dismissive</td>
<td>6</td>
<td>33.50</td>
<td>9.48</td>
</tr>
<tr>
<td></td>
<td>Mixed Messages</td>
<td>59</td>
<td>28.63</td>
<td>10.45</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>120</td>
<td>26.76</td>
<td>9.82</td>
</tr>
<tr>
<td><strong>Stress</strong></td>
<td>Welcome Contributions</td>
<td>13</td>
<td>31.54</td>
<td>6.13</td>
</tr>
<tr>
<td></td>
<td>Messages of Hope</td>
<td>28</td>
<td>30.50</td>
<td>6.02</td>
</tr>
<tr>
<td></td>
<td>Thoughtfulness</td>
<td>10</td>
<td>36.70</td>
<td>8.03</td>
</tr>
<tr>
<td></td>
<td>Dismissive</td>
<td>6</td>
<td>26.67</td>
<td>5.68</td>
</tr>
<tr>
<td></td>
<td>Mixed Messages</td>
<td>59</td>
<td>29.03</td>
<td>6.82</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>116</td>
<td>30.21</td>
<td>6.90</td>
</tr>
<tr>
<td><strong>Depression</strong></td>
<td>Welcome Contributions</td>
<td>12</td>
<td>38.08</td>
<td>9.01</td>
</tr>
<tr>
<td></td>
<td>Messages of Hope</td>
<td>29</td>
<td>43.31</td>
<td>7.66</td>
</tr>
<tr>
<td></td>
<td>Thoughtfulness</td>
<td>12</td>
<td>39.67</td>
<td>7.56</td>
</tr>
<tr>
<td></td>
<td>Dismissive</td>
<td>6</td>
<td>51.67</td>
<td>8.66</td>
</tr>
<tr>
<td></td>
<td>Mixed Messages</td>
<td>57</td>
<td>44.33</td>
<td>10.11</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td>116</td>
<td>43.33</td>
<td>9.43</td>
</tr>
</tbody>
</table>
Self-efficacy, Collection of Memorable Messages, and Stress, Depression, and Affect

To answer RQ5, which asked if self-efficacy moderated the relationship between memorable message type and caregiver stress, depression, and affect. Several one-way analyses of covariance (ANCOVAs) were run.

Perceived Stress. When controlling for self-efficacy, the relationship between collection of memorable message types and perceived stress was no longer significant, $F(4, 101) = 1.01, p=.41, n^2=.04$ This finding may be explained because the collection of memorable messages may not be impacted by caregivers’ ability to care for themselves.

Depression. A second ANCOVA was run to test if self-efficacy moderated the relationship between the collection of memorable messages and depression. The ANCOVA was not significant, $F(4, 101) = .75, p=.56, n^2=.03$. This finding suggests that when self-efficacy is controlled the relationship between depression and collection of messages is no longer significant.

Negative Affect. A third ANCOVA was run to test whether self-efficacy moderated the relationship between the collection of memorable messages and negative affect. The ANCOVA was not significant $F(4, 101) = 1.76, p=.14, n^2=.06$. The final ANCOVA revealed that when self-efficacy is controlled for negative affect, it is no longer significant.

Positive Affect. A fourth and final ANCOVA was run to test whether self-efficacy moderated the relationship between the collection of memorable messages and positive affect. The ANCOVA was not significant $F(4, 101) = .14, p=.97, n^2=.01$. The final ANCOVA revealed that when self-efficacy is controlled for positive affect, it is not significant.
Overall, the significant findings between the collection of caregivers’ memorable messages and depression, stress, and affect drop out when controlling for self-efficacy.

Summary

The current chapter described the results of the research questions and hypothesis that were presented in Chapter one. Findings from the present study offer insights into cancer caregiver’s memorable messages of support from social network members. In this chapter, memorable message type was related social support type. In particular, positive messages of hope and dismissive messages were related to emotional support. Additionally tangible support was most associated to thoughtful messages and unwelcome contributions were most associated with informational support. In addition ratings of VPC on negative memorable message types were found to be significant for three of the dependent variables in the study (e.g. depression, well-being, and negative affect). Finally, the memorable message, open ended responses offered insight into the content of supportive communication. These messages provided an in-depth look at both positive and negative memorable messages of support. In Chapter 4, implications of these findings are discussed.
CHAPTER 4
DISCUSSION

Family caregivers are susceptible to negative consequences as a result of their efforts toward comforting and caring for a loved one with cancer. These negative consequences can include caregiver burden and anxiety (Hunt, 2003), especially when caregivers do not have access to adequate social support; however, those who have access to more effective support are able to cope better with the caregiving process (Grbich et al., 2001; Holahan et al., 1997). For example, Ekwall (2009) reported that caregivers were both emotionally and socially lonely when they had little to no social network. Ekwall found that this resulted in a significantly lower quality of life (e.g. mental health). However, caregivers who communicate openly with friends or family members may overcome some of the negative consequences associated with care (Houldin, 2007). In other words, we know that when caregivers have access to better, more meaningful support and larger social networks (Selleappah et al., 2001; Perreault et al., 2004; Houldin, 2007) they experience improvement in their physical and emotional health (Grbich et al., 2001).

Despite this, little is known about the specific message content that constitutes quality support and helps to overcome these negative consequences. Therefore, to expand the scope of the research based on what is currently known this study focused on the message content that contributes to caregiver well-being and provides support. Specifically, the goal of the dissertation study was to uncover both the most positive and the most negative messages caregivers report receiving from their social networks that were memorable in order to understand more about the content of social support for
cancer caregivers. Another goal of the dissertation was to examine the links between memorable messages, VPC, stress, depression, and affect, and self-efficacy.

Caregivers were asked to share open-ended responses of specific positive and negative memorable message content that they recalled receiving from a social network member. This contribution toward literature on social support is important because it captures specific messages that have potential to help caregivers cope. Understanding the types of messages that are effective in this context is a first step in trying to improve caregivers’ overall quality of life and even combat loneliness. Because memorable messages may continue to be a source of support long after they are shared, understanding what types of memorable message content is considered more positive may be helpful for social networks when considering what to say to a caregiver.

The current study synthesized literature in social support and CSM to better explain the ways in which caregivers cope with trauma and difficulty. Literature on CSM and social support consider the ways that people make sense of difficult experiences and are often received during confusing and critical moments in a person’s life (Burleson, 1994; Koenig Kellas & Kranstuber Horstman, 2015). Given that caregivers often experience burden and anxiety (Hunt, 2003), CSM and social support taken together have potential to lend insight into the most effective ways to present comfort to caregivers by painting a more holistic portrait of supportive message content, and the ways through which these messages provide support.

The results revealed several types of positive and negative memorable messages and identified the ways in which caregivers saw those messages as helpful. The results also demonstrate patterns between memorable messages, VPC, social support types, and
well-being, including depression, stress, affect, and self-efficacy. The remainder of this chapter discusses the implications and conclusions that connect to existing literature and theory that were drawn from the study’s findings. For clarity, I present the remainder of this chapter in topical order. Specifically, each topic and research questions are covered which include: (a) positive and negative memorable message types of family caregivers (RQ1); (b) memorable message types and social support types (RQ2); (c) memorable message types and VPC (RQ3); (d) VPC and stress, depression, affect, and self-efficacy (H1); (e) collection of memorable messages, self-efficacy, depression, stress, and affect (RQ4, RQ5); (f) limitations of this study; and (g) recommendations for future research.

Memorable Message Types

CSM is a model that focuses on the way that people make sense of their experiences, particularly within families and during times of difficulty (Koenig Kellas & Kranstuber Horstman, 2015). Family caregivers of patients with cancer may need to make sense of their experiences, as the disease progresses and changes occur in their daily lives. Under the larger umbrella of CSM, is the study of memorable messages, which recognizes the influential nature of messages (Knapp et al., 1981). Considering memorable messages are long-lasting, and impactful (Knapp et al., 1981) it is important to understand the effects they have on caregivers’ quality of life and ability to cope. Thus, to build on existing research in CSM and memorable messages, the current study investigated both positive and negative memorable messages for caregivers.

**Hope: Mixed Messages.** Although I set out to identify both positive and negative memorable messages, the coding process revealed that unique and common codes for positive and negative messages. Messages of hope were the most prevalent supra-type
that emerged from caregivers reported memorable messages. Interestingly, messages of hope were the only supra-type that was present in both positive and negative reports of memorable messages. This suggests that messages of hope, while mainly positive, have potential to be perceived as negative by caregivers. In this study, messages of hope were most frequently reported as positive messages. This finding is consistent with previous research that has found that hopeful messages are mostly positive (e.g. Rand & Cheavins, 2009; Leung et al., 2009). Researchers, however, have focused more on the positive impact of messages of hope (Rand & Cheavins, 2009) as hope is considered to be “both the perceived ability to generate routes to a goal and the perceived ability/determination to use those routes” (Rand & Cheavins, 2009, p. 324). This study recognizes the importance of hope in our interpersonal relationships and our ability to maintain hope during difficulty (Snyder et al., 2002).

At the same time, the results of the current study demonstrate that hope is not always welcome, and can indeed have negative outcomes. Considerably less research has focused on negative aspects of hope. This study contributes to the emerging research that explores the notion of false hope (Leung et al., 2009) and in recognizing that hope can be both positive and negative. In addition, this finding is significant in demonstrating the functional ambivalence (Spitzberg & Cupach, 2007) that is inherent in messages of hope. It is important to continue to explore the role that hope plays within difficult and traumatic experiences, especially as it relates to cancer because hope may have different functions for different types of cancer and stages.

Messages of hope were categorized into two sub-types. Encouraging messages accounted for the majority of hopeful messages and faith accounted for fewer. The
prevalence of messages of encouragement suggests that caregivers, for the most part, valued messages that made them feel hopeful or confident about their situation. For example, caregivers valued when social network members made them feel that there was hope, despite the difficulty and encouraged them to keep fighting. However, those that identified encouraging messages as their most negative memorable message clearly did not value messages that encouraged caregivers to keep going and often considered them prescriptive.

