A SOCIAL NETWORK ANALYSIS OF THE RELATION BETWEEN SOCIAL SUPPORT 
AND RESILIENCE IN GRANDPARENTS RAISING THEIR GRANDCHILDREN

Submitted by
Angela Nancy Mendoza
Department of Human Development and Family Studies

In partial fulfillment of the requirements
For the Degree of Doctor of Philosophy
Colorado State University
Fort Collins, Colorado
Spring 2018

Doctoral Committee:

Advisor: Christine A. Fruhauf
David MacPhee
Doug Coatsworth
Jennifer Portz
ABSTRACT

A SOCIAL NETWORK ANALYSIS OF THE RELATION BETWEEN SOCIAL SUPPORT AND RESILIENCE IN GRANDPARENTS RAISING THEIR GRANDCHILDREN

The purpose of this study was to use social network analysis (SNA) to examine the relation between social support and resilience in grandparents raising their grandchildren. This was done using an exploratory sequential mixed design. In Study 1, 74 grandparents raising grandchildren completed a survey in which data were collected regarding social support, social isolation, and resilience. Findings aligned with the hypothesis that grandparent caregivers’ social support and coping skills were associated with their ability to adapt successfully despite experiencing adversity. Results utilizing Structural Equation Modeling demonstrated direct effects from social support, coping skills, and age to life satisfaction. It was also hypothesized that grandparents who knew other grandparent caregivers would fare better than those who did not know other grandparents raising grandchildren. Findings did not indicate this was the case. In Study 2, SNA was employed to further examine the results from Study 1. This was done by conducting face-to-face interviews with grandparents raising grandchildren from Study 1 which include SNA. Using data from Study 1 participants were placed in one of four resilience quadrants. Sixteen grandparents raising grandchildren were interviewed using social network analysis, five participants from the resilient group, four grandparents from the maladaptive group, five individuals from the competent group, and two participants from the vulnerable group. Analysis of grandparent’s ego networks indicated resilient grandparent caregivers’ networks were structured in a way that provided more opportunities for the inflow of new
information and resources. Resilient grandparents also tended to demonstrate more resourcefulness.
ACKNOWLEDGEMENTS

It is impossible to demonstrate in words how deeply grateful I am for the love, support and guidance I received from all those who walked this dissertation journey with me. First, I would like to thank my advisor, Christine Fruhauf, for her dedicating mentoring. Through her support and guidance I have been able to complete this dissertation project. Her mentoring has provided me with the skills, knowledge, and confidence to prepare for my future career. I would also like to thank David MacPhee for his expertise and for taking the extra time to meet with me on so many occasions. To my committee: thank you for all the feedback and support you provided. Your input allowed me to create a product that I am proud of.

I would like to thank my family for their love and support. They were there for me every step of the way. This great accomplishment would not have been possible without them. Lastly, a special thanks to my wonderful daughter, Angela, who was patient, supportive, and my biggest motivator.
# TABLE OF CONTENTS

ABSTRACT .................................................................................................................................... ii  
ACKNOWLEDGEMENTS ........................................................................................................... iv  
LIST OF TABLES ......................................................................................................................... vi  
LIST OF FIGURES ....................................................................................................................... vii  
BACKGROUND AND LITERATURE REVIEW ................................................................. 1  
THE CURRENT STUDY ............................................................................................................ 25  
STUDY 1 ....................................................................................................................................... 29  
  METHOD ................................................................................................................................. 30  
  RESULTS ................................................................................................................................. 37  
  DISCUSSION ........................................................................................................................... 46  
STUDY 2 ....................................................................................................................................... 54  
  METHOD ................................................................................................................................. 54  
  RESULTS ................................................................................................................................. 63  
  DISCUSSION ........................................................................................................................... 76  
CONCLUSIONS ............................................................................................................................ 86  
REFERENCES .............................................................................................................................. 89
LIST OF FIGURES

Figure 1: Types of social support................................................................. 17

Figure 2: Explanatory sequential mixed methods design ....................... 26

Figure 3: Significant paths for final model of contributions of stress, social support, and coping to grandparent caregivers’ life satisfaction. .............................................................. 45

Figure 4: Participants scores on the Hassles Scales and the SWLS... 56

Figure 5: Services identified as most helpful in supporting participants, by resilience group. .... 74
BACKGROUND AND LITERATURE REVIEW

Historically, grandparents serve as a source of support for their families in times of crisis (Hill, 2008). As a social phenomenon, grandparents raising grandchildren is not a new family structure (Hayslip, Fruhauf, & Dolbin-MacNab, 2017), yet its prevalence continues to increase (Bailey, Letiecq, Erickson, & Koltz, 2013; Dolbin-MacNab, Roberto, & Finney, 2013). In the United States, it is projected that 1 out of every 12 children will live with grandparents or other relatives at some point in their lives (Kopera-Frye, 2009), and that about 10% of all children under age 18 live with a grandparent (U.S. Census Bureau, 2014). Further, in 2012, 2.7 million grandparents in the United States had primary responsibility for grandchildren (U.S. Census Bureau, 2014) and it is estimated that 1 in 10 grandparents will raise a grandchild for at least 6 months (Burnette, 1999; Kolomer, 2008). These families, which include grandparents and other relatives raising children, are referred to as grandfamilies (Hayslip & Smith, 2013).

To date, the literature on grandparents raising grandchildren has focused primarily on negative consequences of raising grandchildren, ignoring the influence social support may have on moderating stress outcomes and increasing adaptability and resilience among grandparents raising grandchildren (Hayslip & Smith, 2013; Landry-Meyer et al., 2005). Social support has been identified as an important factor in how grandparents raising grandchildren experience the stresses of raising grandchildren (Kelley et al., 2000; Landry-Meyer et al., 2005; Musil, Warner, Zauszniewski, Wykle, Standing, 2009). For example, grandparent caregivers’ social networks often provide resources and support to help grandparents raising grandchildren with the challenges of raising their grandchildren. Yet, there continues to be gaps in the literature as it relates to social networks association with grandparent caregivers social support, coping skills, and resilience. Few researchers have examined the importance of social networks in helping
grandparents raising grandchildren adapt to their role as primary caregivers (Goodman & Silverstein, 2006; Kelley, Whitley, Sipe, Yorker, 2000), and even fewer have examined the influence social networks have on the resilience of grandparent caregivers (Hayslip & Smith, 2013; Landry-Meyer et al., 2005). To date, few researchers have examined resilience within the context of grandparents raising grandchildren (Coon, 2012; Hayslip & Smith, 2013), and researchers who have examined resilience in grandparents raising grandchildren have done so using the assumption that the absence of negative consequences is equivalent to positive outcomes (Coon, 2012). Therefore, Coon (2012) encouraged future research efforts on caregiving and resilience that move beyond this assumption and incorporate a strengths-based perspective.

The attention in the literature to the challenges and negative consequences for grandparents raising grandchildren has resulted in little focus on understanding how to help build on the strengths of grandparent caregivers (Kolomer, Himmelheber, & Murray, 2013) and promote resilience (Bailey et al., 2013). A strengths-based approach would not only help to promote resilience; researchers suggest that such an approach would be helpful in advancing services for grandparents raising grandchildren that focus on adaptation and positive outcomes of grandparents raising grandchildren (Bailey et al., 2013; Fruhauf & Bundy-Fazioli, 2013; Kolomer et al., 2013). Thus, this proposed study goes beyond the assumption that the absence of negative consequences is equivalent to positive outcomes and incorporates a strengths-based perspective by looking at the social networks of grandparents raising grandchildren and how support relates to resilience of grandparents. Such studies can provide valuable insights into how grandparent caregivers’ social networks can be beneficial to their resilience. Furthermore, researchers have not used social network analysis to document the relationship between social
support and resilience with grandparents raising grandchildren. Understanding how social networks may relate to grandparents’ resilience is critical to understanding the factors that contribute to grandparents' flexibility to adapt to the adversities associated with raising grandchildren.

The purpose of this study is to use social network analysis to examine the extent social support is associated with resilience in grandparents who are raising grandchildren. Findings from this study will contribute to the literature on the social networks and resilience of grandparents raising grandchildren. As a result, it will provide further opportunities for researchers to promote resilience within grandfamilies.

**Theoretical Perspective**

Bronfenbrenner’s bioecological theory was used to frame this research in terms of the relationship between grandparent caregivers’ social network and their resilience. This theory is important to advancing the understanding of human development in general (Tudge et al., 2009) and in studying grandfamilies in the context of stressors and social support (Hayslip, et al., 2017). Bronfenbrenner’s bioecological theory is appropriate for this study for a number of reasons. First, the bioecological theory views individuals’ interactions with their environments as a vital part of human development. This supports the current research as it focuses on how grandparent caregivers’ social networks are associated with their resilience. Second, this theory is appropriate because it highlights that social support influences are a significant part of a person’s development, particularly resilience in the face of adversity (Martin et al., 2015).

Bronfenbrenner’s bioecological theory (Bronfenbrenner & Morris, 2006) is different from Bronfenbrenner’s original ecology of human development (Bronfenbrenner, 2005). In the ecology of human development theory (Bronfenbrenner & Morris, 1998), the emphasis is on the
context--referred to as the ecological system--whereas in the bioecological theory, development is viewed as the result of the interaction of the individual and context (Rosa & Tudge, 2013). Bronfenbrenner later acknowledged the ecology of human development theory focused too heavily on context and discounted the role that the person and time have in the developmental process (Tudge et al., 2009), thereby giving attention to the revised bioecological theory utilized for the current study (Bronfenbrenner & Morris, 2006).

The bioecological theory outlines human development as a phenomenon in which individuals’ biopsychological characteristics may endure or change based on their interactions with the environment (Bronfenbrenner & Morris, 2006). The theory includes both individuals and groups in its definition of development, and acknowledges that the process of development extends over the life course, across generations, and through historical time. Further, the bioecological theory incorporates four interrelated components, including: (a) process, (b) person, (c) context, and (d) time (Bronfenbrenner, 2005; Bronfenbrenner & Morris, 2006).

The first component, process, is defined as the progression of development and includes the relation between individuals and the contexts in which development occurs (Bronfenbrenner, 2005). Proximal processes are the core mechanisms of human development (Bronfenbrenner & Morris, 1998; Rosa & Tudge, 2013; Tudge et al., 2009) because it is through these activities and interactions that individuals understand their world (Tudge et al., 2009). Bronfenbrenner emphasized that for the process to be effective, the interaction must occur regularly and for an extended period (Bronfenbrenner & Morris, 2006; Rosa & Tudge, 2013). For example, grandparents raising grandchildren often report feeling isolated; this could likely be influenced by the decrease in interactions with peers their own age because they no longer have as much in common (Goodman & Silverstein, 2006).
The second component of the theory emphasizes people’s contributions to their own
development. The theory suggests that people’s individual attributes influence their development
(Bronfenbrenner & Morris, 2006). Therefore, when examining people’s development, it is
important to consider their individual attributes, characteristics, and circumstances that may influence the developmental trajectory. For example, grandparent caregivers not only are influenced by their own personal characteristics, such as temperament, age, and social resources, but may also be influenced by family relationships, work roles, community life, and their environments in which they live (Mendoza & Weil, 2014). Furthermore, grandparent caregivers’ personal characteristics may serve as vulnerability or protective factors when it comes to their resilience. Bronfenbrenner identified three types of person characteristics that are influential in shaping development: demand, resource, and force characteristics (Bronfenbrenner, 2005; Bronfenbrenner & Morris, 2006; Rosa & Tudge, 2013; Tudge et al., 2009). Demand characteristics are referred to as “personal stimulus” and include characteristics such as gender, skin color, physical appearance, and age (Tudge et al., 2009). Resource characteristics refer to mental, emotional, social, and material resources (Tudge et al., 2009). Finally, force characteristics are individual differences in temperament, motivation, and determination (Rosa & Tudge, 2013; Tudge, et al., 2009). For instance, many Latino grandparents raising grandchildren experience barriers to service because of cultural and language differences (Goodman & Silverstein, 2005; Kropf & Kolomer, 2004).

The context in which development is taking place is the third component of this theory. Person characteristics may influence the direction and power of proximal processes. However, it is also important to consider the context in which development is occurring and the influence it may have on the proximal processes. Bronfenbrenner described context as involving four
interrelated systems: (a) microsystem, or any environment such as home or school in which the individual spends a good deal of time and which has a direct effect on the person; (b) mesosystem, or the interconnections between the microsystems; (c) exosystem, which involves links between two contexts that have indirect influences on an individual’s development but in which the individual does not have an active role; and (d) macrosystem, which involves any group (i.e., culture, subculture) in which the person lives (Bronfenbrenner & Morris, 1998; Rosa & Tudge, 2013; Tudge, Mokrova, Hatfield, & Karnik, 2009). (For a comprehensive review of these four systems, see Bronfenbrenner, 1977; Bronfenbrenner & Morris, 2006).

The last component in the bioecological theory is time, which can influence development in many ways. Bronfenbrenner asserted that time has a crucial role in human development (Bronfenbrenner & Morris, 1998). For instance, an individual’s development may be influenced by the expectations and events occurring during that specific time of their development (Rosa & Tudge, 2013). The concept of time relates to grandparent caregivers in two ways: Grandparent caregivers did not expect to be raising children at this life stage, and the society, especially school systems and technology, have changed drastically since they raised their own children.