Similarly faith messages were welcome by some, while others did not appreciate them. Prayer has been linked to reduced levels of depression and distress for cancer patients (Shaw et al., 2007). However, other studies have found that negative experiences with religious coping can increase depression and decrease physical and emotional well-being (Hills et al., 2005). Similar to prior research on the function of faith in coping, prayer was reported as being both negative and positive for cancer caregivers. Therefore, future research should continue to consider the function of messages of faith as they relate to health outcomes for caregivers. Given that faith messages were reported similarly for both positive and negative memorable messages, (i.e., “I’m praying for you”) it may be beneficial to conduct qualitative research on the role of prayer and health for caregivers in the future. This may lend further insight into why prayer is positive and negative for some. Also, this population was predominately Christian, thus future research should examine whether there are similar benefits or drawbacks to messages focused on faith among people of different religious backgrounds or for those who do not practice religion. Messages of hope may follow a script of what social networks believe to be most positive. However, these messages, while helpful to some, may not account
for the individual caregivers’ needs, desires, or beliefs. Therefore, given that caregivers viewed this type of message as positive and negative, it seems that messages of hope are dependent on caregiver’s beliefs, values, and needs.

**Positive memorable messages.** Thoughtful messages were also reported as positive messages of support. Caregivers reported those social network members who expressed *being there* messages as among the messages that constituted the most positive memorable supportive messages they received. This finding is consistent with research, because caregivers who have access to social networks who are willing to “be there” tend to report less burden (Bainbridge et al., 2009). These types of messages – many of which were nonverbal – may have made caregivers feel as though they were not alone, giving them the motivation needed to provide care.

In addition to messages of being there, caregivers also felt that being presented with gifts from social network members was most memorable, and positive. Those who reported these messages also shared stories related to what being presented with gifts meant to them. Like *being there*, receiving gifts was a form of nonverbal message. Nonverbal communication is important in health contexts. Specifically, Keeley (2004) found that a theme of community tied in with the notion of good death in her study on memorable messages in final conversations. For example, in the study caregivers shared how memorable nonverbal messages included helping their loved one pass by being physically present (p. 95). Therefore caregivers in Keeley’s study did not want their loved one to feel alone at the end of life. Current caregivers may also desire community and for social network members to be alongside them during this process. Caregivers have been found to appreciate support, from friends and family, that is focused on hands-
on practical help such as having people reach out through email (Stajduhar et al., 2008). One way social network members can do this is by being there and providing unspoken, or nonverbal, memorable messages. Therefore, these findings contribute to literature on memorable nonverbal messages because many memorable messages found in the thoughtfulness supra-type were nonverbal (i.e. sending cards, presents, and being present). Future research should consider both the verbal and nonverbal memorable messages in cancer contexts to truly understand what types of messages are most influential.

Finally, welcome contributions were messages that were centered on providing caregivers positive feedback related to the caring process. The sub-type acknowledgement of caregiver efforts recognized caregivers’ abilities and efforts. This finding is similar to research on confirmation theory. Specifically, confirmation theory posits that people want to receive messages that are validating (Buber, 1965). Welcome contributions validated caregivers’ efforts and made them feel they were doing an effective job providing care. Caregivers also reported positive advice as being memorable. Positive advice was messages that focused on providing information or suggestions on ways that caregivers could overcome obstacles. Finally, good news was the least reported message within welcome contributions. Good news messages presented the caregivers with good news related to the cancer, letting caregivers know when treatments were working.

**Negative Memorable Messages and Confirmation.** Unlike messages of hope, dismissive messages were solely reported as being negative memorable messages. Dismissive messages accounted for the majority of negative messages shared. These
messages suggest that when social network members disregard a caregiver’s feelings (e.g. “move on”), downplay the illness (e.g. “that’s not a serious type of cancer”), or are blaming (e.g. “we never hang out”) caregivers remember them as negative. Fewer caregivers reported unwelcome contributions or messages of hope as being negative suggesting that caregivers, overall, see dismissive comments as particularly negative.

This finding may point to a desire for caregivers’ feelings to be acknowledged and for others to understand how serious and impactful cancer is on a caregiver. People have a fundamental need to be validated by others in order to achieve a strong sense of self (Buber, 1965). Therefore, confirmation theory may help to explain how caregivers’ perceptions of their situation are shaped by the messages received from social network members. For example, confirming messages validate the person and accept them. These types of messages were most characterized in the current study by the most positive memorable messages such as welcome contributions. Welcome contributions acknowledged caregivers’ efforts, which caused caregivers to view these types of messages as more positive. However, when messages are disconfirming they can cause people to value themselves less (Sieburg, 1975). Dismissive messages did not provide caregivers with validation because they were most commonly reported as not considering the caregivers feelings, blaming, and acting as though the cancer diagnosis was not serious. Given that disconfirming messages cause people to value themselves less, this may help to explain why dismissive messages are the most impactful negative memorable message for caregivers.

In addition, social network members who consider caregivers’ perspectives likely confirm, acknowledge, and attempt to understand (Trees & Koenig Kellas, 2009) their
experiences. Effective perspective taking behaviors provide a space through which people can talk and feel understood (Koenig Kellas, Willer, & Trees, 2013). Effective perspective taking is often linked to more positive perceptions of support and comfort (Trees & Koenig Kellas, 2009). Therefore, social network members who consider caregivers’ experiences may share more positive messages, which lead to more effective supportive interactions (e.g. thoughtfulness, messages of hope). However, social network members who shared dismissive messages did not provide a space for caregivers to talk and disregarded their experiences. It is important for social network members to consider caregivers’ perspectives, because this could help them avoid sharing dismissive messages. Understanding perspective taking, in this context, would help social network members put themselves in caregivers’ shoes.

Finally, unwelcome contributions accounted for the least amount of memorable messages reported. These messages were also found to be exclusively negative. Given the impact that dismissive messages seem to have on caregivers, this type of message may not have been considered as negative when compared to dismissive messages or messages of hope. Therefore, dismissive messages and messages of hope appear to have a much more significant impact on caregivers than those of unwelcome contributions.

Overall, findings demonstrate that there are different types of messages that can be characterized as most positive and negative in the cancer caregiving context. These findings may be beneficial to future scholarship and translational work on ways to provide effective supportive messages to help caregivers cope. Ultimately, this may lead to educational tools (e.g. pamphlets, talks) that could help social network members understand the types of messages that may benefit caregivers. These types were later
collapsed into a collection of memorable messages to obtain a more holistic view of how the collection of memorable messages impacts caregiver well-being.

**Memorable Message Types and Support Types**

RQ2 asked, are memorable message types related to different types of social support? Emotional support was the most common type of support enacted in this study. This is not surprising considering emotional support has consistently been considered one of the most valuable types of support for those that are unable to control their situation (Albrecht & Adelman, 1987). Given that cancer is progressive (Nijober et al., 1998) emotional support may best provide the support needed for caregivers. This could be—in part—because emotional support focuses on understanding others’ feelings and seeks to provide care and comfort.

While research demonstrates the common use of emotional support during transitional, critical, and difficult moments (Albrecht & Adelman, 1987), considerably less research has focused on memorable messages as a function of social support (Smith et al., 2009). Smith and colleagues encourage scholars to consider the function of support types as they relate to memorable messages. This is important, because social support types fulfill different purposes related to support. Thus, enactment of different support types may be most related to different types of messages.

Results for the current study indicated that messages of hope had the strongest association with emotional support. Thus, messages of hope were considered to be predominately a form of emotional support. Messages of hope were focused on providing caregivers with hope, encouragement, and faith. The description of these messages was consistent with key characteristics of emotional support. For example, emotional support
often provides hope and expresses understanding (Goldsmith, 2004). This finding was also consistent with previous research, which suggests that emotional support is the most common form of support in cancer (Preece & Ghozati, 2001), and that messages of hope are most linked to a form of emotional support (Smith et al., 2009). Emotional support has been found to be beneficial toward health and well-being and often gives people a positive view of their situation (Goldsmith, 2004). Message of hope were most reported as positive, so these types of messages may be helpful in providing a positive outlook related to care.

However, while some research has found benefits associated with emotional support, others have found drawbacks. Lincoln (2000) indicates that emotional support and negative interactions are often associated with one another. Emotional support is often viewed as negative, because caregivers may make negative attributions (i.e. people don’t care, I’m not worth listening to) about themselves or their experiences (Lincoln, 2000). Therefore, while some messages attempt to be attentive, provide comfort, and care (e.g. emotional support) others are inattentive and do not provide comfort. For example, caregivers may not feel hopeful about their situations. Therefore, messages of hope may be viewed as a sense of false hope, or may make the caregiver feel they are unable to express themselves. In the present study, messages of hope were found to be both positive and negative, which is consistent with previous research on emotional support, which has recognized the positive (Goldsmith, 2004) and negative (Lincoln, 2000) functions of emotional support. This is significant, because future scholars may want to investigate the functional ambivalence of emotional support in different types of message content.
Much like messages of hope, dismissive messages were considered an attempt at providing emotional support. For example, telling someone that certain type of cancer is the best type to have, may be an attempt at providing comfort and care (e.g. emotional support). However, it was commonly attributed as being a message that did not provide acknowledgement of the seriousness of cancer. Dismissive messages also attempted to encourage participants keep going, but were viewed negatively. For instance, social network members told caregivers that it was time to “get over their situation”, being inattentive and not considerate of the caregivers’ feelings. Therefore, while social network members enact emotional support to provide comfort, they may not be aware of the potential negative impact that emotional support can have.

While emotional support was significantly related to messages of hope, it was not the only message type related to support type. Tangible support was found to have a strong association with thoughtful messages. According to Cutrona and Suhr (1992), tangible support is the physical act of providing needs and goods. Examples of this include receiving a gift, helping someone, or being there. Thoughtful messages were defined as social network members “being there” by offering to take caregivers places or letting them know they were not alone. Thoughtful messages also included receiving presents from social network members. Caregivers described gifts as being thoughtful, and helping them to forget the many struggles they face while caring. Previous research has found that friends and family members often provide women with breast cancer with tangible support (e.g. helping cook or clean) which helps them balance their familial roles (Hirschman & Joretha, 2005). Tangible support has also been found to be helpful for patients because it helps to buffer stress that follows a serious illness (Dakof & Taylor,
Tangible support may also be helpful for caregivers. Specifically, it may also help caregivers balance their roles as caregivers, and could potentially buffer stress. Therefore, sharing nonverbal messages that are tangible support may also benefit caregivers.

As previously discussed, nonverbal memorable messages have an impact on caregivers in cancer, in part because it can be a reminder that they are not alone (Keeley, 2004). Thoughtful messages, in the form of gifts and tangible support, may provide comfort because they give caregivers a break from the anxieties and difficulties related to cancer. Gifts are messages in themselves, and could be influential—in that they may be the most thoughtful for caregivers. Specifically, gifts are personalized to each individual, making them symbolic and unique. For example, a 23-year-old woman in the study described how “gifts are personal, heartfelt, and have nothing to do with cancer” (#153) making them feel supported and loved. Therefore, future research should continue to explore gifts as messages of support.

The chi-square results also revealed that welcome contributions had a weak association with esteem support. According to Cutrona and Suhr (1992) esteem support promotes peoples skills and intrinsic value. These types of messages show respect to let others know that they are enjoyable to be around. In this study, welcome contributions were defined as messages that focused on providing positive information surrounding caring for a loved one. This was done by social network members presenting positive advice, sharing good news, or acknowledging caregivers efforts and abilities. Both welcome contributions and esteem support appear to focus on how caregivers feel about themselves, while encouraging them that they are a worthwhile person. Again, this was another type of support that may lend insight into the supportive function of memorable
message content. That is when social network members enact esteem support; they may be more likely to share certain types of messages.

Overall, emotional support was the most reported type of support. Additionally emotional support related to both positive and negative messages. This means that emotional support is often enacted within many different types of messages. Thus, while emotional support may be considered helpful in some messages, it may also be considered negative in others. Unlike emotional support, tangible support was found exclusively within positive memorable messages. To be specific, tangible support was most related to messages that ensured caregivers that they’d be there. Therefore, from the study, we know that when social network members enact tangible support when they express a willingness to be there for caregivers. Social network members who enact tangible support are also sharing nonverbal messages of support. That is, caregivers who received a present from a social network member, found this nonverbal message of support to be most related to tangible support. Therefore, tangible and emotional support could be linked to different types of memorable message content. It may be beneficial to explore more message content that relates to these two types of support in cancer contexts.

While message content could be linked to different types of support, this does not help to explain the perceived helpfulness of this message content. Therefore, in order to get a better sense of the helpfulness of messages, I also investigated the relationship between VPC and message content. VPC also helped to explain the impact these messages had on caregiver stress, depression, and affect. Thus, in the following section I share the implications behind the findings of VPC.
Memorable Message Types and VPC

The majority of VPC ratings of the most positive memorable message types were non-significant. However, certain types of negative memorable messages were significantly related to VPC. In other words, the most negative memorable messages may be more salient when it comes to perceived helpfulness of a message. In particular, dismissive messages were perceived as being the least person-centered when compared to messages of hope and unwelcome contributions. This may help to explain why dismissive messages were the most prevalent type of negative memorable message reported. Based on previous research and the findings in this study, dismissive messages may also be considered the least supportive and helpful for caregivers in cancer (Burleson & Samter, 1985) likely because they are discouraging and delegitimizing. Again, communicated-perspective taking (Koenig Kellas, Willer, & Trees, 2013) has potential to help shed light on negative memorable messages. If social network members understood and considered what it would be like to provide cancer care, they may be less likely to share dismissive messages.

Dismissive messages were predominately associated with not understanding a caregivers’ point of view. In other words, caregivers may feel as though these messages don’t confirm their feelings and devalue them. Confirmation theory recognizes that people desire messages that make them feel valued and respected (Buber, 1965). Given that dismissive messages were consistently related to VPC, it may be important to consider how confirming and disconfirming messages can relate to perceptions of VPC.

Finally, the finding of VPC messages being related to dismissive messages is intriguing. Dismissive messages, in this study, were found to have lower ratings of VPC
then unwelcome contributions and messages of hope. This is—in part—because research on VPC suggests that more positive interactions are most closely associated with higher levels of VPC. In this situation, negative interactions may also be related to VPC. Therefore, scholars in VPC should continue to consider the relationship between negative messages and negative supportive interactions with perceptions of VPC. This would provide a more holistic picture of the role VPC plays in providing comfort and quality care. It is also important to consider the impact VPC has on caregiver well-being (e.g. stress, depression, affect, and self-efficacy) to get a more holistic view of the impact of social support on caregiver well-being.

**VPC in Stress, Depression, Affect, and Self-efficacy**

H1 examined the relationship between VPC and caregiver well-being including stress, depression, self-efficacy, and positive and negative affect. Given that previous research has found that VPC can impact the perceptions of whether or not interactions provide quality support (Burleson & Samter, 1985; Goldsmith & MacGeorge, 2000); it is important to consider how VPC may or may not influence caregiver stress, depression, affect, and self-efficacy.

The current study found non-significant results for VPC of positive memorable messages for stress, depression, positive affect, and negative affect. However, while the majority of findings for VPC of positive messages found non-significant results, there were significant findings between ratings of VPC in positive messages and caregiver self-efficacy. Thus, caregivers who rated VPC higher within their positive memorable messages felt that they were better able to care for themselves and manage daily tasks. In the future, it may benefit scholars to understand the relationship between self-efficacy
and social support. However, it does not seem that higher VPC ratings have a significant
impact on caregivers, when considering the positive messages shared. This is somewhat
surprising, considering prior research in VPC argues that effective support is highly
person centered, inviting recipients to elaborate on their feelings (Burleson, 1994). It may
be that, in the cancer context, positive messages – such as thoughtfulness, hope, and
welcome contributions – did not invite caregivers to elaborate.

While VPC of positive messages only yielded one significant result, VPC of
negative memorable messages was significantly related to all dependent variables
(depression, self-efficacy, positive and negative affect, and well-being). Specifically,
when messages are negative, but still rated high on VPC, caregivers reported lower levels
of stress, depression, and negative affect. While the content of memorable messages may
be negative, caregivers may still view their social network members as trying to be
helpful (i.e. be more person centered). This finding is consistent with previous research in
VPC—in that—researchers have found that higher ratings of VPC are associated with
better health outcomes (Burleson et al., 2009). Therefore, even with negative messages,
the higher the rating of VPC, the better quality of health. However, VPC has also been
linked to better quality of support (Burleson et al., 2009). For caregivers, negative
memorable message types may not be providing quality support. Therefore, in the event
when messages are negative, if they are VPC, they are still possibly helpful. In addition,
if caregivers have higher ratings of well-being, they are not as negatively affected by
messages, especially when high on VPC. While VPC was found to impact caregiver well-
being (e.g. stress, depression, affect), the collection of memorable messages may also
impact caregiver well-being. Therefore, the following section reviews findings of caregiver well-being as they relate to the collection of memorable messages.

**Collection of Memorable Messages, Stress, Depression, Affect, and Self-efficacy**

RQ4 asked what collection of memorable messages influence caregivers stress, depression, and affect. There were five major categories that emerged within the composite of collection of messages which included: *welcome contributions, messages of hope, thoughtfulness, dismissive, and mixed messages*. *Unwelcome contributions* were not reported with enough frequency as a majority to constitute a collection of messages for caregivers. Several one-way ANOVAs were run to understand how the collection of messages impacted perceived stress, depression, and positive and negative affect. Results revealed that thoughtfulness was significantly different from dismissive messages and mixed messages on caregiver stress. This indicated that caregivers who received a collection of thoughtful messages also reported significantly lower levels of stress. Therefore, nonverbal memorable messages may be the most impactful types of memorable messages toward caregiver health. In addition, it seems that consideration of caregivers’ needs and desires is the most important aspect of positive memorable messages. Thus, verbal messages may have less of a long lasting impact on caregivers than nonverbal messages. Because of the cross-sectional nature of the study, however, future research should examine potential causal paths between memorable messages and well-being.

The most notable finding of the collection of memorable messages on depression, stress, and affect was found in dismissive messages. Dismissive messages were significant in every model. Dismissive messages did not acknowledge, validate, or
provide caregivers a space to express themselves. This finding suggests that caregivers want their feelings and experiences to be acknowledged and understood. Therefore, it is important for social network members to consider caregivers perspectives. As previously discussed, perspective taking (Koenig Kellas, Willer, & Trees, 2013) may offer insight for social network members. If social network members put themselves in caregivers’ shoes, they may be less likely to share dismissive messages. In addition, they may realize the importance of trying to understand how a person is feeling, and consider what that person could use to cope with their experiences. Likewise, confirmation theory suggests that confirming messages validate people, which can impact people’s perceptions of that message (Buber, 1965). Dismissive messages did not validate caregivers feelings, which demonstrates the impact that disconfirming messages can have, especially as it relates to difficulty and trauma. To see if any other variables controlled this relationship, I also investigated the role of self-efficacy and stress, depression, and affect.

Self-efficacy refers to the sense of control that people have over their behavior or a given situation. For caregivers, it refers to the amount of control they feel they have over caregiver problems (Au et al., 2010). Therefore, to see if self-efficacy moderated the relationship between the collection of memorable messages and depression, affect, and stress, several ANCOVAs were run (RQ5). The findings revealed that when controlling for self-efficacy, the significant findings of the dependent variables dropped out from the initial ANOVAs between collection of memorable messages and well-being. Therefore, self-efficacy is an important variable to consider for caregivers’ levels of stress, depression, and negative affect.
When self-efficacy was rated high the negative relationship between negative memorable message types and well-being no longer exist. Prior research is consistent with this finding. For example, research has shown that when patients report higher levels of self-efficacy related to pain, they report lower levels of pain, psychological distress, and show an improvement in physical performance (Buckelew et al., 1994). In addition, family caregivers who are better able to solve problems have increased levels of self-efficacy, which help to manage caregiver stress and reduce psychological distress (Kim & Given, 2008). The American Cancer Society (2014) also suggests that caregivers’ ability to maintain self-efficacy is an important aspect of adjusting to cancer. This study also found that caregiver has a great impact on caregivers, and that higher ratings help to alleviate psychological distress. Thus, information about caregiver self-efficacy could help caregivers develop better coping skills that could in turn enhance caregivers’ self-efficacy. Future research should continue to explore the role of self-efficacy for caregivers. This could lead to further education on ways to help caregivers improve their self-efficacy.