Literature Review

To further understand the gaps in the literature and need for research related to the association between grandparent caregivers’ social networks and resilience, the following sections provide a definition of resilience and review the current literature on the adversities grandparents raising grandchildren face, then considers the association between resilience and social support, and concludes with a focus on social support.

Resilience

Resilience is a dynamic (Bailey et al., 2013; Masten, 2001) and multidimensional construct (Friborg et al., 2003; Luthar, Doernberger, & Zigler, 1993; Rutter, 2006). In its most
basic form, resilience is defined as an individual’s ability to adapt successfully despite
experiencing adversity (Coon, 2012; Herman et al., 2011; Masten & Coatsworth, 1998).
Furthermore, according to Masten and Coatsworth (1998), “To identify resilience, two
judgments are required: first, that there has been a significant threat to the individual or exposure
to severe adversity or trauma and second, that the quality of adaption or development is good”
(p. 206). In this context, adversity is defined as stressors, exposure to trauma, and/or an
accumulation of social risks (MacPhee, Lunkenheimer, & Riggs, 2015). Adversity is often
interchangeably used with risk, which refers to the increased risk of undesirable outcomes (Smith
& Hayslip, 2012). For example, grandparents raising grandchildren have an increased risk of
experiencing depressive symptoms (Coon, 2012; Hill, 2008). Good quality of adaption can be
measured in a number of ways. Masten and Coatsworth (1998) note the importance of
remembering that families may have different values and expectations for measuring quality
adaption. Among the literature with older adults high resilience has been associated with lower
depression, longevity, and high levels of life satisfaction (MacLeod, Musich, Hawkins, Alsgaard,
& Wicker, 2016).

Furthermore, it is important to this research study to understand the difference between
resilience and resiliency. The ability to maintain functioning in the face of adversity is referred to
resilience, whereas “resiliency” is the trait-like characteristic for individuals who adapt well
despite experiencing adversity (MacPhee et al., 2015). In other words, resilience is viewed as the
process of adapting to adversity whereas resiliency is viewed as a personal characteristic
(MacPhee et al., 2015).

Masten (2001) distinguished different groups of resilient phenomena: (a) resilient, (b)
maladaptive, and (c) competent. Resilient individuals who have demonstrated positive adaption
despite having experienced high adversity (i.e., trauma or stressful experiences). Maladaptive individuals have also experienced high adversity, but do not demonstrate positive adaption. Individuals in the competent group are those we might consider as “typical” in that they have not experienced high adversity and are doing as expected.

A person’s likelihood of coping with adversity is influenced by the protective factors available as well as their ability to access them (Lee, Blitz, & Srnka, 2015; Ungar, 2010). Protective factors are described as individual and environmental characteristics that are associated with good outcomes despite exposure to adversity (Masten & Coatsworth, 1998; Smith & Hayslip, 2012). There are three major categories of protective factors, which include: (a) individual attributes (i.e., psychological and dispositional; e.g., coping); (b) interpersonal relationships, such as family support; and (c) environmental supports (Friborg et al., 2003; Smith & Hayslip, 2012).

**Adversities Faced by Grandparents Raising Grandchildren**

Grandparents often assume responsibility for their grandchildren for reasons that typically involve some type of family crisis such as parental substance abuse (Burnett, 1999; Musil et al., 2009), incarceration (Goodman & Rao, 2007; Musil et al., 2009), abandonment, child abuse/neglect (Burnett, 1999; Goodman & Silverstein, 2002), and/or to keep the grandchildren out of the foster care system (Burnette, 1999; Goodman & Rao, 2007; Goodman & Silverstein, 2002). A similarity among the reasons why grandchildren are in a grandparent’s home is that they involve some type of family crisis, which can often lead to feelings of loss or helplessness for the grandparent and grandchildren (Hayslip & Shore, 2000; Hill, 2008). Furthermore, grandparent caregivers often report raising their grandchildren because of their
attachment to the children, feelings of obligation, or because they believe there was no other alternative (Cowling et al., 2015).

Grandparent caregiving occurs in all racial/ethnic groups, ages, socioeconomic strata, and geographic regions (Cox, 2000; Fuller-Thomson, Minkler, & Driver, 1997). According to the U.S. Census Bureau (2015), approximately 33% of grandparents who identify as having responsibility for their grandchildren are 60 years of age and over, whereas 66% are between the ages of 30 and 59. Of the grandparents raising grandchildren in the United States, approximately 21% live in poverty (U.S. Census Bureau, 2015). According to this same report, 51.1% of grandparent caregivers are White, 24.2% are African American, 18.7% are Latino/Hispanic, and the rest are members of other minority groups (U.S. Census Bureau, 2015).

This diverse group of grandparents who raise grandchildren provides a great service to their grandchildren, families, and society (Bailey et al., 2013). In addition to supporting their family in a time of crisis, grandparents are also saving the country money spent on kinship care. For example, Hayslip and Smith (2013) estimated that it would cost the United States more than $6.5 billion a year if half of the children raised by grandparents entered the formal foster care system. In addition to providing a service to society, these grandparents are also providing their grandchildren a “safety net,” love, security, encouragement, and structure that they may not receive in a foster care home (Hayslip & Kaminski, 2005). Furthermore, research with children placed out of their parents’ home has demonstrated that children raised by relatives, such as grandparents, fare better than those children who are placed with nonfamily households (Hill, 2008).

Providing safe, secure, and loving homes for their grandchildren does not come without challenges for grandparents. Grandparents often must overcome high levels of adversity as
caregivers to their grandchildren. It is well demonstrated in the literature that grandparent caregivers experience physical, emotional, and psychological stress. Such stresses include social isolation (Coon, 2012; Hill, 2008); overcrowding in the home (Bullock, 2005; Goodman & Rao, 2007); financial strains (Coon, 2012; Doley et al., 2015); Hayslip & Kaminski, 2005; Hill, 2008); role overload (Coon, 2012; Hill, 2008); struggles with parenting (Coon, 2012; Lee et al., 2015); and increased risk of depression (Coon, 2012; Hill, 2008), anxiety, and other mental illnesses (Bullock, 2005; Goodman & Rao, 2007; Hill, 2008; Kolomer, 2008). For example, grandparents raising grandchildren are more likely to have poor physical health, more psychological stress, and higher levels of depression than noncaregiving grandparents (Bullock, 2005; Coon, 2012; Hayslip & Kaminski, 2005; Hill, 2008; Kolomer, 2008; Lee et al., 2015; Musil, et al., 2011).

In a study by Musil and colleagues (2011) with grandmothers raising grandchildren, grandmothers’ self-rated physical health worsened and levels of stress increased over a 2-year period compared to grandmothers who were living in a three-generation household or who were not living with grandchildren. Also, Minkler and Fuller-Thompson (2005) found that grandparents raising grandchildren reported less satisfaction with their health and were more likely to have physical limitations that affected their activities of daily living as compared to noncaregiving grandparents.

In addition to changes in physical health, many researchers have documented that grandparents raising grandchildren are at risk of experiencing elevated levels of psychological distress (Coon, 2012; Hayslip & Kaminski, 2005; Hill, 2008; Lee et al., 2015; Musil, et al., 2011). For instance, when compared to noncaregiving grandparents, grandparent caregivers consistently demonstrate more elevated levels of psychological distress (Grindstead, Leder, Jensen, & Bond, 2003), which often manifest as depression. It has been estimated that 25% of
grandparent caregivers experience significant depressive symptoms (Burnette, 2009). Thomas, Sperry, and Yarbrough (2000) discovered that 72% of participants in their study reported feeling depressed in the previous week, and found increased psychological distress to be affecting parenting and family functioning. Another study, by Minkler and colleagues (1997), compared depressive symptoms of grandparents raising grandchildren and noncaregiving grandparents. They found that 25.1% of grandparents raising grandchildren reported experiencing depression symptoms compared to only 14.5% of noncaregiving grandparents. Increased rates of depression among grandparents raising grandchildren may be partly due to a loss of leisure activities, a decrease in social opportunities, the loss of future dreams and goals, and other challenges such as financial issues (Hill, 2008).

Adding to the high levels of psychosocial stress grandparent caregivers may be experiencing, many grandparents raising grandchildren report experiencing financial challenges (Bullock, 2005; Doley et al., 2015; Kopera-Frye, 2009; Minkler & Fuller-Thomson, 2005). Various researchers have found similar results, with many grandparent caregivers experiencing financial struggles. For example, in Kopera-Frye’s (2009) study, grandparents raising grandchildren identified economic hardship along with a lack of medical care as a salient concern. In another study that also found finances to be a major concern for grandparents raising grandchildren, Bullock (2005) described the case of one participant who explained that the situation was difficult for her because she did not have a lot of money and did not receive any money from Social Security or other governmental agencies. Furthermore, Fuller-Thomson and Minkler (2007a) found that the “poorest individuals were disproportionally providing care” to grandchildren (p. 10).
Other challenges of raising grandchildren include grief and difficult emotions related to the adult child, and grandchildren demands. Grandparents may have feelings of disappointment and resentment towards the parent of the grandchild(ren) (Coon, 2012; Hayslip & Kaminski, 2005; Hayslip & Shore, 2000; Kolomer, 2008; Lee et al., 2015). In addition to the customary demands of raising a child, many grandparents raising grandchildren may be raising children with developmental, emotional, or behavioral issues (Coon, 2012; Hayslip & Kaminski, 2005; Hayslip & Shore, 2000). Often, grandchildren are experiencing depression, anxiety, health problems, behavior problems, academic difficulties, aggression, anger, and feelings of rejection and guilt (Dolbin-MacNab, 2006). Furthermore, grandparents may be dealing with insufficient knowledge about child development and effective parenting strategies (Hayslip & Kaminski, 2005). These concerns are compounded with feelings of grief and loss related to the child’s parent (Coon, 2012; Hayslip & Kaminski, 2005; Kolomer, 2008) and grandparents’ fear of what will become of their grandchildren in the event of their own disability or death (Hayslip & Kaminski, 2005).

Despite all of the hardships and negative consequences of raising grandchildren, grandparents continue to provide support, security, and nurturing environments to grandchildren. Grandparents step in to a difficult situation with numerous challenges, yet research has shown that most grandparents raising grandchildren identify the experience of caregiving for their grandchildren as rewarding (Coon, 2012). Lee and colleagues (2015) found that raising grandchildren helped grandparents (a) work through feelings of guilt related to an adult child (the parent of the grandchildren), (b) feel younger and more vibrant, and (c) feel a renewed sense of meaning and purpose. Furthermore, many researchers note that grandparents describe their caregiving situation as being intrinsically rewarding, providing them a new sense of purpose and
a second chance at parenting (Coon, 2012; Hayslip & Kaminski, 2005; Hayslip & Shore, 2000; Lee et al., 2015). Many grandparents raising grandchildren find meaning in caregiving for their grandchildren (Lee et al., 2015), and many grandparents view the experience as an opportunity to serve as a role model, keep grandchildren safe and healthy, and maintain the well-being of their family (Coon, 2012; Hayslip & Kaminski, 2005; Hayslip & Shore, 2000; Goodman, Scorzo, Ernandes, & Alvarez-Nunez, 2013).

**Resilience and Social Support**

The extant literature suggests that many grandparent caregivers are resilient, given that they find the role to be rewarding despite multiple stressors. What protective factors might be involved in mitigating the effects of such stressors? A large body of evidence demonstrates an association between social support and resilience (Martin et al., 2015). For example, findings indicate social support may have a positive impact on the development of resilience in grandparent caregivers (Dolbin-McNab et al., 2013; Hayslip et al., 2015; Osburu, 2005).

Social support can enhance grandparent caregivers’ ability to cope with adversity as it may moderate the effects of raising grandchildren (Dolbin-McNab et al., 2013; Osburu, 2005), improve preventative health and self-care practices (Dolbin-McNab, Roberto, and Farney, 2013; Fruhauf & Bundy-Fazioli, 2013; Hayslip et al., 2013), and decrease the risk for depressive symptoms (Coon, 2012; Goodman et al. 2013; Musil & Ahmad, 2002; Musil et al., 2009). Additionally, social support has also been associated with better physical and mental health, and greater life satisfaction, which promote resilience in grandparents raising grandchildren (Coon, 2012; Goodman et al. 2013; Musil & Ahmad, 2002; Musil et al., 2009). Due to its influence on a grandparent’s ability to cope and adjust to being a grandparent raising grandchildren (Dolbin-McNab et al., 2013; Gerard, Landry-Meyer, & Roe, 2006; Landry-Meyer et al., 2005), social
support can be conceptualized as a protective factor that promotes resilience in grandparents raising grandchildren (Dolbin-McNab et al., 2013).