Summary

Collectively, the findings of the current dissertation have powerful implications for researchers and social network members of family caregivers in cancer. There are several different types of memorable messages that can be constituted as either positive or negative in the context of cancer care. Each of these memorable message types offers social network members with content of supportive and non-supportive message content. In addition, these message types provide content that is present within different social support types. This could help to understand what sorts of messages are most linked to
different types of enacted support. In addition, memorable message content may be viewed more or less helpful depending on how person centered the content is. This research found that VPC is most related to negative memorable messages. Therefore, negative memorable messages in this context seem to have the greatest impact on evaluations of VPC and caregivers’ well-being (e.g. depression, stress, affect). Findings also revealed the significance of self-efficacy for caregivers in cancer, such that the relationship between the collection of messages and all dependent variables of well-being dropped out after controlling for self-efficacy. Overall, because similar content could be seen as positive or negative, evaluations of VPC in addition to content and social support type is important in uncovering a holistic picture of what works and doesn’t. Thus, for caregivers to get complete, effective, and quality social support is important to collect an inventory of the message content caregivers find most and least helpful.

In summary, social network members may feel that they are providing effective and quality support, but the current findings indicate that many family caregivers feel that dismissive negative memorable messages are prevalent and unhelpful. This could be a result of caregivers not knowing what to say, not putting themselves in the caregivers’ situation, and not providing validation of their experiences. Thus, the results could help to provide social network members with specific examples on effective and ineffective supportive message content. The implication of these findings further suggests that negative memorable messages may have the greatest impact on caregivers. Therefore, it is important that social network members are provided pamphlets and potentially a website with information about these messages. In addition, future research may consider studies on memorable messages related to confirmation theory and perspective taking.
Limitations

The study yielded interesting, unique findings related to caregiver’s memorable messages and social support; however, there are still limitations present that must be addressed. First, recruitment and participant sample could be improved in future research. Given that cancer is a difficult topic to discuss it was challenging to find participants who were current caregivers. Thus, this study was inclusive, in that bereaved and remission caregivers were included. The intention was to conduct exploratory research to create space for future directions in research. Interestingly, about half of participants were current caregivers to patients who were in Stage IV. This population can be especially difficult to locate. However, recruitment efforts were able to get many participants in later, more terminal progressions of the disease.

Second, in addition to better recruitment and a larger sample size, this study also lacked a diverse population. Thus, in the future, a more diverse group of participants should be considered. The main recruitment for this study occurred in the Midwest and smaller rural communities in the south. This resulted in a mostly Caucasian/White ($n=143, 91.7\%$) participants from rural and conservative areas (e.g. Nebraska, Arkansas, Illinois), and participants were mainly Catholic ($n=38, 24.4\%$) and Christian ($n=33, 21.2\%$). In the future, scholars should investigate messages that are salient to those of different racial backgrounds as well as differing religions. This may help to provide a richer and in-depth picture of what effective support looks like in different cultural groups. Specifically, religious beliefs and rituals may be a source of interest when investigating supportive behavior within a cancer context. The majority of the participants in this study were women ($n=139, 89.7\%$), men only accounted for 9.7%
(n=15) of participants. Understanding what types of messages are supportive for both women and men may be helpful to social network members, as these may or may not differ. Therefore, future scholarship should consider the differences in supportive message content between men and women. Overall, future research should recruit from a larger geographic scale in an effort to reach a more diverse participant pool.

Third, one of the biggest limitations was the time frame of the study. Ideally, data collection for another few months would have allowed a larger, more powerful sample size. While the study had a powerful sample size that yielded some significant results, more participants could have been beneficial, especially in the analysis of different types of memorable messages. There was still more left to explore related to memorable messages and social support. However, the data collection process will continue after the presentation of the dissertation for future research projects.

Fourth, there were methodological limitations to the study. Data was collected through an online self-report survey. The survey included open ended questions for participants to share their memorable messages and Likert-type scales. However, the self-report data is limited on a survey because the researcher is not able to ask participants to clarify content or ask follow up questions. This issue was apparent in some of the memorable messages shared. For example, participants shared longer, storied, versions of what was most memorable to them. In the future, in-depth interviews or observations may allow participants to expand on the information they present and share richer stories.

Finally, the data is cross-sectional and does not allow for causal claims. Future research should experimentally test the longitudinal effects of memorable messages on caregivers’ well-being and perceptions.
Despite the limitations that were present in the study, there are many strengths that provide a foundation for future research to understand messages of support that strengthen or hinder the coping process for family caregivers in cancer. Specifically, there is much more to be learned about supportive message content and how these messages can be used to help caregivers cope. Furthermore, caregiver’s social network members may not be equipped with the proper tools or education to provide effective supportive messages. The more scholars can learn about what sorts of messages are more helpful or unhelpful, the more we may help caregivers cope. The following section outlines some future directions of research that emerged as a result of the current study as well as practical applications for social network members to consider.

Practical Application

As suggested throughout this chapter, this study is valuable because it provides insight into the most impactful messages of support for caregivers in cancer. Communication is a process; therefore, messages may not always be intentionally positive or negative when shared by social network members. However, social network members should use the results of this study to improve on their understanding of what messages are most positive and negative in this context. In the following section, I provide suggestions based on the results of this study for social network members of caregivers providing cancer care. These suggestions were derived from a limited population sampling and were not specific to a particular type of cancer caregiver. However, there may be helpful considerations that social network members can use as tools when seeking to provide support. Additionally, these suggestions were taken from
caregivers reported memorable messages concerning what are considered positive and negative messages of support.

**Consider Values, Beliefs, and Needs of Caregiver.** First, social network members should be considering what the caregivers’ core values, beliefs, and needs are. As the results suggest (e.g. messages of hope) a message could be considered positive and negative. Therefore, it is important to understand what the caregiver needs most and whether they hold certain beliefs or values. For example, faith comments such as “I’ll pray for you” were considered to be both positive and negative. This may stem from a person who may not believe in prayer and future research should tease apart these distinctions. In addition, encouraging messages were also found as being both positive and negative. Therefore, sharing stories about someone who had or has cancer may not be an inspiration or motivation for caregivers. It is important for social network members to listen and understand what caregivers could benefit from most. My findings could help social networks achieve this, by providing them with information (i.e. pamphlets, websites) about message types that are considered both positive and negative. In addition, for these messages, I would encourage social network members to consider caregivers’ desires and needs, or share messages that are exclusively reported as being positive (i.e. thoughtful and welcome contribution messages).

**Put Yourself in Their Shoes.** Caregivers manage and deal with many stressors associated with the caring process. As a result, many look to social network members to reach out to them, providing them with effective supportive messages. Many of the negative messages were considered blaming or dismissive. Messages could be dismissive because social network members aren’t sure what to say to caregivers. Additionally, they
may be uncomfortable talking with caregivers about cancer. This has potential to result in more dismissive messages, such as saying, “oh that’s the good cancer to have” or telling the caregiver that it is time to “move on” or “get over it”. Blaming a caregiver for not spending enough time with them is not considering the amount of time that is put into care. Rather than social network members blaming the caregiver for a lack of time spent caring, they should try to imagine what goes into the process of caring and be understanding of that process. Perspective taking can help people understand one another’s thoughts and feelings. In relationships, interactional partners acknowledge, attend to, and confirm one another’s perspectives during their interactions (Koenig Kellas, Willer, & Trees, 2013, p.329). In addition, perspective taking has potential to have both positive (i.e. family satisfaction, comforting, and supportiveness) effects and negative (i.e. mental health, stress) effects on people. Therefore, one way we could work toward helping social network members and caregivers understand one another is by developing research on perspective taking in this context. Perspective taking may also lend further insight into how caregivers cope with and make sense (CSM) of the caring process and interactions with social networks. It may also provide social networks with insight into the many challenges caregivers face. This could potentially benefit social networks because they could get a better sense of what to say, when considering family caregivers experiences. Thus, many of these negative messages may be easily avoided if social network members try to envision how the caring process works and what they might need if they were in that situation.

**Education.** More education on the supportive message content that is most helpful for caregivers could inform social network members on how to provide more
quality support. However, there are few that currently exist. The goal of this study was to translate this research into practice. The plan is to develop a website and pamphlets for hospitals that detail the message content that is seen as most positive and negative, including evaluations of VPC and support types. This would provide social network members with a more holistic picture of what works and what doesn’t when providing support to family caregivers in cancer. Development of these would be helpful, because caregivers could refer their social network members to this information before they say something hurtful. In addition, these tools could help caregivers who want to be supportive, but aren’t sure what to say. Many caregivers in the study suggested that their social network members disappeared (i.e. these types of messages were reported as negative). Social network members may avoid caregivers, which could be detrimental to caregivers, because social networks can help ameliorate negative consequences (e.g. caregiver burnout, depression). Social network members may not have experience with cancer, and struggle to understand caregivers’ experiences. This often results in more dismissive messages. As found in this study, dismissive messages are negative and disregard how a caregiver feels. If social network members knew the impact of these types of messages, they could avoid sharing them with caregivers. It may also be important to teach caregivers self-efficacy, because the negative links between memorable messages and psychological well-being (e.g. stress, depression, negative affect) dropped out when considering self-efficacy. Creating similar educational tools for caregivers (e.g. pamphlets, websites) that provide information on self-efficacy could help caregivers gain a better sense of control. While this study found that self-efficacy is important, more should be explored on the role that self-efficacy plays for caregivers.
Future Research

Given the exploratory nature of this study, the results provide a strong foundation for research of caregiver’s memorable messages of support. In addition to the recommendations discussed above, scholars should focus on messages of support that are impactful toward helping caregivers. There are several possible directions for future research which include the areas of: (a) different illness contexts; (b) specific types of cancer; (c) relational research (d) memorable messages types; (e) the impact of self-efficacy on caregiver well-being; (f) different methodological approaches to this research.