Research on resilience in grandparents raising grandchildren is increasing, but to date few studies have been performed that focus solely on grandparent caregivers’ resilience (Bailey et al., 2013, Coon, 2012). Those researchers who have taken this approach have found an association between grandparent caregivers’ social connectivity and resilience (Bailey et al., 2013, Coon, 2012; Dolbin-McNab et al., 2013; Gerard et al., 2006; Kelley et al., 2000; Landry-Meyer et al., 2005; Leder et al., 2007). For example, Bailey and colleagues (2013) conducted face-to-face interviews with 26 grandparents raising grandchildren to explore the characteristics of those grandparent caregivers who demonstrated more positive adjustment and adaptation to being a grandparent caregiver. Social connectivity was found to be one of the overarching themes that characterized resilient grandparents raising grandchildren. Furthermore, Bailey et al., (2013) noted that resilient grandparents raising grandchildren demonstrated the ability to draw from their individual, familial, and community-based resources. Many researchers have highlighted the importance of social support to grandparent caregivers’ resilience and many have assumed that social support, specifically formal support, seems to promote grandparent caregiver resilience (Dolbin-McNab et al., 2013; Gerard et al., 2006; Kelley et al., 2000; Landry-Meyer et al., 2005; Leder et al., 2007) by decreasing feelings of isolation, providing emotional support, and building grandparent caregivers’ skills and knowledge (Dolbin-McNab et al., 2013). Yet, little is known about how social support is related to resilience and how a grandparent caregivers’ social network (which may include supportive and unsupportive members) is associated with their resilience. Furthermore, it is important to note that resilience is not static,
but a process that can be enhanced by social support (Lee et al., 2015); the key is to determine how this happens.

**Social Support**

Social support is a well-known protective factor for individuals who experience some form of stress (Masten, 2001; Luthar, Doernberger, & Zigler, 1993), but it has not been studied as much with grandparent providers. In particular research has not looked at the relation between a grandparent caregivers social network and their social support, coping skills, and resilience. Furthermore, many researchers have emphasized the necessity to focus on how social support can decrease stress related to raising grandchildren and strengthen grandfamilies (Hayslip et al., 2017; Kelley et al., 2000; Landry-Meyer et al., 2005).

*What is social support?* Social support refers to emotional and instrumental assistance from others (Cochran, Larner, Rile, Gunnarsson, & Henderson, 1999). This assistance is provided by one’s social network which consists of significant connections people have with other people and organizations in their social environment (Landry-Meyer et al., 2005). Social support is a multidimensional construct in that it has many components to it and can be categorized in many ways (Landry-Meyer et al., 2005). For example, it includes both formal and informal support (Dolbin-McNab et al., 2013; Gerard, et al., 2006). Formal support is rendered by professionals, community service providers, or other social systems (Dolbin-McNab et al., 2013; Landry-Meyer et al., 2005; Musil, Schrader, & Mutikani, 2000). Much of the time, this type of support includes a paid arrangement or contractual agreement (Landry-Meyer et al., 2005; Musil et al., 2000). Examples of such services include professionals such as physicians (Dolbin-McNab et al., 2013), informational support, support groups, respite care, and financial assistance (Musil et al., 2000).
Whereas formal support is provided by professionals and community service providers, informal support is provided by the individual’s family, friends (Dolbin-McNab et al., 2013; Landry-Meyer et al., 2005; Musil et al., 2000), neighbors (Dolbin-McNab et al., 2013), and/or a confidant or partner (Landry-Meyer et al., 2005). In addition to categorizing social support as formal or informal support, social support can be further characterized by identifying whether the support is perceived support or enacted support (Dolbin-McNab et al., 2013; Landry-Meyer et al., 2005). For example, a grandparent’s perception of what supports are available and adequate is identified as perceived support (Dolbin-McNab et al., 2013; Gerald et al., 2006; Landry-Meyer et al., 2005) whereas actual support the grandparent received is referred to as enacted support (Dolbin-McNab et al., 2013; Landry-Meyer et al., 2005).

Another differentiation among the types of social support is instrumental versus emotional support. Instrumental support refers to tangible support, such as receiving financial assistance or help with household chores (Dolbin-McNab et al., 2013; Kolomer et al., 2013). On the other hand, support that helps grandparent caregivers feel better or improves their quality of life is considered emotional support (Kolomer et al., 2013). For a visual of the types of social support and definitions, refer to Figure 1.
**Social Network**
Connections individual has with others in their social environment

**Formal Support**
Rendered by professionals and/or community providers

**Informal Support**
Received from family, friends, confidant, or partner.

**Enacted**
Actual support received

**Perceived**
Individuals perception of the availability and adequacy of support

**Emotional**
Helps individual feel better and improve life quality (e.g. providing company)

**Instrumental**
Tangible support (e.g. helping with household chores or financial assistance)

*Figure 1: Types of social support*
Importance of social support for grandparents raising grandchildren. Grandparent caregivers’ social network represents their level of social embeddedness in that it includes the types and number of relationships that they have that may be available to provide support (Dolbin-McNab et al., 2013; Landry-Meyer et al., 2005). Yet, researchers have found that a larger social network does not imply a more supportive network for grandparents raising grandchildren (Landry-Meyer et al., 2005). Furthermore, researchers have found that grandparents’ social support networks change after assuming primary responsibility of their grandchildren (Jendrek, 1993; Landry-Meyer, 1999; Minkler, Roe, & Robertson-Beckley, 1994). For example, grandparents often report experiencing inadequate social supports and social isolation from their same-aged peers (Doley et al., 2015).

Researchers have found that despite a high degree of social embeddedness prior to raising their grandchildren, many grandparent caregivers report experiencing decreased contact and support from members of their social network (Landry-Meyer et al., 2005; Minkler et al., 1994). Specifically, grandparents raising grandchildren seem to experience a decrease related to their friendship network (Fuller-Thomson & Minkler, 2000; Jendrek, 1993, Kelley et al., 2000; Landry-Meyer et al., 2005). Landry-Meyer and colleagues (2005) reported that about half of the grandparents raising grandchildren in their sample said that they had stopped having contact with a friend since taking on the responsibility of raising a grandchild. It is noted that there are several reasons why grandparent caregivers’ friendship network decreases. For example, grandparents raising grandchildren may not have the time or financial means for social activities and other interests they used to do with friends (Cowling et al., 2015). This, in combination with peers who are no longer in the role of parent (Jendrek, 1994; Hill, 2008; Landry-Meyer, 1999) and may not welcome grandchildren at social gatherings, can lead to feelings of being marginalized and
isolated (Cowling et al., 2015; Fruhauf & Bundy-Fazioli, 2013; Landry-Meyer, 1999; Lee & Blitz, 2014). In addition to feeling abandoned by same-age peers with whom they likely no longer have as much in common with, grandparents raising grandchildren may believe they do not fit in with younger parents, thus increasing their sense of isolation (Lee & Blitz, 2014). Findings such as these are concerning because social isolation has been linked to a decrease in quality of life and functional decline (Perissinotto, Cenzer, & Covinsky, 2012; Webel et al., 2014). Therefore, it is imperative to find ways to decrease social isolation among grandparents raising grandchildren. One intervention receiving attention in the literature and by community services is support groups.

**Support Groups**

Attendance in support groups is useful in reducing social isolation among grandparents raising grandchildren (Kolomer, 2008; Lee & Blitz, 2014). For instance, in a study by Kolomer (2008), grandparents raising grandchildren who attended support groups reported feeling less isolated and lonely. Furthermore, studies have found that support groups provide a place where individuals can meet others with the same shared experience. Grinyer (2012), found that sharing with others who have been through a similar experience can help the grieving and loss process as well as lessen isolation. Another study looked at a support group for families who had experienced a loss and found that the shared experience helped the bereavement process (Henoch, Berg, & Benkel, 2016). Grandparents raising grandchildren may experience grief due to a number of issues. For example, grandparents may be dealing with grief over the loss (e.g., death or inability to parent) of their adult child, or forfeiture of their own hopes and dreams while helping their grandchild(ren) deal with the loss of their parent and family structure (Backhouse & Graham, 2013; Goodman & Silverstein, 2001). Furthermore, as demonstrated in Backhouse and
Grahams (2013), grandparent caregivers may feel that their grief is not recognized or validated by the community, thus experiencing disenfranchised grief (Doka, 1989). Therefore, grandparent caregivers may benefit from support groups because they are able to discuss their loss and grief with individuals who have shared experiences. Other benefits of social support membership include a decrease in depressive symptoms (Kolomer, McCallion, & Overeynder, 2013), emotional support (Leder et al., 2007), creation of connections among support group members (Fruhuaf & Bundy-Fazioli, 2013; Leder et al., 2007; Lee & Blitz, 2014), skill and knowledge building related to the care of their grandchildren (Fruhauf & Bundy-Fazioli, 2013), and ideas about what has been successful and unsuccessful for other group members (Lee & Blitz, 2014). Despite the numerous benefits of support group attendance, there has been evidence suggesting negative consequences of attendance, as well. For example, Sands and Goldberg-Glen (2000) found that support group attendance did not lower levels of anxiety in grandparents raising grandchildren. On the contrary, Sands and colleagues (2005) found that at times social support attendance results in feelings of anxiety. Additionally, a regression analysis indicated that support group attendance was negatively associated with grandparents’ well-being (Sands et al., 2005).

Supportive Social Networks and Mental Health

As previously discussed, it is well known from empirical research that when grandparents assume custodial caregiving responsibilities for grandchildren, they often experience social isolation. Social isolation and decreased peer contact are defining features of fragile social support networks for grandparents raising grandchildren (Kolomer et al., 2013; Lee et al., 2015). For example, Lee and colleagues (2015) found that grandparent caregivers’ sense of having a fragmented support system was related to social isolation.
Supportive social networks have been associated with improved mental health (Fruhauf & Bundy-Fazioli, 2013; Hayslip, 2015; Leder et al., 2007; Musil et al., 2000; Sands et al., 2005), and better physical health (Fruhauf & Bundy-Fazioli, 2013; Hayslip, 2015; Leder et al., 2007; Rowe & Kahn, 1998; Sands et al., 2005). It has also been associated with less distress (Musil et al., 2000), increased sense of empowerment (Bullock, 2005), and the ability to adjust and adapt to demands of raising grandchildren (Bailey et al., 2013). Further, a supportive social network may compensate for or counteract some of the negative consequences of raising grandchildren (Dolbin-McNab et al., 2013; Gerard et al., 2006; Hayslip et al., 2015) and promote positive outcomes (Dolbin-McNab et al., 2013; Gerard et al., 2006), thereby serving as protective factors in moderating the effects of adversity. This may in turn lead to greater life satisfaction for grandparents raising grandchildren (Hayslip et al., 2015), thus having a positive effect on their resilience. Therefore, having a consistent and cohesive support system is assumed to be important for grandparents who are raising their grandchildren (Lee et al., 2015).

Having a supportive social network may enable grandparent caregivers to successfully adapt and alleviate the stress on their well-being thereby supporting a greater quality of life (Dolbin-McNab et al., 2013; Gerard et al., 2006; Sands et al., 2005). Therefore, high levels of social support may be important to the mental health and well-being of grandparents raising grandchildren (Sands et al., 2005). Social support is associated with better mental health among grandparents raising grandchildren (Burnette, 2009; Dolbin-McNab et al., 2013; Gerard et al., 2006; Kelley et al., 2000; Musil & Ahmad, 2002; Musil et al., 2009; Sands & Goldberg-Glen, 2000). For example, Musil and colleagues (2009) examined the role of social support in depressive symptoms among three groups of grandmothers: (a) raising grandchildren, (b) living in multigenerational homes, and (c) non caregiving. This study demonstrated that greater support.
contributed to better overall mental health for grandmothers raising grandchildren and those living in multigenerational homes. High levels of subjective social support seemed to protect grandmothers from family stress, reduce depressive symptoms, and offset the strain of caregiving, allowing them to achieve better mental health. In a study by Musil and colleagues (2009), found that grandmothers with less supportive social networks experienced higher levels of depressive symptoms independent of their caregiving status (Musil et al., 2009). Sand et al. (2005) also found that high levels of social support were associated with higher levels of well-being even after controlling for sociodemographic and contextual factors.

Other researchers, such as Roberto, Dolbin-McNab, and Finney (2008), found similar results while focusing on specific types of social support. For example, perceived support has been found to be associated with better mental health (Dolbin et al., 2013; Goodman et al., 2013; Roberto et al., 2008). In addition, both formal and informal social support have been identified as important factors to grandparent caregiver’s life satisfaction (Dolbin-McNab et al., 2013; Gerard et al., 2006; Landry-Meyer et al., 2005), positive feelings (Landry-Meyer et al., 2005), and lower levels of depression (Landry-Meyer et al., 2005; Leder et al., 2007; Musil & Ahmad, 2002). These findings demonstrate the impact social support may have in mitigating the impact of raising grandchildren on the mental health of grandparents raising grandchildren.

Physical Health

In addition to social support being important to grandparent caregivers’ mental health and well-being, social support is also important to their physical health (Musil et al., 2000). Findings from research on social support among grandparents raising grandchildren are consistent with the research on the importance of social ties in successful aging (Sands et al., 2005). For example, Hayslip and colleagues (2015) found that social support may have a positive impact on a
grandparent caregiver’s health and depression, which is consistent with Rowe and Kahn’s (1998) emphasis on the importance of feeling connected to the maintenance of well-being. Other researchers in the field of successful aging have demonstrated an association between social support and less functional decline (Martin et al., 2015; Unger et al., 1999), better cognitive functioning (Martin et al., 2015), and a longer life (Martin et al., 2015). Extant research on grandparents raising grandchildren has found similar results. For instance, Leder and colleagues (2007) discovered positive correlations between social support and physical health. Utilizing one-year longitudinal data, Hayslip and colleagues’ (2015) findings revealed that even after adjusting for multiple covariates, greater social support predicted better health among grandparents raising grandchildren.

To understand the impact of social support on grandparent caregivers’ health, many researchers have focused their research efforts on specific types of social support. For instance, Gerard and colleagues (2006) found that formal enacted support had the greatest influence in buffering the negative impact on a grandparent caregiver’s health. In other studies (Kelley et al, 2000; Leder et al., 2007; Roberto, Dolbin-McNab, & Finney, 2008), perceived support was associated with grandparent caregiver’s physical health. In a study with 40 grandmothers raising grandchildren, grandmothers perceiving their physician as being supportive was associated with better physical health (Roberto et al., 2008). Similarly, Muliira and Musil (2010), found perceived and instrumental support to be associated with greater use of preventive health care, gynecological exams, and blood pressure screenings. Different types of social support may influence grandparent caregiver’s physical health in different ways, but overall, findings identify social support as a key factor in helping grandparents raising grandchildren adjust to the
challenges of raising grandchildren (Dolbin-McNab et al., 2013; Hayslip & Kaminski, 2005; Hayslip et al., 2015), thus, influencing grandparent caregiver’s resilience.
THE CURRENT STUDY

The current study aims to explore the relation between grandparent caregivers’ social networks and their resilience. Based on the previous literature review, there is a clear gap that exists related to the relationship between grandparent caregivers’ social network and resilience. Researchers have not examined how grandparent caregivers social network is related to their social support, coping skills, and resilience. The current study is a comprehensive study on this. By understanding the association between grandparent caregivers social network and their resilience we can learn about how to help grandparents who are raising their grandchildren to build their social support.

I used a mixed-methods design and social network analysis to examine social support and resilience among grandparents raising grandchildren. A mixed-methods research design includes collecting both quantitative and qualitative data to answer research questions and to best achieve an understanding of the research problem at hand (Creswell, 2007). Incorporating a mixed-methods design is appropriate for the current study because it allows for the use of different data collection methods that serve to expand the depth of knowledge and strengthen the investigation of grandparents' social networks and how it relates to their resilience.

Explanatory sequential design. Specifically, an explanatory sequential design was used (see Figure 2) for this research study. An explanatory sequential design is a mixed-methods design with two distinct phases: quantitative followed by qualitative method (Creswell & Clark, 2011). For simplification, the project was divided into two studies. Study 1 included the quantitative phase of the project whereas Study 2 included the qualitative phase and social network analysis.
In Study 1, the data collected from the surveys completed by grandparents raising grandchildren were analyzed. A distinguishing feature of this design is that the results from the quantitative data inform the qualitative data collection (Creswell & Clark, 2011). Thus, the data from Study 1 aided in determining the sample population and finalizing the interview protocol for the collection of the qualitative data. Once this was complete, Study 2 entailed face-to-face interviews that were used to explain and elaborate on the findings from the surveys. The rationale for using an explanatory sequential design was that the quantitative data and analyses provided a general understanding of the research questions, whereas the qualitative data analyses provided more detail and an in-depth understanding from the perspective of the participants who are currently raising grandchildren.
Social network analysis. In combination with a mixed-methods design, social network analysis (SNA) was used in Study 2. Social network analysis is a set of theories, tools, and processes that aim to understand the relationships between individuals and the network structures that are created through those interactions (Robins, 2015). It assumes that an individual’s relations are important and focuses on the effects of his/her social network (Borgatti, Everett, & Johnson, 2013). A key component of SNA is that it addresses the social connections (i.e., ties) a person (i.e., identified as a node) has and the strength of these connections (Borgatti et al., 2013; Scott, 2013). These connections are then represented visually using network diagrams, thus providing both a visual and a mathematical analysis of the networks of interest (Borgatti, et al., 2013; Scott, 2013).

In contrast to methods commonly used in social science that focus on individual attributes, SNA is motivated by the patterns of relations among the members of a system (Giuffre, 2013). The concentration on relations is important because these patterns of relations can have profound consequences for individuals. Therefore, it is imperative to understand the relations in order to understand the effects of an individual’s social environment (Giuffre, 2013). It is for this reason that SNA has become a widely used approach in examining human relations and interpersonal interaction patterns in many disciplines including sociology, anthropology, and social psychology (Borgatti, Mehra, Brass, Labianca, 2009; Zheng et al., 2010). More recently, SNA has been used in examining interventions with parents and youth (Craddock, Rice, Rhoades, & Winetrobe, 2016; Elreda, Coatsworth, Gest, Ram, & Bamberger, 2016) but have not been utilized with grandparent caregivers.

A social network may provide social capital to the individuals within it. Social capital is defined and used in different ways (Crossley et al., 2015). The basic concept is that social capital
is the assets embedded within a social structure that can be used for gain by its actors (Robins, 2015). More specifically, social capital can be viewed in three ways: as access to resources, as social cohesion, and as “brokerage” (Crossley et al., 2015). For purposes of the current study, the brokerage version was used during the social network analysis. Brokerage capital is used to describe a situation in which the alter bridges between different parts of the network. This position can gain advantages because it enables the spread of novel information, resources, and opportunities (Robins, 2015).

The incorporation of SNA for this research study was appropriate because it has been suggested that grandparents' social network may be a crucial element in their resilience (Kelley et al., 2000; Landry-Meyer et al., 2005). Furthermore, employing SNA provided an in-depth examination of how grandparent caregivers’ social environment relates to their resilience. In particular, SNA included a personal-network research design in which the core of the analysis was an egocentric network (egonet). An egocentric network is used to examine the relations between a focal person (i.e., grandparent), referred to as ego, and individuals and services, referred to as alters, in their social network (Hurtado-Mendoza et al., 2015; Robins, 2015). In this design, the participant is the focal point of the study. Therefore, participants are asked to whom they have connections with, the specific support each alter provides, and the characteristics of these alters (Borgatti et al., 2013; Robins, 2015).
STUDY 1

As previously mentioned, my dissertation project was separated into two studies. Study 1 utilizes quantitative methods of the explanatory sequential design to address the following research questions (RQ) and corresponding hypotheses:

RQ1: How are grandparent caregivers’ social support and coping skills associated with their ability to adapt successfully despite experiencing adversity?

H1: Grandparent caregivers who experience more stress demonstrate lower life satisfaction.

H2: Grandparent caregivers with higher levels of social support have higher levels of life satisfaction.

H3: Grandparent caregivers with higher levels of coping abilities experience greater satisfaction with life.

H4: Stress, coping, and social support have direct effects on life satisfaction.

H5: Social support and coping moderate the association between stress and life satisfaction.

RQ2: Do grandparent caregivers who have other grandparent caregivers in their social network fare better than those grandparent caregivers who do not know any other grandparents who are raising their grandchildren?

H1: Grandparent caregivers who have other grandparent caregivers in their social network report higher levels of social support compared to those grandparent caregivers who do not know any other grandparent caregivers.

H2: Grandparent caregivers who have other grandparent caregivers in their social network are more resilient, in terms of life satisfaction.
H3: Grandparent caregivers who have other grandparent caregivers in their social network have lower levels of social isolation compared to those grandparent caregivers who do not know any other grandparent caregivers.

**Method**

Participants for Study 1 included adults who identify as a grandparent raising one or more grandchildren. Based on the previous literature, the national mean age for grandparents raising grandchildren is 57 years old (Fuller-Thomson et al., 1997). These statistics demonstrate the wide age span of grandparents raising grandchildren and thus participation in this study was not limited to a specific age group. Furthermore, in order to be eligible to participate in the study, the parent of the grandchild had to not be present in the home and the grandchildren must have lived in the grandparents’ home for a minimum of one year.

Convenience sampling, a nonprobability sampling method, was employed to recruit participants (Creswell & Clark, 2011). Convenience sampling consists of recruiting participants who are easily accessible (Creswell & Clark, 2011; Marshall, 1996) and proximal to the researcher (Creswell & Clark, 2011). This was ideal for the current study for a number of reasons. First, given the qualitative approach and use of social network analysis for Study 2, it was important to recruit grandparents who were able to participate in a face-to-face interview. Second, I had access to professionals, community service providers, and grandparents raising grandchildren who could help recruit participants. Employing a convenience sample allowed for gathering of useful data and information that would likely not be possible with probability sampling techniques, which would require access to a larger population of grandparents raising grandchildren. Using G*Power software, an alpha level of .05 was used to determine that 74
participants would need to be recruited for Study 1 to have 80% power to detect a medium effect size (Cohen, 1988; Faul, Erdfelder, Buchner, & Lang, 2009).

Recruitment procedures included direct referrals from community leaders and service providers engaged with grandfamily initiatives and aging services (i.e., Grand Family Coalition, Namaqua Center, Larimer County Alliance for Grandfamilies, Weld County Grandparents Raising Grandchildren Task Force, Larimer County Office on Aging, Dahlia Campus of Health and Well-being, and Weld County Area Agency on Aging). Professionals included support group leaders and professionals associated with agencies who provide services to grandparents raising grandchildren. I presented at community, support, and social events in which grandparents raising grandchildren were in attendance. Furthermore, I offered to present findings to the community. Additionally, research flyers were distributed at clinics, community centers, churches, libraries, health clinics, recreation centers, cultural centers, support groups, and other local agencies.

Participants were given the opportunity to participate in a lottery to win a $50 gift card in an effort to increase survey completion and response rates (Dillman, 2000). The survey was made available on paper and online, and were provided to participant’s in-person or by mail, depending on the participants’ preference. Providing participants with options to complete the survey is necessary to increase the response rate (Dillman, 2000).

It took close to 6 months to recruit 74 participants to complete the surveys. There were some recruitment strategies that worked well, as well as some strategies that were not as successful. My prior experiences working with various grandfamily organizations and community partners assisted with recruitment of participants, as professionals and grandparent caregivers knew and trusted me. Additionally, attending events and support and social groups for
grandparents raising grandchildren demonstrated to be a good method of recruitment. Mailing hard copies of the survey with self-addressed pre-stamped envelopes to LISTSERVs from agencies who serve grandparents raising grandchildren also resulted in several completed surveys. On the other hand, having participant’s complete online surveys was not as fruitful. Of the 74 surveys, only 18 participants completed it online. Furthermore, 24 individuals began the online survey, but six did not complete it. It may be that participants preferred the hard copy version of the survey. Most agencies I approached were willing to support recruitment efforts through email list serves, social media, and other web-based formats. This made recruitment difficult because participants were not taking the online survey, nor were they reaching out to me to request a hard copy of the survey. Ongoing recruitment efforts included: (a) revising, shortening, and clarifying the emailed study description and extending the recruitment’s reach to a broader range of support-group facilitators; (b) providing incentives with mailed hardcopy survey instruments (such as a teabag to drink while completing the survey); and (c) resending surveys to those participants who started an online survey but did not complete it.

Participants included 74 grandparent caregivers between the ages of 49 and 79 years with a mean of 62.7 years. The majority of the participants identified as White (75%), 10.3% identified as Black or African American, 8.8% as American Indian or Alaska Native, and 5.9% chose the “Prefer not to answer” option. Additionally, 30% of the sample identified as Hispanic or Latino, and 6.8% of the sample reported both English and Spanish as their primary language. Participants included 68 (93.2%) female participants and 5 (6.8%) male participants. A little over half of the sample were in a committed relationship (married or cohabitating; 52.1%), whereas the rest of the sample were either divorced or separated (33.8%), single (7%), or widowed (5.6%). Over a third of the sample (34.3%) had earned a college degree, 30.1% had some
college, 24.7% had a high school diploma or GED, and 9.6% reported completing some of middle school or high school. Most of the participants were actively working (62.9%), 8.6% were unemployed, 15.7% were stay-at-home parents, 2.9% were unemployed students, and 35.7% were retired. Of those working, 17.1% were employed full-time and 20% were employed part-time. Using the 2017 Federal Poverty Guidelines (U.S. Department of Health and Human Services, 2017), 47.3% of the sample was living in poverty. This is further evident in that 55.9% of participants did not perceive their income to be adequate for their needs.

The number of persons in the grandparent participant household ranged between 2 and 6 people with a mean of 3.35 persons per household. Overall, 131 grandchildren were being raised by grandparents in the sample. Of these 131 grandchildren, their ages were reported for 120 individuals. Ages of grandchildren ranged from 1 to 22 years old, with an average age of 10.51 years. On average, participants were raising 1.82 grandchildren; 41.7% were raising one grandchild, 38.9% were raising two grandchildren, 15.3% were raising three grandchildren, and 4.2% were raising four grandchildren. On average, participants reported raising grandchildren and/or great grandchildren for 10.22 years, with a range of 1 year to 26 years. When asked how long they expected to continue in the role as a grandparent raising grandchildren, 22.2% stated until their grandchildren reached adulthood whereas 29.2% expected to be in this role for the rest of their lives. Furthermore, 86.1% of participants stated they know other grandparents raising grandchildren and 80.3% had attended a support group for grandparents raising grandchildren.

Measures

Surveys were used to ask participants about demographics, stressors (hassles), coping, social support, and life satisfaction (i.e., resilience). Surveys took approximately 15-20 minutes to complete.
Demographic survey. The demographic profile included questions about the grandparent caregiver, the grandchildren being raised, and the household. Additionally, participants were asked whether they knew other grandparents who are raising their grandchildren in order to create two groups: those who know other grandparent caregivers and those who do not.