First, the current study may serve as a catalyst for further investigation of memorable messages and social support in a variety of different illness contexts. For example, to expand knowledge on ways to provide support to caregivers, it would be beneficial to investigate other types of disease such as chronic illness (e.g. lupus, kidney disease, Alzheimer’s) and terminal illness (e.g. liver failure, stroke/heart failure). Chronic illness would provide insight, because much like cancer, it is progressive in nature. However the prognosis in some cases may not be as clear. Understanding the messages that are particularly impactful in these contexts may lend insight into different approaches and ways that social networks can provide adequate support. Additionally, terminal illness may be important because of the intensity and amount of care provided. However, much like previous research on end-of-life conversations, it may be incredibly challenging to reach this population (Keeley, 2004). Therefore, consistent with prior research, it may be most beneficial to get retrospective accounts of memorable messages during the process. Focusing on caregivers most memorable messages, support, and well-
being may allow for a deeper understanding of the uniqueness of caregivers and their ability to cope with and make sense of difficulty associated with care.

Second, this study was meant to be a jumping-off point for more focused research in the future. Many scholars focus their research on areas such as breast cancer. However, there are many other cancers that are not being represented as frequently. Interestingly close to 40%, \((n=48, 38.1\%)\) caregivers of loved ones with lung cancer participated in the study. The next most common types of cancers found in this study were stomach/gastric, prostate, and breast. However, there were 25 different types of cancers that caregivers were providing care for. Given that my sample yielded mostly caregivers in lung cancer, getting a more in-depth picture of conversations and messages that are supportive in lung cancer may lend insight into what supportive message content is considered most beneficial to this specific population. Focusing on different types of cancer will provide more context and specific message content that is most helpful for those particular types of cancer. Cancer is unique in that cancer care varies depending on the stage and type of cancer diagnosed. Scholars in the future may want to look into the differences related to support in cancer types. This may help to understand how support differs and what is most effective in helping different types of cancer caregivers cope.

Caregivers at different stages and experiencing different types of cancer may have a more narrowed type of memorable message that is more or less helpful to them. For instance, in the present dissertation, cancer caregivers in prostate cancer most frequently reported receiving their most negative memorable message as downplaying the illness. Social network members repeatedly told caregivers that it was the “good” kind of cancer to have. Messages of hope may also function differently depending on what type of
cancer is reported. For example, those with pancreatic cancer, in this study, reported their most negative memorable as a message of hope. This could be a result of the aggressive nature of this type of cancer. However, messages of hope were most often seen as positive for those battling breast cancer.

Third, the main requirement for this study was that caregivers must be the primary caregiver to the patient. Therefore, specific relationships were not focused on. Previous research has investigated different relationships for caregiving (e.g. spousal, child/parent) (Given et al., 2001). However, as suggested above, understanding these relationships in different illness contexts could benefit both caregivers and patients. In the future, I’d like to collect data that focuses on interactional conversations (e.g. perspective taking) or memorable messages of both patient and caregiver. Scholars may also consider the differences needed in support between a parent caregiver to a child versus a child caregiver to a parent. In addition, it is also important to consider who is sending the message. This may help to explain why certain messages are seen are more or less positive in this context. In the current study, most memorable messages of support came from parents, siblings, friends, and support groups. Future research should focus why messages were most positive and negative from specific types of support providers. This could help researchers to further tease apart the differences in perceptions of message content as they relate to relationships.

Fourth, given that memorable messages have not been explored much in this context, it would be beneficial to continue to look into memorable messages of support. More research situated in the CSM framework would be helpful when understanding how caregivers make sense of their experiences related to care, particularly with their social
network members. However, social network members may not know what to say, because they may not have exposure to cancer, or aren’t familiar with specific types of cancer. Therefore, they may not fully understand how a caregiver feels, or what it is like to provide cancer care. This has potential to result in negative memorable message types, such as dismissive messages. One way that scholars could provide further support of the importance of CSM for caregivers is by working toward helping social network members understand caregivers’ perspective. This could help social network members, because they may get a better sense for what caregivers are experiencing. In addition, it may also make them more aware of the type of support or message they may wish to receive if they had a similar experience. Perspective taking is a study within the CSM framework, which focuses on the ways through which people attend to and confirm another’s feelings (Koenig Kellas, Willer, & Trees, 2013). Therefore, further investigation of CSM and social support may lend insight into a multitude of ways that social networks can provide effective memorable messages and dialogue with caregivers helpful.

Fifth, given that self-efficacy controlled for the relationship between the collection of memorable messages and depression, stress, and negative affect, future research should decompose this relationship. This could provide scholars with a clearer understanding of the impact of self-efficacy. Specifically, memorable messages may only be related to depression, stress, and negative affect if self-efficacy is either high or low. This is important because caregivers’ belief in their ability to control the situation may impact their perceptions of negative memorable messages (e.g. dismissive) on their health. The findings from this study suggest future research of caregiver self-efficacy is warranted.
Finally, to get a more in-depth picture of memorable messages and support in this context, future researchers should use qualitative methods (e.g. interviews, diary study) to retrieve a more comprehensive view of messages of support. This is—in part—because of the limitations of collecting self-report data in a questionnaire. The survey used had open ended questions to gather rich data and Likert-type scales. Several issues occurred within data collection as a result of this. For instance, some participants shared detailed stories through which it might have been beneficial to probe the participant to locate a specific message. In addition, further questions regarding their messages may have provided more rich insight into why these messages were considered supportive. Future research could combine in-depth interviews with questionnaires. This would result in a more complete picture of the memorable messages of caregivers in cancer and provide a more rich understanding of support in this context.

Conclusion

As the results of this study signify, caregivers do view different types of messages as being more positive or negative. The present study extends literature in social support and contributes to research grounded in the communicated sense-making model. Results of this study suggest that memorable message types are related to different social support types, bridging together literature on social support and memorable messages. Therefore, educational tools and more research may help social networks share messages that are more meaningful and impactful for caregivers in cancer.

Despite all that is currently known about caregivers in cancer, there is much more to understand about how to provide enriching, powerful, and impactful supportive communication to them. The current dissertation demonstrates that uncovering different
types of messages shared by social networks can benefit current, remission, and bereaved caregivers in cancer. Ultimately, the goal is that social network members can have access to different ways to provide social support and messages that help caregivers in cancer cope with the many demands of cancer care. These findings provide researchers, social network members, and other family caregivers with insight into the most effective types of messages of support.
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Appendix A

Participant Informed Consent-Electronic Copy

University of Nebraska – Lincoln

Participant Informed Consent

Supportive Interactions for Family Caregivers of Patients with Cancer

Purpose: Researchers tell us that during times of difficulty, it is important to communicate about the experience to make sense of how it has influenced us. Family caregivers are a unique and valuable population to study, because they provide invaluable care to loved ones with cancer. This study investigates supportive interactions between family caregivers and social networks to understand perceived helpfulness of supportive message content.

The following information is provided in order to help you make an informed decision about whether or not to participate. To be included in the study, you must meet the following criteria:

1. Participants in the states of Nebraska and Alabama must be at least 19 years old or older to participate, participants in the state of Mississippi must be at least 21 years old to participate, and participants in all other states must be at least 18 years old to participate, and
2. Must be a current or former primary family caregiver of a patient with cancer

If you do not meet the above criteria, you do not qualify for this particular study and should not proceed with the survey.

If you meet the study criteria, you may take part in this study that consists of completing a confidential, online survey.

Procedure: This study will be completed through a confidential online survey. Participation in this study involves answering questions about your perceptions of your
experience with caregiving, questions related to social support within your social network, as well as questions related to your well-being. You will also be asked to provide general demographic information. It is estimated that this will take approximately 20-30 minutes to complete. We assure you that your name will not be associated in any way with the research findings. Results of this research may be presented at research presentations at UNL, professional conventions, journal articles, and medical education.

**Benefits:** There are no direct benefits to you as a result of participating in this study except potentially gaining a greater understanding of your experience of caregiving for a patient with cancer. It allows space to understand how supportive interactions impact the coping process for caregivers. Additionally, I hope to create materials that include useful information for social networks of caregivers, so that they may better provide support.

**Risks:** We believe that there are minimal risks that may result from participating in the study. However, in the event of problems or emotional discomfort resulting from participating in this study, please contact the UNL Psychological Consultation Center at (402) 472-2351 or other comparable services. Treatment is available on a sliding fee scale. It is the responsibility of each participant to pay for treatment if they choose to seek it out. The researchers will not be held liable for treatment expenses incurred.

**Opportunity to Ask Questions:** You may ask any questions concerning this research and have those questions answered before agreeing to participate or after the study is complete. If you have any questions about this research project, please feel free to contact the principal investigator at (708) 772-2626. Please note that this option will make your identity known to the principal investigator. If you have any questions about your rights as a research participant that have not been answered by the investigator or would like to report any concerns about the study, you may contact the University of Nebraska-Lincoln Institutional Review Board by telephone at (402) 472-6965.

**Freedom to Withdraw:** Further, please remember that your participation in this study is strictly voluntary and you are free to withdraw at any time without adversely affecting your relationship with the investigator, the Department of Communication Studies, or the University of Nebraska. You may also refuse to answer any question you are uncomfortable answering. Your decision will not result in any loss of benefits for which you are otherwise entitled.

You are voluntarily making a decision whether or not to participate in this study. By clicking I agree and entering your name, you are providing your electronic signature and you are agreeing to participate in this research and have read and understood the information presented. Please print a copy to keep for your records. By agreeing you also acknowledge that you are in fact 19 years old if in the states of Nebraska and Alabama, 21 in the state of Mississippi, or **at least 18 years old in all other states**, and that you are a caregiver to a patient with cancer. You are also welcome to email the principal
investigator if you would like a copy of this informed consent form, though, please note that this option will make your identity known to the principal investigator.