Stressors. The Hassles Scale (Kanner, Coyne, Schaefer, & Lazarus, 1981) was used to measure stressors. The Hassles Scale, developed by Kanner, Coyne, Schaefer, and Lazarus (1981), is a measure of daily stressors people experience. Participants are instructed to indicate which hassles occurred in the past month, and rate each event as having been “somewhat,” “moderately,” or “extremely” annoying. The Hassles Scale has demonstrated to be a better predictor of stress than either life events or daily uplifts. Due to the length of the measure (117 items), it was possible that participants could become fatigued. Therefore, only items were selected that described the events grandparent caregivers were likely to experience. This resulted in a subset of 25 items that provided a measure of daily hassles participants experience. Cronbach’s alpha for the sample was .94.

Social support. Social support was assessed with three scales. The Multidimensional Scale of Perceived Social Support (MSPSS; Zimet, Dahlmen, Zimet, & Farley, 1988) is a 12-item measure of subjective assessment of social support. It consists of three subscales, with four items each: family, friends, and confidante. Each item is rated on a 7-point Likert scale ranging from very strongly disagree (1) to very strongly agree (7). Items include questions such as: “My friends really try to help me,” “My family is willing to help me make decisions,” and “There is a special person in my life who cares about my feelings.” (Dahlem, Zimet, & Walker, 1991). Responses are summed and divided by 12 for a total score with higher scores indicating higher perceived social support (Bruwer, Emsley, Kidd, Lochner, & Seedat, 2008). The MSPSS has
been used with adults of various age ranges, and among individuals from diverse ethnic groups (Edwards, 2004; Stanley, Beck, & Zebb, 1998).

The MSPSS consistently demonstrates good psychometric properties (Bruwer et al., 2008; Dahlem et al., 1991; Hayslip et al., 2015; Levin, 2000; Zimet et al., 1988). Zimet and colleagues (1988) reported an overall Cronbach’s alpha between .84 and .93. Test-retest reliability from a study with older adults by Stanley and colleagues (1998) reported consistency over time for friends \( (r = .73) \), family \( (r = .74) \) and Total Scores \( (r = .73) \). Construct validity for the MSPSS has been supported by significant negative correlations between scores on the MSPSS and measures of anxiety and depression symptoms (Zimet et al., 1988) and significant correlations with other perceived support measures, such as The Family subscale (Edwards, 2004). Cronbach’s alpha for the current sample was .97.

In addition to measuring access to emotional support on the MSPSS, participants were asked eight questions about their satisfaction with their social network using a portion of a Social Network Questionnaire (SNQ) used by MacPhee and colleagues (1996), in which respondents are asked to respond yes or no to questions such as, “Do you wish you had more people in your network?” “Do you wish you had more people who understood you?” “Do you wish there were fewer people you knew who made you angry and upset?” Questions related to having people to confide in, depend on, get advice, and feel understood imply emotional support whereas, “Do you wish you had more people who could help out with your child?” implies instrumental support. Questions were reverse coded with higher scores indicating more support satisfaction. Cronbach’s alpha for the sample was .87.

The Friendship Scale (Hawthorne, 2006) was used to measure feeling of social isolation. This 6-item measure was developed by Hawthorne (2006) with an aging population and is
commonly used in assessing social isolation in older adults (Nikmat, Al-Mashoor, & Hashim, 2015; Webel et al., 2014; Wittich, Murphy, & Mulrooney, 2014). Example items include, “I felt isolated from other people” and “I felt alone and friendless.” Each item has response options from 0 (Not at all) to 4 (Almost always). Scores are interpreted using cut points to determine if the participant is very socially isolated, isolated/low level of social support, socially connected, or very socially connected (Hawthorne, 2006; Nikmat et al., 2011). Psychometric properties of the Friendship scale indicate that it has adequate reliability, Cronbach’s alpha of .72 -.83 (Hawthorne, 2006; Nikmat et al., 2011), good convergent validity when compared to two other short relationship scales, and concurrent validity in terms of correlates of social isolation (Hawthorne, 2006). Cronbach’s alpha for the current sample was .84.

Coping. The ability to cope with stress can serve as a protective factor when dealing with adversity. Thus, the Resilience Scale (RS; Wagnild & Young, 1993) was used to measure coping (i.e., resiliency). The Resilience Scale was developed from a qualitative study with woman who had adapted successfully to major life events, and has been used in various qualitative and quantitative studies with older adults (Hayslip et al., 2013; Lamond, et al., 2008; Wilks & Croom, 2008; Windle, Bennett, & Noyes, 2011). The RS identifies individuals’ general coping abilities that enhance the ability to adapt. Thus, the RS is a measure of personality characteristics (Wagnild & Young, 1993). The RS is a 26-item scale using a seven-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Items include statements such as, “I can usually find something to laugh about,” “I can usually look at a situation in a number of ways,” and “My life has meaning.” Higher scores represent higher levels of coping. For example, a score of 25 to 100 is representative of low resiliency whereas a score of 161 to 175 is considered to demonstrate very high resiliency. In a methodological review of resiliency measures, the RS
received one of the best psychometric ratings (Windle et al., 2011). An extensive review of resiliency measures reported that multiple studies using the RS with various ages, multiple ethnic groups, and with men and women demonstrated good reliability (Ahem, Kiehl, Sole, & Byers, 2006). Internal consistency reliability from several studies yielded Cronbach’s alphas ranging from .76 to .91 (Wagnild & Young). Concurrent validity for the RS has been supported by significant correlations between scores on the RS and measures of morale, life satisfaction, and depression (Hayslip et al., 2013). Cronbach’s alpha for the sample was .94.

**Life satisfaction.** The Satisfaction with Life Scale (SWLS; Diener, Emmons, Larsen, & Griffin, 1985) is a self-report measure of life satisfaction (Diener et al., 1985). It is designed around the idea that there is a need for an overall judgement of the subject’s life in order to measure the concept of life satisfaction. The scale includes five statements related to life satisfaction, such as, “The conditions of my life are excellent.” Respondents are instructed to indicate their agreement with each statement based on a Likert scale of 1-strongly agree to 7- strongly disagree. Scores are summed and interpreted using cut points to determine if the participant is extremely satisfied, satisfied, slightly satisfied, neutral, slightly dissatisfied, dissatisfied, or extremely dissatisfied. The SWLS has been shown to have favorable psychometrics. For example, it has demonstrated to have internal consistency and acceptable test-retest reliability. The SWLS is suited for use with different age groups. Cronbach’s alpha for the sample was .85.

**Results**

**Preliminary Analyses**

Descriptive statistics were examined for variables’ distributional properties. All variables, except coping and support satisfaction, were normally distributed. The coping variable included
two outliers that were winsorized, which resulted in a normal distribution. Support satisfaction was positively skewed; thus, a square root transformation was conducted that resulted in normally distributed data.

Data were missing for 0% to 2.7% of all variables in the model except the MSPSS (9.5% missing) and the coping scale (12.5% missing). Therefore, prior to conducting descriptive and correlational analyses, missing data were imputed using the fully conditional Markov Chain Monte Carlo (MCMC) method, which is recommended for normally distributed variables (Graham, 2012). It assumes an iterative approach that fits a single variable using all other variables in the model as predictors and then imputes missing data for the single variable being fit. The method continues for each variable in the model to the maximum number of iterations specified, which was 20 in the present study. The data were not missing completely at random (MCAR) given that Little’s (1988) MCAR test was significant, $\chi^2(24) = 42.17, p = .01$. However, the MCMC method of imputation is robust even when data are not MCAR (Graham, 2012).

For model testing, missing data were handled in Mplus using full information maximum likelihood (FIML) estimation. This approach provides less biased estimates (Enders & Bandalos, 2001) because it assumes that the data are missing at random and uses available data to estimate missing data. In Mplus, cases with missing data on exogenous variables are not included in the analysis. To include cases with missing data on predictors and covariates, covariates were entered into the model as dependent variables. When exogenous variables are entered in the model as dependent variables, multivariate distributional assumptions of normality are made and cases with missing data are thus estimated. None of the exogenous variables in the present study violated the assumption of normality. Thus, model parameters were estimated based on the full sample.
Grandparents Raising Grandchildren: Under Duress

Descriptive analyses of the data replicated previous research documenting that grandparents raising grandchildren are a highly stressed population. In general, participants tended to experience fairly high levels of stressors, with 70% of the sample reporting having experienced 18 or more of the 25 daily stressors on the Hassles Scale, and with more than half (54.2%) of the sample having a score of 32 or greater on the annoyance of hassles experienced where a score of 25 indicates frequent annoyance with daily stressors. The most commonly occurring stressors were problems with grandchildren and troubling thoughts about the future, with various financial concerns being commonly reported. However, problems with children were not 1 of the 10 most annoying stressors reported, and troubling thoughts about the future ranked ninth on the top 10 most annoying stressors. Table 1 lists the top 11 most frequent stressors and those that are most annoying. Nine of the 10 most frequent hassles were also among the top 10 most annoying hassles. The most annoying stressors were being overloaded with family responsibilities, as well as having too many things to do; problems with adult children; and concerns about finances.

Their access to social support also was low, with 76% of the sample below the midpoint score (4.00) on the social support scale. Similarly, their feelings of support were low: 53% had a score less than or equal to 13% on the support satisfaction scale, indicating that more than half of the grandparents reported getting their support needs met on only one or none of the eight forms of support. In terms of social isolation, 64% of the sample was very socially isolated and another 18.1% reported feeling isolated.
Table 1
*Top 10 + 1 Most Frequent and Most Annoying Daily Hassles for Grandparent Caregivers*

<table>
<thead>
<tr>
<th>Stressor</th>
<th>Frequency $M$</th>
<th>SD</th>
<th>Intensity $M$</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td>Troubling thoughts about the future</td>
<td>.78</td>
<td>.42</td>
<td>1.28</td>
<td>.97</td>
</tr>
<tr>
<td>Problems with grandchildren</td>
<td>.78</td>
<td>.42</td>
<td>1.22</td>
<td>1.00</td>
</tr>
<tr>
<td>Concerns about money for emergencies</td>
<td>.77</td>
<td>.43</td>
<td>1.46</td>
<td>1.14</td>
</tr>
<tr>
<td>Too many things to do</td>
<td>.77</td>
<td>.42</td>
<td>1.49</td>
<td>1.11</td>
</tr>
<tr>
<td>Overloaded with family responsibilities</td>
<td>.76</td>
<td>.43</td>
<td>1.58</td>
<td>1.16</td>
</tr>
<tr>
<td>Not getting enough sleep</td>
<td>.75</td>
<td>.43</td>
<td>1.35</td>
<td>1.07</td>
</tr>
<tr>
<td>Problems with adult children</td>
<td>.74</td>
<td>.44</td>
<td>1.53</td>
<td>1.17</td>
</tr>
<tr>
<td>Not enough personal energy</td>
<td>.74</td>
<td>.44</td>
<td>1.41</td>
<td>1.07</td>
</tr>
<tr>
<td>Financial security</td>
<td>.72</td>
<td>.46</td>
<td>1.46</td>
<td>1.18</td>
</tr>
<tr>
<td>Concerns about money for necessities</td>
<td>.71</td>
<td>.46</td>
<td>1.38</td>
<td>1.18</td>
</tr>
<tr>
<td>Not enough money for entertainment and recreation.</td>
<td>.67</td>
<td>.47</td>
<td>1.31</td>
<td>1.20</td>
</tr>
</tbody>
</table>

Note. Frequency is rated as occurred or did not occur in the past month. Annoyance is rated from 1 (*somewhat*) to 3 (*extremely*).

Furthermore, 30.8% of the sample scored below 130 on the measure of coping, which indicates some degree of low resiliency (moderately low, low, or very low coping). Finally, nearly half of the sample (45.9%) rated themselves as at least somewhat dissatisfied with their life; i.e., a score of 19 or below on the SWLS. Of the five questions on the SWLS, the item “The conditions of my life are excellent” was more often rated as a source of dissatisfaction ($M = 3.54$, $SD = 1.94$) whereas the item “So far, I have gotten the important things I want in life” ($M = 5.24$, $SD = 1.52$) was most often rated as a source of satisfaction.

**Correlations among Predictors of Grandparent Caregivers’ Life Satisfaction**

Bivariate correlations were computed in order to test hypotheses related to the resilience of grandparents raising grandchildren. Specifically, hypotheses that (a) higher levels of adversity (i.e., daily hassles) would be associated with lower levels of life satisfaction, (b) greater social support would be positively correlated with life satisfaction, and (c) better coping skills (i.e.,...
resiliency) would predict higher life satisfaction were tested. Table 2 presents the correlations among the measures in the model of grandparent resilience.

Table 2
*Correlations among Social Support, Stressors, Coping, and Life Satisfaction*

<table>
<thead>
<tr>
<th></th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>M</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Support</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1. Social support</td>
<td>-.53***</td>
<td>.47***</td>
<td>-.32**</td>
<td>-.30**</td>
<td>.26*</td>
<td>.44***</td>
<td>4.68</td>
<td>1.57</td>
</tr>
<tr>
<td>2. Social isolation</td>
<td>-.72***</td>
<td>.37**</td>
<td>.47***</td>
<td>-.27*</td>
<td>-.47***</td>
<td>9.17</td>
<td>5.57</td>
<td></td>
</tr>
<tr>
<td>3. Support satisfaction</td>
<td>-.42***</td>
<td>-.47***</td>
<td>.22</td>
<td>.45***</td>
<td>.28</td>
<td>.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stress</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Occurrence of hassles</td>
<td>.87***</td>
<td>-.28*</td>
<td>-.37**</td>
<td>16.45</td>
<td>7.91</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Annoyance of hassles</td>
<td>-.30*</td>
<td>-.42**</td>
<td>28.81</td>
<td>16.26</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Coping and Life Satisfaction</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Coping</td>
<td>.52***</td>
<td>139.26</td>
<td>21.70</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Life satisfaction</td>
<td></td>
<td>20.76</td>
<td>7.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p < .05. ** p < .01. *** p < .001.

**Stress and life satisfaction.** Results support the first hypothesis given that both the frequency of daily hassles and the average annoyance of those hassles were significantly correlated with life satisfaction. These correlations indicate that although grandparents who experienced more daily stressors reported being less content with their lives, the association was not so strong as to preclude off-diagonal participants who despite having many daily stressors still reported high life satisfaction. Grandparents who reported more daily stressors, and being more annoyed by them, also indicated that they had significantly less support, especially in terms of higher social isolation and lower support satisfaction (Table 2). Grandparents who were more hassled also were significantly more likely to report that they had difficulty coping with stress (Table 2).
Support, coping, and life satisfaction. Next, correlations were computed to examine associations between the putative protective factors—social support and coping—and life satisfaction. All three measures of support were significantly correlated with life satisfaction (Table 2) such that grandparent caregivers were more content with their lives if they received more emotional support, were less socially isolated, and were more satisfied with the support they received. Coping was similarly correlated with life satisfaction (Table 2). Finally, grandparent caregivers who had more supportive social networks also reported being better able to cope with life’s adversities (Table 2), although the correlation between support satisfaction and coping was a trend that failed to reach significance.

Importance of Knowing Other Grandparent Caregivers

In order to test the hypothesis that grandparent caregivers are less stressed and adapt better if they have other grandparent caregivers in their social network, I computed t-tests in order to compare stress, social support, coping, and life satisfaction in grandparent caregivers who knew other grandparent caregivers versus those who did not have a grandparent caregiver in their support network. No significant group differences emerged in social isolation, $t(70) = -0.32$, social support, $t(70) = 0.64$, coping, $t(70) = -0.40$, or life satisfaction, $t(70) = -0.08$. However, in terms of the frequency of hassles, grandparent caregivers who knew other grandparent caregivers ($M = 17.19, SD = 7.36$) reported significantly more hassles than did those who did not know other grandparent caregivers ($M = 10.70, SD = 9.67$), $t(70) = -2.47, p = .02$, Cohen’s $d = .76$. However, the difference in annoyance of hassles did not reach significance, $t(70) = 1.82$. Finally, on the measure of support satisfaction, grandparent caregivers who knew other grandparent caregivers ($M = .37, SD = .34$) were less satisfied with the support they received
compared to those who did not know other grandparent caregivers \( (M = .62, SD = .38), t(70) = 2.12, p = .04, \) Cohen’s \( d = .69. \)

**Model Tests of Predictors of Grandparent Caregivers’ Life Satisfaction**

An initial step in testing my model of predictors of grandparent caregivers’ life satisfaction was to determine whether correlations among the social support variables, and between the two indicators of hassles (i.e., frequency and annoyance), warranted treating them as indicators of latent constructs. First, correlations among social support, social isolation, and support satisfaction were large, or very large in the case of the inverse association between social isolation and support satisfaction (Table 2). Thus, all three measures of social support appear to tap into the same latent construct. Second, the correlation between the frequency and annoyance of hassles was so high as to indicate that they were redundant measures (Table 2). For this reason, only the measure of annoyance was included in model testing because it was more likely to assess stress as opposed to stressors (Lazarus, 1993).

Additionally, marital status, income, and age were included as covariates. Significant group differences were found between those married and those not married. Grandparent caregivers who were not married had higher levels of intensity of hassles, \( t(69) = 2.31, p < .05, \) less emotional support, \( t(69) = -.01, p < .01, \) more social isolation, \( t(69) = 2.71, p < .01, \) less support satisfaction, \( t(69) = -2.61, p < .05, \) and lower levels of life satisfaction, \( t(69) = -2.18, p < .05. \) Income also was correlated with the intensity of hassles, \( r = .28, p = .02 \) and emotional support, \( r = .25, p = .04. \) Therefore, marital status and income were included as covariates. Age was not significantly correlated with any of the scales, but did show a trend with life satisfaction, \( r = .17, p = .08, \) so it was added as a covariate.
Mplus version 7.4 was used to test the model of predictors of life satisfaction. Scores for stress and coping were standardized for all model tests. The first step was to test a direct effects model in which hassles predicted life satisfaction, with income, age, and marital status covaried. This model explained 30.2% of the variance in life satisfaction; both hassles, $\beta = -.41$, $SE = .11$, $p < .001$, and marital status, $\beta = .32$, $SE = .14$, $p = .025$, were significant predictors.

To the base model were added coping and social support as direct predictors of life satisfaction (see Figure 3). Emotional support (i.e., the MSPSS), support satisfaction, and social isolation were constrained as indicators of the same latent construct. This model fit the data adequately, $\chi^2 (12) = 13.75$, $p = .32$, RMSEA = .04, 90% CI [.00, .13], CFI = .99, SRMR = .04, and explained 55% of the variance in life satisfaction. For CFI, a value greater than or equal to .90 indicates adequate fit, and for SRMR, a value of .08 or less indicates a good model fit as does an RMSEA value of .06 or less (Hu & Bentler, 1999). As shown in Figure 3 and Table 3, the direct effect from social support to life satisfaction was significant, as was the path between coping and life satisfaction. However, the direct effect from stress to life satisfaction was no longer significant (Table 3). Additionally, age was a significant covariate but not the other covariates in the model (see Table 3). Thus, coping and social support account for substantial variance in grandparent caregivers’ life satisfaction, and as a set render as nonsignificant the effect of stress.
Figure 3: Significant paths (solid lines) for final model of contributions of stress, social support, and coping to grandparent caregivers’ life satisfaction. Nonsignificant paths are signified by dotted lines. * $p < .05$. ** $p < .001$. 
Table 3
Predicting Life Satisfaction from Hassles, Coping, and Social Support: Direct Effects Model

<table>
<thead>
<tr>
<th>Paths tested</th>
<th>$\beta$</th>
<th>SE</th>
<th>$p$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Married $\rightarrow$ Life satisfaction</td>
<td>.16</td>
<td>.12</td>
<td>.20</td>
</tr>
<tr>
<td>Income $\rightarrow$ Life satisfaction</td>
<td>-.19</td>
<td>.12</td>
<td>.12</td>
</tr>
<tr>
<td>Age $\rightarrow$ Life satisfaction</td>
<td>.18</td>
<td>.09</td>
<td>.04</td>
</tr>
<tr>
<td>Stress $\rightarrow$ Life satisfaction</td>
<td>-.05</td>
<td>.11</td>
<td>.63</td>
</tr>
<tr>
<td>Social support $\rightarrow$ Life satisfaction</td>
<td>.38</td>
<td>.12</td>
<td>.002</td>
</tr>
<tr>
<td>Coping $\rightarrow$ Life satisfaction</td>
<td>.46</td>
<td>.09</td>
<td>&lt;.001</td>
</tr>
</tbody>
</table>

The final model test focused on whether social support or coping moderates the association between hassles and life satisfaction. Interaction terms were created by multiplying the stress score by each putative moderating variable; i.e., coping and social support. When the two interaction terms were added to the direct effects model in Figure 3, age remained a significant covariate, $\beta = .21, SE = .09, p = .02$. Also, both coping, $\beta = .47, SE = .10, p < .0001$, and social support, $\beta = .40, SE = .13, p = .002$, remained significant predictors in this model. However, neither interaction term was significant, even though more variance was explained by the moderation model, $R^2 = .61$. In order to test whether the moderation model fit the data better than the direct effects model, the two models were compared using the log-likelihood ratio test (see Maslowsky, Jager, & Hemken, 2014). This resulted in a significant log-likelihood ratio test, $D = 653.26, df = 10, p < .001$, which indicates that the direct effects model represents a significant loss in fit relative to the moderation model. However, given the nonsignificant interaction terms, the law of parsimony favors the direct effects model shown in Figure 3 rather than moderation of stress by coping or social support.

**Discussion Study 1**

The purpose of Study 1 was to examine how grandparent caregivers’ social support and coping skills are associated with their ability to adapt successfully despite experiencing adversity, and if grandparent caregivers who know other grandparents fare better than those who
do not know other grandparents. Results from 74 grandparents raising grandchildren revealed that they are a highly stressed population. This result is consistent with previous research whereas grandparents raising grandchildren experience high levels of stress (Bullock, 2005; Coon, 2012; Hayslip & Kaminski, 2005; Hill, 2008; Kolomer, 2008).

**Stresses Associated with Grandparent Caregiving**

The stresses grandparent caregivers are experiencing are normative in that the majority of the most frequent and annoying stresses reported by grandparent caregivers are also common among parents of children. Among parents, daily hassles, much like the ones experienced by grandparent caregivers, have been found to be relevant to parent satisfaction and well-being (Crnic & Booth, 1991; Crnic & Greenberg, 1990). Crnic and Booth (1991) also found that social support moderated the influence of hassles in mothers. The findings from the current study are consistent with the literature on parents and daily hassles in that as the number of daily hassles increased, grandparent caregivers’ life satisfaction tended to decrease. Additionally, in this study grandparents who reported high levels of stress and high degrees of annoyance also reported being less satisfied with their social support system. Much like with parents (Crnic & Greenberg, 1990), grandparent caregivers in this sample with more social support experienced more life satisfaction. Other studies with grandparent caregivers have found similar results. For example, Musil (1998) found that grandparent caregivers are at an increased risk for depression when emotional or instrumental support are missing.

In addition to dealing with common daily hassles related to parenting, grandparents raising grandchildren also reported problems with adult children as one of the most frequent and annoying stressors. This result is not surprising as grandparent caregivers likely have taken on this role due to their adult child’s inability or unwillingness to parent the grandchild (Cowling et
al., 2015; Kolomer, 2008; Lee et al., 2015). According to Hayslip and colleagues (2015), stresses associated with the grandchild’s parent are common among grandparent caregivers. In Shore and Hayslip’s (1994) research, many grandparents expressed disappointment in their adult child, resented him/her or felt taken advantage of by the adult child. Furthermore, the most annoying stressor reported by grandparents in the current study was “overloaded with family responsibilities.” Although this may also be common among parents of children, this could suggest that grandparent caregivers may be experiencing stress related to the off-time pressures of raising grandchildren. Grandparents do not expect to be raising children at this stage of their life, as it is not viewed as part of the normal life course (Landry-Meyer & Newman, 2004).

**Stress, Support, Coping, and Grandparent Caregivers’ Life Satisfaction**

As hypothesized, in this study higher levels of stress were associated with lower levels of life satisfaction. Despite this association, there were a number of grandparent caregivers who reported high life satisfaction. These grandparent caregivers were resilient despite the high levels of stress they experienced. On the other hand, grandparents who reported higher levels of hassles also tended to report higher social isolation, lower support satisfaction, and were more likely to report difficulty dealing with stress, which may be conceptualized as risk factors and thus compromise individuals’ resilience.

Confirming findings from previous studies, grandparent caregivers in the current sample also experienced social isolation (Doley et al. 2015; Jendrek, 1994) and inadequate social supports (Doley et al. 2015). This is worrisome for a number of reasons. Support groups are thought to be useful in reducing social isolation (Kolomer, 2008; Lee & Blitz, 2014), but this does not seem to be the case with this sample of grandparents raising grandchildren as a high percentage (80.3%) of grandparents reported support group attendance. In fact, these findings are
similar to those of Sands and colleagues (2005), which found support group attendance was negatively related to grandparents’ well-being.

Social isolation is linked to a decrease in quality of life (Perissinotto et al., 2012; Webel et al., 2014). Therefore, social isolation may be part of the reason why almost half of the sample indicated dissatisfaction with their life. Furthermore, if grandparent caregivers are not getting the support they need, it is likely that their resilience will be affected as it has been proposed that social support can serve as a protective factor that promotes resilience (Dolbin-McNab et al., 2013).

As predicted, higher levels of life satisfaction were correlated with higher levels of social support and coping skills. The more coping skills, social support, and support satisfaction, and the less social isolation grandparents had, the more satisfied they were with their life. This provides evidence that social support and coping skills serve as protective factors for grandparent caregivers. This was also seen in the SEM model in which the direct effects of coping and social support predicted life satisfaction. Interestingly, hassles were significantly correlated with life satisfaction, but with the addition of coping and social support (and the covariates), hassles were no longer significant. This is particularly interesting because this would mean that grandparent caregivers may benefit more from increases in social support and learning coping skills, which is much easier than attempting to decrease the adversities (e.g., stress) they experience as a grandparent raising grandchildren.

The hypothesis that grandparent caregivers who know other grandparents raising grandchildren fair better than grandparent caregivers who do not know any other grandparent caregivers was not supported in the current study. On the contrary, grandparents who knew other grandparents raising grandchildren reported higher levels of stress and less support satisfaction.
Perhaps these grandparents had met other grandparent caregivers through support groups, which they had sought out because they were under more stress and were not happy with the support they were receiving. Another possibility could be that knowing other grandparent caregivers decreases the grandparents’ belief that their grief is disenfranchised and therefore increases their willingness to express themselves and their needs. This would assume that it is not that they have less support, but that they believe their desire for more support is warranted by the hassles they experience.