☐ I AGREE

Name:

Should you have any questions regarding your participation in this study, please feel free to contact me. Thanks.

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Appendix B

Email: To primary investigators social network.

Subject Line: Supportive Interactions for Family Caregivers of Patients with Cancer

Hello ___________,

My name is Alexis Zoe Johnson and I am currently a doctoral candidate at the University of Nebraska-Lincoln conducting my dissertation research project. I am deeply interested in learning more regarding your experiences receiving social support as a family caregiver. I appreciate your interest in participating in this study. Below is a link to the questionnaire. The questionnaire should only take approximately 20-30 minutes of your time. Please feel free to share this link with members in your social network who may qualify. Thanks again.

To participate: participants in the states of Nebraska and Alabama must be at least 19 years old or older to participate, participants in the state of Mississippi must be at least 21 years old to participate, and participants in all other states must be at least 18 years old to participate, and be a current or former family caregiver of a patient with cancer. Thank you for your interest in this study. To learn more or participate in the study please click on the following link:

https://ssp.qualtrics.com/SE/?SID=SV_2sFW9AGUN3Gf98V

Thanks, Alexis Zoe Johnson

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Appendix C

Volunteers Needed for Research Study

“Supportive Communication in Cancer Care”

**Description of Project:** Researchers in the Department of Communication Studies at UNL are conducting a study on the experience of family caregivers who provide or have provided care to family members with cancer. Specifically, we are interested in how memorable, supportive communication shapes the experience and impact family caregivers of patients with cancer. The study involves answering questions in an online survey. Your participation in this study will take approximately 20-30 minutes. The Survey can be found at this URL: https://ssp.qualtrics.com/jfe/form/SV_2sFW9AGUN3Gf98V. Please feel free to take a tab (below) with the study information.

**To participate:** Participants in the states of Nebraska and Alabama must be at least 19 years old or older to participate, participants in the state of Mississippi must be at least 21 years old to participate, and participants in all other states must be at least 18 years old to participate. If you meet these requirements, and are a current or former family caregiver of a patient with cancer, and have 20-30 minutes to complete an online survey, you can participate in the study by clicking on this link: https://ssp.qualtrics.com/jfe/form/SV_2sFW9AGUN3Gf98V

To learn more, contact the principle investigator of the study and a fellow family caregiver in cancer. Alexis Johnson, (708) 772-2626, ajohnson9e@gmail.com.

https://www.linkedin.com/pulse/request-assistance-cancer-caregiving-research-alexis-johnson?trk=prof-post

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Dr. Jody Koenig Kellas
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Appendix D
Message to Administrators of Cancer List Serves

Hello. My name is Alexis Johnson and I am a doctoral student in the Department of Communication Studies at the University of Nebraska-Lincoln. My research centers on health communication processes, and I’m conducting research that I hope will shed light on supportive communication in the context of cancer care. As someone who has been a caregiver to a family member with cancer, I am particularly interested in the memorable messages of support that caregivers receive from their social networks that caregivers find helpful and unhelpful. Ultimately, I’d like this research to lead to a better understanding of how communication can help us orient toward ways to provide helpful, positive messages of support for family caregivers in cancer. I would really appreciate the opportunity to reach out to your online community to see if anyone might be interested in participating in this research. If you are comfortable with this, I would like to post the below message on your website inviting people complete an online survey about their experience with being a family caregiver in the context of cancer. I appreciate your consideration of this request and please let me know if I can answer any questions for you.

My name is Alexis Johnson and I am a doctoral student in the Department of Communication Studies at the University of Nebraska-Lincoln. My research centers on health communication processes, and I am conducting research that I hope will improve our understanding of supportive communication between social networks and family caregivers of patients with cancer. As someone who has provided care to a patient with cancer, I am interested in conducting research that is aimed at better understanding the memorable, supportive messages that are shared with family caregivers in cancer.

To participate: Participants in the states of Nebraska and Alabama must be at least 19 years old or older to participate, participants in the state of Mississippi must be at least 21 years old to participate, and participants in all other states must be at least 18 years old to participate. If you meet these requirements, and are a current or former family caregiver of a patient with cancer, and have 20-30 minutes to complete an online survey, you are eligible to participate in this important research.

Alexis Johnson

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Appendix E

Informal Social Network Message for LinkedIn, Facebook, GooglePlus

Hello! As many of you know, I am a doctoral student in the Department of Communication Studies at the University of Nebraska-Lincoln. My research centers on health communication processes, and I am conducting research that I hope will improve our understanding of supportive communication between social networks and family caregivers of patients with cancer. As someone who has provided care to a patient with cancer, I am interested in conducting research that is aimed at better understanding the memorable, supportive messages that are shared with family caregivers in cancer.

To participate: Participants in the states of Nebraska and Alabama must be at least 19 years old or older to participate, participants in the state of Mississippi must be at least 21 years old to participate, and participants in all other states must be at least 18 years old to participate. If you meet these requirements, and are a current or former family caregiver of a patient with cancer, and have 20-30 minutes to complete an online survey, you can participate in the study by clicking on this link: https://ssp.qualtrics.com/SE/?SID=SV_2sFW9AGUN3Gf98V

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Appendix F

Memorable Messages of Support

Coder Training Manual

Alexis Johnson
University of Nebraska-Lincoln

Updated 10.24.15
Defining Memorable Messages

Memorable messages are short statements that are shared during interpersonal interactions. These messages are often internalized and continue to influence a person’s life for long periods of time (Stohl, 1986). These messages serve as a means through which we communicate and socialize with others. In addition, memorable messages are a means to shape who we are and how we make sense of our experiences. Memorable messages can be both positive and negative. They can especially useful of times of distress, trauma, and/or difficulty.

For the present codebook, we will focus on the written messages shared by participants in data collection. We will be analyzing both positive and negative messages. Below, are detailed explanations and examples of the coding scheme and sample memorable messages.

Defining Social Support

Researchers describe social support as a fundamental skill in making sense of and coping with their experiences (Cutrona & Russel, 1990). Social support has been characterized in a multitude of different ways. Specifically, scholars in social support have created 6 typeologies in characterizing support. These include: (a) emotional support (providing comfort and understanding), (b) informational support (giving advice and providing resources), (c) network support (connecting with people), (d) esteem support (complimenting others), (e) tangible support (receiving gifts), and (f) appraisal support (comments about self-evaluation).

For this codebook, we will focus on characteristics of messages that signify the type of support. We will be analyzing what types of messages are associated with different types of support. To do this, I lay out several characteristics of each type of support as demonstrated from Xu and Burleson (2001) quantitative measure. In addition, examples of the different types of support are given.
Memorable Messages

**Directions:** For positive and negative memorable messages, please indicate the number that BEST characterizes the memorable messages. First, select the Supratype (e.g. Welcome Contributions, Acknowledgment) and then select the Subtype (e.g., positive advice, compliments, appreciation).

1. **Welcome Contributions:** messages that focus on providing positive information surrounding the process of caring for a loved one. These messages include:
   
   1a. **Positive advice:** messages that focus on how to provide care, how to manage care, or how to get resources related to care (e.g. “There are resources available to you”, “Be positive and patient”, “I know of a support group that really is helpful”).
   
   1b. **Good news:** receiving good news about the diagnosis (e.g. “They are in remission”, “The treatment was a success”, “We caught the cancer early”).
   
   1c. **Acknowledgement of Caregiver Efforts:** messages that focus on recognizing the caregiver’s efforts and abilities. These messages include, messages that praise and admire the caregiver (e.g. “you’re remarkable”, “you do such a good job”). Messages that acknowledge the effort and time spent in caring for a loved one (e.g. “you work so hard”, “thanks for caring for him”).

2. **Messages of Hope:** messages that are intended to influence, move, guide the caregiver. These messages can be influenced by the divine. They may also be associated with messages that evoke hope. **They may also be considered negative or positive.** These messages include:

   2a. **Encouragement:** messages that make caregivers feel hopeful, confident, or determined about their situation (e.g. “celebrate each moment”, “you can do this”, “everything will be okay”). These messages can also include hopeful stories of survival (e.g. “I know someone beat this”). These messages also may refer to life as a gift—recognizing that we must appreciate and live each day to its fullest—for example, “let’s remember how precious each day is”. They may also be empathetic responses that demonstrate a sense of understanding (e.g. “I understand what you are going through, “I’m sorry that must be difficult). 
   
   2b. **Faith:** messages that focus on faith and prayer (e.g. “sending prayers your way”, “god can get us through this”).

3. **Thoughtfulness:** messages that show consideration for caregivers needs, desires, and wants. These messages pay attention to what the caregiver could benefit from and seek to understand the caregiver’s feelings. These messages include:

   3a. **Being there:** messages that demonstrate social network members being present for the caregiver (e.g. “You are not alone”, “We are always here for you”).

   3b. **Presenting gifts:** the message shared may not be a message but an action. For
example, someone giving a caregiver a gift/present (e.g., “They gave me giftcards to my favorite restaurant”, “They brought over food”).

4. **Dismissive**: messages that treat caregiver’s feelings as unworthy of consideration or downplay the seriousness of the loved one’s cancer. These messages include:
   4a. **Disregard for Caregivers feelings**: messages that dismiss the caregiver’s feelings (e.g. “get over it”, “it’s not a big deal”) Also these can be messages that insult, lack respect, and courtesy toward caregivers (e.g.“I bet you are crazy”, “you are causing more bad then good”, “leave them”, “your job comes first”).
   4b. **Downplaying illness**: these messages downplay the seriousness of the illness (e.g. “that’s the good kind”, “you are lucky it’s only stage I”).
   4c. **Blaming**: messages that assign fault and responsibility related to care (e.g. “it’s your fault, “I spend more time taking care of her”, “You do nothing compared to me”).

5. **Unwelcome Contributions**: messages that are shared, but are unwelcome from social networks. These messages include:
   5a. **Bad news**: messages that focus on the reality of the situation and offer little to no hope (e.g. “they will die”, “this is terminal”, “there is nothing more we can do”). These messages may also include negative stories of someone they knew passing away from the disease (e.g. “I know someone who died of that”, “I remember when my mom had cancer”).
   5b. **Unsolicited advice**: messages that tell people what to do (e.g. “that’s not how you provide care”, “I think you should just let her die at home”).

6. **Uncodable**
Types of Social Support

As aforementioned, there are 6 main types of social support. Below, I include a brief definition and example of each type.

1. **Emotional Support** is commonly known as expressions of caring, empathy, and concern (Goldsmith, 2004). Emotional support in cancer is one of the most common types and has been found to be effective in alleviating negative effects (Finn, 1999). The following are key characteristics to look for in emotional support.
   - Someone saying “I love you”.
   - Expressing understanding.
   - Disclosing a similar experience.
   - Comforting when you are upset through physical affection (Ex: hug, shoulder patting).
   - Providing hope.
   - Expressing sorrow or regret.
   - Offering attentive comments.
   - Keeping problems in confidence.

2. **Esteem Support** promotes peoples’ skills, abilities, and intrinsic value (Cutrona & Suhr, 1992). Esteem support aims to enhance how people feel about themselves. The following are characteristics to look for in esteem support.
   - Expressing respect.
   - Sharing personal quality.
   - Trying to reduce feelings of guilt.
   - Telling you, you are still a good person, even with a problem.
   - Telling you, you will have a better future than most people.
   - Agreeing with your perspective.
   - Saying people enjoy being near you.
   - Assuring you that you are a worthwhile person.

3. **Network Support** are connections you have with others and the availability of companionship. The following are characteristics of network support.
   - Access to new friends.
   - Having a good time with others.
   - Connecting with people you can turn to for help.
   - Being with people you can confide in.
   - Sharing similar interests or experiences with you.
   - Offering to spend time with you to get your mind off things (Ex: having dinner, going out, praying with you).
• Helping you find others that can assist you.

4. **Informational Support** can give people a sense of control over their situations. This is because, it offers people information regarding decisions related to coping (Roter & Hall, 1992). The following are characteristics of informational support.
  • Getting advice.
  • Telling you available choices and options.
  • Helping you understand why you didn’t do something well.
  • Informing you of people you can talk to.
  • Giving reasons you should or shouldn’t do something.
  • Teaching you information you don’t know.
  • Providing detailed information about a situation.

5. **Tangible Support** is known as the act of physically providing needs and goods (Cutrona & Suhr, 1992). The following are characteristics of tangible support.
  • Giving you a gift or money.
  • Offering to lend you something.
  • Taking you to a doctor.
  • Doing chores.
  • Joining you in an activity to alleviate stress.
  • Expressing willingness to help when needed.
  • Helping you get something done.

6. **Appraisal Support** refers to reframing an experience to help in self-evaluation. The following are characteristics of appraisal support.
  • A transition
  • Message of evaluation

7. Uncodable
Examples of Social Support Types

Emotional Support Examples:
“Whenever I was feeling down, Jacob always held my hand. This helped me feel better when I was stressed during medical tests.”

“It was a relief to hear that my friend had gone through the same thing as me. She told me a story of how her brother passed away, as a result of suicide. This made me feel as though I was not alone.”

“There is always hope.”

Esteem Support Examples:
“Despite going through so much, you manage to stay so strong.”

“I know you feel like you should be there for him all day. However, you need to live your own life. He knows how good you care for him.”

“You are such a good caregiver, I don’t know how you do it.”

Network Support Examples:
“It is amazing how many people came to the hospital to pray for my wife.”

“My friend referred me to an online support group. I have found great comfort in this new group.”

“I remember when I was going through the stress of cancer, my friends invited me out for lunch.”

Informational Support Examples:
“There are many clinical trials available for this type of cancer, let me share your options.”

“One of my doctors was very thorough in describing changes I’d experience as a result of my illness. This made me feel as though I was in control and could manage what was to come.”

“Always remember to get as much information as possible.”

Tangible Support Examples:
“One of the greatest gifts I was given was a memory book of my mother after she passed.”
“My friends would make meals and come over to give them to my mother and I. This saved so much time and spoke volumes.”

“There were some days I couldn’t make it to the doctor with my child. However, my mother offered to take him for me.”

**Appraisal Support Examples:**

“I trust your judgement.”

“You’re doing the right thing.”

“My friend encouraged me that I was meant to do this.”
Appendix G: Family Caregiver Survey

Demographic Questions

What is your age? _____________

What is your gender? ________________

What is your relationship to the patient?:
1. Spouse or Partner
2. Child
3. Parent
4. Friend or Close Acquaintance
5. Sibling
6. Other

_________________________________

Amount of time caregiving (in months): ______________________________

What type(s) of cancer does the patient have? (Please specify)
_________________________________________

Stage of cancer:
1. Stage 0
2. Stage I
3. Stage II
4. Stage III
5. Stage IV
6. Remission (how long in remission?):

____________________

7. Bereaved (how long ago did they pass?):

____________________

Your marital status:
1. Single
2. Married
3. Widowed
4. Divorced
5. Separated
6. Dating
7. Other

____________________

What is your ethnicity?
1. White/Caucasian
2. Asian  
3. African American  
4. Hispanic  
5. Native American  
6. Other  
___________________

Your highest level of education?  
1. Grade school  
2. High school diploma  
3. Bachelor’s degree  
4. Master’s degree  
5. Doctoral degree  
6. Other  
___________________

Are you currently working?  
1. Yes  
2. No  

What is your current yearly income?  
1. Under 10,000  
2. 10,000-29,999  
3. 30,000-49,999  
4. 50,000-69,999  
5. 70,000-89,999  
6. 90,000 or more  

What is your religious affiliation:  
______________________________

Memorable Messages

For this study, we are interested in any memorable messages you remember hearing from your members of your social network during the time you have been providing care to your loved one with cancer. A social network member can be a friend, co-worker, extended family member, neighbor, etc.

Memorable messages are lasting messages that have stuck with you or had an impact on you. We are interested in the messages you remember hearing and how you thought and felt about them.

Memorable messages that you recall can be positive or negative—we are interested in both and all kinds of messages that your social network members have shared that had an impact on you or that you remember vividly. We will ask you to share as many as you can recall, beginning with the most positive and the most negative. After you share each message you can recall, please answer the questions that follow about each message.
First, please describe the **most positive** memorable message of support you have received from a social network member during the process of caring for your loved one.

Who shared this memorable messages of support that you wrote above?

1. Family member (please specify)

2. Friend

3. Co-worker

4. Neighbor

5. Other (please specify)

Please indicate the degree to which each word in the following word pairs most closely describes your feelings towards the memorable message your social network member shared. Remember, in answering questions about social networks, they can be friends, co-workers, neighbors, extended family members, etc.

<table>
<thead>
<tr>
<th>Disregards</th>
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</table>
Next, please describe the most negative memorable message of support you have received from a social network member during the process of caring for your loved one.

Who shared this memorable messages of support that you wrote above? (check all that apply).

___ Close Friend
___ Co-Worker
___ Family Member______________ (please specify)
___ Other_______________________(please specify)

Please indicate the degree to which each word in the following word pairs most closely describes your feelings towards the memorable message your social network member shared. Remember, in answering questions about social networks, they can be friends, co-workers, neighbors, extended family members, etc.

<table>
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<tr>
<th>Disregards</th>
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</table>

Below we’ll ask you to list any other memorable messages that you recall.

Who shared this memorable messages of support that you wrote above? (check all that apply).

___ Close Friend
___ Co-Worker
___ Significant Other
___ Family Member______________ (please specify)
___ Other_______________________(please specify)
Who shared this memorable messages of support that you wrote above? (check all that apply).

-  Close Friend
-  Co-Worker
-  Significant Other
-  Family Member_________________ (please specify)
-  Other____________________________ (please specify)

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<tr>
<th>Disregards</th>
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<tr>
<td>1 2 3 4 5</td>
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<th>Judges</th>
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<td>1 2 3 4 5</td>
<td>6 7</td>
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</table>
In this section, we are interested in how confident you are that you can keep up your own activities and also respond to caregiving situations. Please think about each experience as a caregiver for your loved one with cancer and rate your confidence level. During the process of providing care to your loved one, how confident are you that you are:

Coping with information overload.

1  2  3  4  5  6  7  8  9
Not at all confident

Listening and learning from the person as to how to care better for them.

1  2  3  4  5  6  7  8  9
Not at all confident

Letting go of things I can’t control.

1  2  3  4  5  6  7  8  9
Not at all confident

Expressing negative feelings about the illness.

1  2  3  4  5  6  7  8  9
Not at all confident

Maintaining hope.

1  2  3  4  5  6  7  8  9
Not at all confident

Being able to notice the “good moments” in caregiving when they occur.

1  2  3  4  5  6  7  8  9
Not at all confident

Allowing the person to have and express his or her own feelings.

1  2  3  4  5  6  7  8  9
Not at all confident

Assisting the person with activities such as feeding, washing, dressing, or toileting.

1  2  3  4  5  6  7  8  9
Not at all confident

Continuing to take care of myself (for example: exercise, diet, sleep).
<table>
<thead>
<tr>
<th>Task</th>
<th>Not at all confident</th>
<th>Totally Confident</th>
</tr>
</thead>
<tbody>
<tr>
<td>Talking openly and honestly with the person.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Continuing to engage in personal activities that I like to do.</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Providing emotional support for the person I am caring for.</td>
<td></td>
<td></td>
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<tr>
<td>Understanding medical information from doctors, nurses, or other sources.</td>
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<td></td>
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<tr>
<td>Seeking support for myself.</td>
<td></td>
<td></td>
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<tr>
<td>Dealing with feelings of helplessness.</td>
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</tr>
<tr>
<td>Dealing with the person expressing negative feelings toward me when they occur.</td>
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<tr>
<td>Assisting and encouraging the person in following through with all treatments.</td>
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<td></td>
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<tr>
<td>Asking physicians and nurses questions.</td>
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</table>
Not at all confident                             Totally Confident

Dealing with criticism from others.
1  2  3  4  5  6  7  8  9
Not at all confident                             Totally Confident

Maintaining a close relationship with the person I am caring for.
1  2  3  4  5  6  7  8  9
Not at all confident                             Totally Confident

In the remainder of the questions, we ask you about your overall well-being related to providing cancer care. Therefore, when you answer these questions, please consider your own feelings and experiences.