**Limitations and Future Directions**

As with any research study, the current study is not without its limitations. During the recruitment phase, it was brought to my attention by a few nongrandparent kinship providers that the current study excluded them, and as kinship providers they are often overlooked and ignored. Even though the aim of the study focused on grandparent caregivers, future research could be more inclusive of kinship providers so as to not exclude other caregivers such as aunts who are raising a family member’s child. Another limitation of this study related to recruitment was that the majority of the participants were recruited from local agencies such as support groups, through kinship navigators, and social events for grandfamilies and/or local community events. This resulted in a sample that was ‘connected’ with services and therefore did not include grandparent caregivers who may be isolated and/or not using these services. Though difficult, future research should attempt to reach grandparents raising grandchildren who do not have contact with service agencies or providers.

Another drawback of recruiting participants from such agencies was the self-selection which resulted in not having enough individuals who adequately represent caregivers without other caregivers in their network. This was problematic because one of the research questions for
this study was to determine if those with grandparent caregivers in their social network experienced better outcomes than those that did not. As previously noted, results from this study did not demonstrate evidence that knowing a grandparent caregiver was beneficial to grandparents raising grandchildren. On the contrary, results indicated that grandparents who knew other grandparent caregivers reported stress with more frequency and less support satisfaction. Future work could benefit from purposefully recruiting both grandparent caregivers who know other grandparents and those who do not know other grandparents raising grandchildren.

The current study focused on measuring social support using the MSPSS, SNQ, and Friendship Scale. However, it may be beneficial for future work to assess instrumental support as well. Furthermore, it would be interested to examine how the socioeconomical status of grandparent caregivers relates to their use and need for instrumental support. These scales along with the ones used to measure hassles, coping skills, and life satisfaction were all participant self-reports and hence have some inherent biases. Study 2, the second part of this dissertation included interview data which provides a more in-depth picture.

Study 1 included the covariates of age, income, and marital status. Future research may include other covariates such as race and ethnicity. Additionally, the Satisfaction with Life Scale was used in the current study to measure good quality adaption. Future research could include a scale to measure for depressive symptoms as satisfaction with life is not equivalent to the absence of depressive symptoms.

Lastly, the current study is a descriptive, correlational study and therefore does not permit causal inferences to be made. Researchers should collect longitudinal data, and in addition to looking at the same outcomes examined in this study, I recommend examining the effects of
interventions and programs that focus on mitigating risk and/or promoting coping skills and social support among grandparent caregivers. Longitudinal studies would also be beneficial because it would offer an opportunity to test coping and social support as mediators between stress and life satisfaction. This would be an important next step, as the design of the current study examined coping and social support as protective factors and did not allow for inferences about mediation that would require a longitudinal design (Little, 2013).

Implications for Practice

Finding from the current study should be considered when developing intervention and prevention programs as well as resources and social policies for grandparents raising grandchildren. Resilience literature suggests that it is possible to promote positive development despite adversity (Luthar & Cicchetti, 2000). Therefore, it would be advantageous to implement ways to promote positive adaption in grandparents raising grandchildren rather than waiting to implement treatment strategies due to the adversities these grandparents are facing.

Further, Masten and Coatsworth (1998) provided three key strategies to promoting resilience: (a) risk focused, (b) resource focused, and (c) process focused. These strategies can be used to promote resilience in grandparent caregivers. For example, grandparent caregivers in the current study reported high levels of stress, and evidence suggests that individuals’ physical and psychological well-being are influenced by their appraisal of daily hassles (i.e., stress; Crinic & Greenberg, 1990). We may not be able to eliminate the hassles grandparent caregivers experience, but we can provide them with resources to help mitigate the risks associated with stress. For instance, grandparent caregivers experiencing problems with adult children may benefit from an intervention that teaches communication skills for difficult situations or family therapy. Individual therapy may also be beneficial in regard to ‘troubling thoughts about the
future’ and perhaps feelings of being overloaded with family responsibilities. Noting that four of the most frequent and annoying hassles dealt with money, it is evident that monetary assistance programs can be vital in supporting grandparent caregivers. Free financial advising (e.g., budgeting) and referrals to agencies that can provide financial support (e.g., money for rent) would help grandparents with the financial stressors they experience. Many of these resources may already exist in some counties but such resources can be crucial to the well-being of grandparent caregivers and the grandchildren they are raising. Additionally, grandparents raising grandchildren may not be aware that such resources exist, so efforts for reaching grandparent caregivers who are connected to resources or who may be socially isolated are necessary.

Resources to help with stressors is one method of risk mitigation that takes on a resource-focused strategy proposed by Masten and Coatsworth (1998), but utilizing a more process-focused strategy could also promote resilience in grandparent caregivers. As this study indicated, social support and coping are significant predictors of life satisfaction. Therefore, interventions that promote social support and coping skills in grandparent caregivers would be advantageous. Programs such as GRANDcares (Yancura, Greenwood-Junkermeier, & Fruhauf, 2017) can help promote coping skills in grandparent caregivers, such as coping with difficult feelings, communicating effectively, reducing stress, and taking care of themselves. In conclusion, it is imperative that practitioners and researchers continue to find ways to help grandparent caregivers increase their social support and coping skills as it is much easier to add social support and coping skills to grandparent caregivers’ ‘bucket’ than it is to take away their stressors.
STUDY 2

Study 2 employed qualitative methods and social network analysis to address the following research question (RQ):

RQ1: Among grandparent caregivers who experience high levels of adversity, what experiences distinguish between those who are resilient (i.e., high in life satisfaction) versus low in life satisfaction?

Method

In accordance with the explanatory sequential design, the purpose of Study 2 was to elaborate on the findings from Study 1. Therefore, results from the survey data (i.e., Study 1) influenced Study 2. For example, participant scores on the Hassles Scale and Satisfaction with Life Scale from Study 1 were used to determine the participants for Study 2. Additionally, the questions for interview protocol in Study 2 were developed in accordance with the results of Study 1. For instance, in Study 1 there were a set of frequently cited hassles for grandparent caregivers related to services or the lack thereof, thus in the interview participants were what were the most useful services they had used and what were the most needed services for grandparent caregivers.

Development of Resilience Quadrant

As previously discussed in the literature review, in order for resilience to exist, there must be both adversity and better than expected adaption or development (Masten & Coatsworth, 1998). Furthermore, the RS measures coping as it was designed to measure an individual's resilience as a personality characteristic (i.e., resiliency; Wagnild & Young, 1993) and so does not take into consideration whether the individual has experienced adversity or good quality adaption or development. Thus, in order to recruit participants with different levels of resilience,
resilience quadrants were developed using participants’ scores on the Hassles Scale and SWLS. To confirm the use of these two scales, a Pearson’s $r$ was computed to assess the relationship between the scores on the Hassles Scale and the scores on the SWLS. Results indicated a modestly significant negative correlation between the scores on the Hassles Scales and scores on the SWL, $r(74) = .42, p < .001$.

The SWLS, a self-report measure of life satisfaction (Diener et al., 1985), was used as an indicator of good quality of adaption or development in which higher levels of satisfaction represented higher levels of good quality adaptation. Using the SWLS scoring, participants were separated into two groups. Using the scoring scheme provided by Diener and colleagues, those with a score of 19 or less were identified as having some degree of dissatisfaction and those with a score of 20 or more as having some degree of satisfaction with life.

The Hassles Scale, a measure of daily stressors people experience (Kanner et al., 1981), was used as the measure adversity. Initially a cutoff score of 42.25 ($75^{th}$ percentile) was used to group participants into two groups; those experiencing high levels of daily stressors and those not experiencing high levels of daily stressors. This cutoff point resulted in five cases in the resilient quadrant. Because the goal was to have 3-5 individuals from each group and it was likely that not all five of the individuals in the resilience group would participate in an interview, cutoff scores were re-examined. In order to have at least 10 individuals in the resilient group, a cutoff point of 35 was chosen. This cutoff point is appropriate because 63.5% ($n = 47$) of participants scored a 35 or below and it allowed for 10 participants in the resilient group. Figure 4 shows the scatterplot for scores on the Hassles Scale and SWLS.
Figure 4: Participants scores on the Hassles Scales and the SWLS. The solid thick lines signify the cut off points for group assignment. Individuals in the resilient group reported experiencing high number of daily stressors (i.e., Hassles score equal to or greater than 35) and being satisfied with their life (i.e., SWLS score of 20 or above) and experiencing a high number of daily stressors. Individuals in the maladaptive group reported experiencing a high number of daily stressors (i.e., Hassles score equal to or greater than 35) and some degree of life dissatisfaction (i.e., SWLS score less than or equal to 19).

Using the SWLS and Hassles Scale cut off scores previously discussed, participants were categorized into one of four resilience groups; (a) Resilient (n = 11), (b) Maladaptive (n = 22), (c) Competent (n = 29), or (d) Vulnerable (n = 12).

Participants and Recruitment

For Study 2, purposeful sampling, a method in which I intentionally selected specific participants (Creswell & Clark, 2011), was used to select participants for the face-to-face interviews. For this study, participants were purposefully sampled based on their placement in resilience quadrants. An a priori decision was made to include 3 to 5 participants from each identified resilience group for Study 2. This range of participants was chosen based on the
recommendations in the literature. For instance, Creswell and Clark (2011) recommended interviewing 4 to 10 people total in order to acquire a good amount of information without overburdening the analysis process. Similarly, Borgatti and colleagues (2013) recommended a sample of 5 to 10 participants when using SNA, explaining that having fewer than 5 participants does not provide enough information for a social network analysis and that more than 10 can make it difficult to manage the data and analysis process. Keeping these two recommendations in mind, the goal of the current study was to include at least 3 to 5 participants from each of the four quadrants with a total of 12 to 20 interviews.

Once all participants from Study 1 were assigned to a resilience group, 10 participants from each of the four quadrants were randomly selected to be invited to participate in a face-to-face interview. Once the list of potential participants was developed, I reached out to these individuals inviting them to participate in a face-to-face interview. In an effort to increase interview participation, participants were given the opportunity to participate in a lottery to win a $50 gift card. Participants selected for interviews were contacted via email, phone, and/or mailing address depending on what participants indicated on their Study 1 consent form. At least three attempts were made to connect with the participant to schedule an interview. Once the participant had agreed to participate in an interview, further attempts were made to schedule an interview. Additionally, in order to decrease the number of no shows and reschedule interviews, I provided a reminder phone call, text message, or email to the participant the day before the scheduled interview.

Five months of recruitment efforts resulted in 16 face-to-face interviews. Common obstacles for recruitment included incorrect contact information, individuals not corresponding, and no-shows for scheduled interviews. A few grandparent caregivers had to reschedule
interviews due to issues related to grandchildren, transportation challenges, and their own physical health. One grandmother rescheduled her interview five times. Recruitment seemed to be more difficult for individuals who were in the maladaptive and vulnerable group, with the vulnerable group being the most difficult to secure for an interview. From the initial 10 participants selected to be interviewed from the vulnerable group, only one interview was conducted. In an attempt to reach the desired 3 to 5 participants from each resilience quadrant, attempts were made to interview all \((n = 12)\) participants in the vulnerable group. Despite these efforts, I was only able to schedule one more face-to-face interview providing a total of two interviews for those in the vulnerable group.

**Participants**

Participants for Study 2 included 16 adults who were a grandparent raising one or more grandchildren who completed the survey for Study 1 and were randomly selected to participate in a face-to-face interview. Of the 16 grandparents raising grandchildren, 5 were from the resilient group, 4 from the maladaptive group, 5 from the competent group, and 2 from the vulnerable group.

Participants’ ages ranged between 52 and 75 years old with a mean age of 62.8 years. The majority of the participants identified as White \((n = 10)\), one identified as Black or African American, one as American Indian or Alaska Native, and one chose the “Prefer not to answer” category. Additionally, 31.3% \((n = 5)\) of the sample identified as Hispanic or Latino and one person of the sample reported both English and Spanish as their primary language. Participants included 15 (93.8%) females and one (6.3%) male. One third of the sample were married \((n = 5)\), 46.7% were divorced \((n = 7)\), 2% separated \((n = 2)\) and 6.7% were single \((n = 1)\). The majority of the sample reporting having attended college (68.7%, \(n = 11\)) with six reporting ‘some college,’
three having earned an associate’s degree and three having earned a master’s degree. The other 31.3% \((n = 5)\) of the sample had a high school diploma or GED. Participants varied on their employment status; employed full-time \((n = 4)\), employed part-time \((n = 3)\), unemployed \((n = 2)\), stay at home parent \((n = 2)\), or retired \((n = 4)\). Using the 2017 Federal Poverty Guidelines (U.S. Department of Health and Human Services, 2017) 44.8% \((n = 7)\) of the sample population for Study 2 is living in poverty. This is further evident in that 62.5% \((n = 10)\) of participants did not perceive their income to be adequate for their needs.

The number of persons in the household ranged between 2 and 4 people with a mean of 2.94 persons per household. A total of 27 grandchildren were being raised by grandparents in the sample for Study 2. Ages of grandchildren ranged from 3 to 18 years, with an average age of 11.17 years old. Participants were raising 1-3 grandchildren \((M = 1.69; 43.8\% 1 \text{ grandchild}, 43.8\% 2 \text{ grandchildren, and } 12.5\% 3 \text{ grandchildren})\). On average, participants reported raising grandchildren for 9.63 years with a range of 2 to 28 years. When asked how long they expected to continue in the role as a grandparent raising grandchildren 26.7% \((n = 4)\) stated until their grandchildren reached adulthood whereas 20% \((n = 3)\) expected to be in this role for the rest of their lives. The majority of participants \((93.8\%, n = 15)\) stated they know other grandparents raising grandchildren and had attended a support group for grandparents raising grandchildren.