These questions are about how you feel and how things have been for you during the past month. For each question, please give one answer that comes closest to how often you experience each of these feelings.

0       1       2       3       4
Never   Almost  Sometimes Fairly  Very
        Never   Often    Often

1. In the last month, how often have you been upset because of something that happened unexpectedly?

0       1       2       3       4
Never   Almost  Sometimes Fairly  Very
        Never   Often    Often

2. In the last month, how often have you felt you were unable to control the important things in your life?

0       1       2       3       4
Never   Almost  Sometimes Fairly  Very
        Never   Often    Often

3. In the last month, how often have you felt nervous and stressed?

0       1       2       3       4
Never   Almost  Sometimes Fairly  Very
        Never   Often    Often

4. In the last month, how often have you dealt successfully with irritating life hassles?

0       1       2       3       4
Never   Almost  Sometimes Fairly  Very
5. In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?

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6. In the last month, how often have you felt confident about your ability to handle your personal problems?

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7. In the last month, how often have you felt that things were going your way?

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8. In the last month, how often have you found that you could not cope with things that you had to do?

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9. In the last month, how often have you been able to control irritations in your life?

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<th>Fairly</th>
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10. In the last month, how often have you felt you were on top of things?

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11. In the last month, how often have you been angered because of things that happened that were outside of your control?

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12. In the last month, how often have you found yourself thinking about things that you have to accomplish?

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<tr>
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13. In the last month, how often have you been able to control the way you spend your time?

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14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?

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<td>Never</td>
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</table>

Please rate how often you experienced the following statements over the last month.

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<tbody>
<tr>
<td>Rarely or</td>
<td>Some or</td>
<td>Occasionally or</td>
<td>Most</td>
</tr>
<tr>
<td>None of the time</td>
<td>Little of the time</td>
<td>Moderately of the time</td>
<td>All of</td>
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</table>

1. I was bothered by things that usually don’t bother me.

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<td>Rarely or</td>
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<tr>
<td>None of the time</td>
<td>Little of the time</td>
<td>Moderately of the time</td>
<td>All of</td>
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</table>

2. I did not feel like eating, my appetite was poor.

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<td>None of the time</td>
<td>Little of the time</td>
<td>Moderately of the time</td>
<td>All of</td>
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</table>

3. I felt that I could not shake off the blues even with the help of my family or friends.

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<td>Occasionally or</td>
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<tr>
<td>None of the time</td>
<td>Little of the time</td>
<td>Moderately of the time</td>
<td>All of</td>
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</table>

4. I felt that I was just as good as other people.

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<tbody>
<tr>
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<tr>
<td>None of the time</td>
<td>Little of the time</td>
<td>Moderately of the time</td>
<td>All of</td>
</tr>
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</table>

5. I had trouble keeping my mind on what I was doing.
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<th>3</th>
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<tbody>
<tr>
<td></td>
<td>Rarely or None of the time</td>
<td>Some or Little of the time</td>
<td>Occasionally or Moderately of the time</td>
<td>Most All of the time</td>
</tr>
<tr>
<td>6. I felt depressed.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Rarely or None of the time</td>
<td>Some or Little of the time</td>
<td>Occasionally or Moderately of the time</td>
<td>Most All of the time</td>
</tr>
<tr>
<td>7. I felt that everything I did was an effort.</td>
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<td></td>
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<tr>
<td></td>
<td>Rarely or None of the time</td>
<td>Some or Little of the time</td>
<td>Occasionally or Moderately of the time</td>
<td>Most All of the time</td>
</tr>
<tr>
<td>8. I felt hopeful about the future.</td>
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</tr>
<tr>
<td></td>
<td>Rarely or None of the time</td>
<td>Some or Little of the time</td>
<td>Occasionally or Moderately of the time</td>
<td>Most All of the time</td>
</tr>
<tr>
<td>9. I thought my life had been a failure.</td>
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<td></td>
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<tr>
<td></td>
<td>Rarely or None of the time</td>
<td>Some or Little of the time</td>
<td>Occasionally or Moderately of the time</td>
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</tr>
<tr>
<td>10. I felt fearful.</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td></td>
<td>Rarely or None of the time</td>
<td>Some or Little of the time</td>
<td>Occasionally or Moderately of the time</td>
<td>Most All of the time</td>
</tr>
<tr>
<td>11. My sleep was restless.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rarely or None of the time</td>
<td>Some or Little of the time</td>
<td>Occasionally or Moderately of the time</td>
<td>Most All of the time</td>
</tr>
<tr>
<td>12. I was happy.</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rarely or None of the time</td>
<td>Some or Little of the time</td>
<td>Occasionally or Moderately of the time</td>
<td>Most All of the time</td>
</tr>
</tbody>
</table>
13. I talked less than usual.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>Little of the time</th>
<th>Occasionally or</th>
<th>Most</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely or</td>
<td>Some or</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Occasionally or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most</td>
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</table>


<table>
<thead>
<tr>
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<td></td>
<td></td>
</tr>
<tr>
<td>Most</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

15. People were unfriendly.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>Little of the time</th>
<th>Occasionally or</th>
<th>Most</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely or</td>
<td>Some or</td>
<td></td>
<td></td>
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<tr>
<td>Occasionally or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

16. I enjoyed life.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>Little of the time</th>
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<th>Most</th>
</tr>
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<tbody>
<tr>
<td>Rarely or</td>
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<td></td>
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<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

17. I had crying spells.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>Little of the time</th>
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</thead>
<tbody>
<tr>
<td>Rarely or</td>
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<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most</td>
<td></td>
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<td></td>
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</tbody>
</table>

18. I felt sad.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>Little of the time</th>
<th>Occasionally or</th>
<th>Most</th>
</tr>
</thead>
<tbody>
<tr>
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<td></td>
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<tr>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most</td>
<td></td>
<td></td>
<td></td>
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</tbody>
</table>

19. I felt that people dislike me.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>Little of the time</th>
<th>Occasionally or</th>
<th>Most</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely or</td>
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<td></td>
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<tr>
<td>Occasionally or</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Most</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

20. I could not get going.

<table>
<thead>
<tr>
<th>None of the time</th>
<th>Little of the time</th>
<th>Occasionally or</th>
<th>Most</th>
</tr>
</thead>
<tbody>
<tr>
<td>Rarely or</td>
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<td></td>
</tr>
<tr>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Most</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feeling</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>--------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>None of the time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Little of the time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Moderately of the time</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>All of the time</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Please indicate how often you have experienced each of the following feelings during the **last month**.

1. Interested

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>A</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
</tbody>
</table>

2. Distressed

<table>
<thead>
<tr>
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<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
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<td>A</td>
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<td>Extremely</td>
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</tbody>
</table>

3. Excited

<table>
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<td>A</td>
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</tr>
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</table>

4. Upset

<table>
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<tr>
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<th>5</th>
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</thead>
<tbody>
<tr>
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<td>A</td>
<td>Moderately</td>
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<td>Extremely</td>
</tr>
</tbody>
</table>

5. Strong

<table>
<thead>
<tr>
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<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
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<td>A</td>
<td>Moderately</td>
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<td>Extremely</td>
</tr>
</tbody>
</table>

6. Guilty

<table>
<thead>
<tr>
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<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not at all</td>
<td>A</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
</tbody>
</table>

7. Scared

<table>
<thead>
<tr>
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<th>5</th>
</tr>
</thead>
<tbody>
<tr>
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<td>A</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
</tbody>
</table>

8. Hostile
<table>
<thead>
<tr>
<th>No.</th>
<th>Trait</th>
<th>Scale</th>
<th>Response 1</th>
<th>Response 2</th>
<th>Response 3</th>
<th>Response 4</th>
<th>Response 5</th>
</tr>
</thead>
<tbody>
<tr>
<td>9</td>
<td>Enthusiastic</td>
<td>Not at all</td>
<td>A</td>
<td>Little</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
<tr>
<td>10</td>
<td>Proud</td>
<td>Not at all</td>
<td>A</td>
<td>Little</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
<tr>
<td>11</td>
<td>Irritable</td>
<td>Not at all</td>
<td>A</td>
<td>Little</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
<tr>
<td>12</td>
<td>Alert</td>
<td>Not at all</td>
<td>A</td>
<td>Little</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
<tr>
<td>13</td>
<td>Ashamed</td>
<td>Not at all</td>
<td>A</td>
<td>Little</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
<tr>
<td>14</td>
<td>Inspired</td>
<td>Not at all</td>
<td>A</td>
<td>Little</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
<tr>
<td>15</td>
<td>Nervous</td>
<td>Not at all</td>
<td>A</td>
<td>Little</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
<tr>
<td>16</td>
<td>Determined</td>
<td>Not at all</td>
<td>A</td>
<td>Little</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
</tr>
</tbody>
</table>
17. Attentive

<table>
<thead>
<tr>
<th></th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
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<tr>
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<td>A</td>
<td>Moderately</td>
<td>Quite a bit</td>
<td>Extremely</td>
<td></td>
</tr>
<tr>
<td>Little</td>
<td></td>
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<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

18. Jittery

<table>
<thead>
<tr>
<th></th>
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<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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</thead>
<tbody>
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<td>Quite a bit</td>
<td>Extremely</td>
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<tr>
<td>Little</td>
<td></td>
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</tr>
</tbody>
</table>

19. Active

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
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<th>4</th>
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<td>Little</td>
<td></td>
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<td></td>
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20. Afraid

<table>
<thead>
<tr>
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</tbody>
</table>

Thank you for your participation in this study. If you would like you may forward the survey to your personal networks. Below, please enter the email address of the personal networks you would like to forward the survey to.

Email: 

__________________________