**Procedures**

Face-to-face interviews were used to further explore the results from Study 1 related to demographics, social support, social isolation, and resilience. Semistructured interviews entail a less structured format in which the interview guide included a mix of open-ended questions and those that do not have predetermined wording or order to them (Merriam, 2009; Seidman, 1998). Furthermore, this method was employed because it allows the researcher the flexibility and
opportunity to move the interview in the direction of emerging ideas and new topics (Merriam, 2009; Seidman, 1998). Interviews were scheduled with each participant at a time and place of their choosing. Of the 16 interviews that were conducted, 50% were conducted at a place of business (e.g., restaurants or coffee shops). The remaining 50% of interviews were conducted at a library (n=2), at the participant’s home (n=5), and one interview was conducted over the phone.

An interview protocol was used, and included two sets of questions. One set of questions was asked open-ended questions such as, “Who has been the most helpful in supporting you as a grandparent raising grandchildren?” and “When faced with a difficult or challenging situation, how do you handle it?” The other set of questions were SNA questions and included having participants establish: (a) name generators, (b) name interpreters, and (c) name interrelaters. Name generators consist of questions typically used to obtain a list of individuals with whom the participant has some type of relationship (i.e., alters) and are the first step of a personal network research design (Halgin & Borgatti, 2012; Hogan, Carrasco & Wellman, 2007). Once a list of alters had been acquired, the next step was to ask the participant to name interpreter questions. Name interpreter questions are used to gain information about the attributes of each alter (e.g., gender) and the kind of relationship (e.g., type, frequency, quality, functionality, etc.) the ego (i.e., grandparent caregiver) has with each alter (Borgatti et al., 2013; Halgin & Borgatti, 2012). To measure for density, participants (i.e., the ego) were asked if any of his/her alters know each other, and if so how close they are to one another (Borgatti et al., 2013; Cochran et al., 1990; Robins, 2015). To facilitate data collection related to SNA, I included a template in the interview protocol to facilitate collection related to participants’ social networks. In addition to the
template, the interview protocol also provided a set of questions designed to collect details about each alter’s relationship to and frequency of contact with the ego (i.e., grandparent).

A common concern in research is the potential for question-order effects (Lasorsa, 2003; Oldendick, 2008). Question-order effects occur when the sequence in which questions are asked influence a participant’s responses (Tourangeau, & Rasinski, 1988). Studies on the impact of one question on the response to subsequent questions have demonstrated that even minor changes in question order can have a large influence on responses (Bowling, 2005; Lasorsa, 2003; Schwarz, 2007). Although there is not a technical procedure to protect against question-order effects, there are number of strategies researchers can implement to alleviate this issue (Lasorsa, 2003; Oldendick, 2008). For example, the pace of the interview and the control over the order of the questions can help avoid question-order effects (Bowling, 2005). Other strategies include reversing the order in which key questions are asked (Lasorsa, 2003) and randomizing sets of items or systematically varying the order of the questions (Oldendick, 2008).

In order to decrease the possibility of the order of questions influencing the results in this study, I systematically varied the two sets of questions for each participant. For example, if the first participant received the set of SNA questions first followed by the social support, social isolation, and resilience questions, the second participant received the social support, social isolation, and resilience set of questions first and the SNA questions second. Furthermore, the second subset of questions--those related to resilience, social support, and social isolation--were randomized. This resulted in a variation in order of this subset of questions, thereby distributing any question-order effects across the set of questions (Oldendick, 2008).

Interviews took one to two hours to complete, with the average interview lasting about one and a half hours. Immediately after each interview, I recorded in a designate journal a
description of the setting, any events that occurred during the interview, and any other observations made during the interview. Additionally, all interviews that were audio taped with the participants' permission, were transcribed verbatim, then deleted.

**Pilot Study**

Due to the exploratory nature of the study, I conducted a pilot study to ensure the survey and interview protocol were appropriate and would work efficiently. A pilot study allows for researchers to experience the possible “twists and turns of the interviewing process and the complexities of the interview relationship” (Seidman, 1998, p. 32) before the actual study. Furthermore, Seidman (1998) encouraged researchers to pilot their studies to better understand if their approach and structure are appropriate, and provide an opportunity to further process and revise their research proposal.

As a result of this recommendation, two grandmothers raising their grandchildren were recruited to complete the survey and take part in the face-to-face interview. Conducting this pilot study was beneficial as it increased my comfort with administering the survey and interview, offered the opportunity for new questions to be identified, and provided areas for improvement. For example, while completing the survey, one of the grandmothers mentioned that the support she received from her immediate family was very different from the support her extended family provides. She went on to explain that she knows this is the case with many grandfamilies. Due to the survey consisting of predeveloped and validated scales, I was not able to make changes to the question that triggered the grandmother’s comment. After reviewing the literature on the MSPSS, an operational definition for family was found. Therefore, if this question or comment were to arise again, participants would be directed to answer it according to their interpretation of family. Furthermore, reflecting on the grandmother’s comment about family, the question,
“Tell me about your relationship with your family?” was added. Furthermore, if appropriate, such questions would be followed with probes regarding acceptance and support as it relates to this question and SNA.

The first grandmother interviewed had numerous members in her social network. It was difficult to keep track of them as she provided information about each member. This resulted in my thinking about how best to track this information in a way that is accurate, yet does not slow down the interview. Audio taping of the interviews, and asking participants for permission to follow-up with them with any questions or clarifications after the interview helped to ensure the data were collected accurately. Another benefit of the pilot study was that it provided a better idea of how long each portion of the data collection would take. Both grandmothers were able to complete the survey in 5-10 minutes. For the interview portion, it took 45 minutes with one grandmother and 2 hours with the other participant. The 2-hour interview also included casual talk between the interviewer and interviewee, so it was estimated that the interview process would last approximately an hour and a half. It should also be noted that the 2-hour interview was with the grandmother with numerous social network members.

Overall, the pilot study went well. There were not any concerns, and the delivery of both the survey and interview protocol went smoothly. Having completed the pilot study and implemented the identified changes to the interview protocol resulted in me having more confidence about the interview protocol and interview process.

Results

Data analyses for Study 2 consisted of a qualitative analysis of the data collected from the face-to-face interviews and an in-depth investigation of each grandparent caregiver’s social network using social network analysis. Interview data were analyzed based on the resilience
group. For example, data from a participant in the resilient group were analyzed and compared to others in the resilient group. Once this was complete, cross-group comparisons were incorporated. Results are discussed in the following section.

Social Network Analysis

Descriptive statistics were calculated using SPSS and social network characteristics were analyzed using E-Net. E-Net is a free, downloadable Windows software designed to organize social network analysis data and includes multiple analysis options appropriate and specific to ego-network data (Borgatti, 2006). It organizes data into five key sections: egos, alters, alter-alter ties, visualization, and measures. E-Net can summarize the distributions of egos’ characteristics, alters’ attributes (e.g., gender), as well as the relationship between alters and egos (e.g., closeness) (Halgin & Borgatti, 2012). Additionally, it allows for the researcher to select egos, alters, and relations for any given analysis, therefore providing simultaneous calculation of multiple networks. Another benefit of using this program is that any final analyses can be done using statistical packages such as SPSS and SAS.

Each ego network was treated as a separate case (DeJordy & Halgin, 2008) and was analyzed for size and composition. Once all ego networks were completed, findings were aggregated among like resilience groups and SPSS was used to determine group averages. This was done in order to facilitate cross-group comparisons.

Given that the study is exploratory with a small sample it should be noted that comparisons between groups may result in the likelihood of a Type 1 error. Additionally, due to the small size of the sample I adopted a rule to interpret any differences with an effect size of .60 or greater.
**Demographic factors.** Demographic data for the sample as a whole (with all resilience groups included) is described in the participants section.

**Resilient group.** The average age for participants in the resilient group \( (n = 5) \) was 61.2 years old. Two of the participants received a high school diploma, one received an associate’s degree, and two received a master’s degree. Three of the five participants were employed in some capacity, one individual reported income was inadequate and this same individual met the 2017 Federal Poverty Guidelines (U.S. Department of Health and Human Services, 2017). Participants in this group had been raising 1 to 3 grandchildren between the ages of 5 and 17 years old for 2 to 13 years. Two of the participants said they were unsure about how long they will be raising their grandchildren; one said for another 1-5 years and another said until he/she died.

**Maladaptive group.** The maladaptive group consisted of four individuals. The average age for this group was 61.5 years old. These four individuals had a number of commonalities, such as they all had some college and none were married. Additionally, none believed their income was adequate, and three of the four met the 2017 Federal Poverty Guidelines (U.S. Department of Health and Human Services, 2017). Furthermore, three of the four grandparents were not currently working in some capacity. Individuals in this group were raising 1-2 grandchildren between the ages of 8 and 18 years old. Participants in this group had been raising grandchildren for 8 to 18 years and all expect to continue to raise their grandchildren for 10 or more years, until they reached adulthood or until they died.

**Competent group.** The average age of the five participants in the competent group was 67.25 years old. Two had received their high school diploma, one had attended some college, and two had received an Associate’s degree. Employment status varied among the group. Three
of the five reported their income as inadequate and three met the 2017 Federal Poverty Guidelines (U.S. Department of Health and Human Services, 2017). Four were not married. Three were raising one grandchild and two were raising two grandchildren. Participants in this group had been raising grandchildren between the ages of 8 and 18 for 3-28 years. This group varied in their responses for how long they expect to continue to raise their grandchildren.

**Vulnerable group.** There were two participants in the vulnerable group. Participants were 56 and 62 years of age. One had received a high school diploma and the other had attended some college. One was employed full time and reported income as adequate whereas the other was retired and reported income was not adequate. Neither one met the 2017 Federal Poverty Guidelines (U.S. Department of Health and Human Services, 2017). One of the two participants was married. Both had been raising one grandchild (age 10 and 11) for 8-9 years and both expected to continue to raise their grandchild for 10 more years.

**Degree.** Size, also referred to as degree, is the number of contacts the ego has, and is important because it can tell researchers about the access the participant has to social support, resources, and information (Dejordy & Halgin, 2008). Over all of the resilience groups, participants listed between 6 and 16 alters with an average of 12 alters.

**Resilient group.** Participants in the resilient group listed between 8 and 16 alters \( (M = 13.60, SD = 3.36) \). One participant listed eight alters; the rest of the participants listed 13 or more alters.

**Maladaptive group.** The average for alters listed for this group was 11 \( (M= 11.75, SD = 4.03) \). One participant listed six alters and the other three listed between 12 and 15 alters.

**Competent group.** On average, participants in this group listed 12 alters \( (M = 12.20, SD = 2.50) \). Two participants listed 9 to 10 alters and the other three participants listed 14 alters.
**Vulnerable group.** Both participants in this group listed 11 alters.

**Alter characteristics.** Structural shape measures characterize the pattern of ties among an ego’s alters (i.e., grandparent raising grandchildren) alters (Borgatti et al., 2013). The attributes of an ego’s alters make up the composition of the network and encompass a number of factors, such as content and dissimilarity between ego and alter (Dejordy & Halgin, 2008). For example, in regard to content, the attributes of a grandparent caregiver’s alter may affect the access to resources and information. Who a grandparent caregiver knows may also increase the probability of his/her exposure to certain experiences. For instance, perhaps grandparent caregivers who know other grandparent caregivers have greater access to resources and information.

Of 198 alters identified by the 16 egos in this study, 63.64% \((n = 126)\) were female. There were no significant differences in gender between resilience groups. Participants were asked to identify alters as family, friends, professionals, and other. For all egos, 56% of alters were identified as family, 19% as friends, 18% as professionals and 6% as other, which included individuals who did not fit one of the other categories, such as a parent of the grandchildren or the boyfriend of a granddaughter (Table 4 shows details for all groups). Findings from a \(t\)-test demonstrated a significant difference in the proportion of professionals in the maladaptive ego networks \((M = 3.75, SD = 4.38)\) versus the other ego networks \((M = 23.07, SD = 15.37)\), \(t(14) = -2.43, p = .03, d = 1.71\). Furthermore, findings form a \(t\)-test indicated a significant difference between the maladaptive group \((M = .00, SD = .00)\) and the other groups \((M = 4.47, SD = 4.07)\), \(t(11) = -3.80, p = .003, d = 1.55\), in the times a spouse was included as an alter with whom he/she discussed important matters. Participants in the maladaptive group \((M = .00, SD = .00)\), also had significantly fewer alters with whom they spent leisure time with than those in the other resilience groups \((M = 4.28, SD = 5.96)\), \(t(11) = -2.50, p = .03, d = 1.02\). Similar results were
found for the vulnerable group ($M = .00$, $SD = .00$), as they also had significantly fewer alters
with whom they spent leisure time ($M = 3.66$, $SD = 5.70$), $t(13) = -2.41$, $p = .03$, $d = .91$.

Additionally, participants were asked how often they had contact with the other; how
close they were with them; and how often the alter hassled, caused problems, or made life
difficult for them in the past 6 months. Table 4 shows the proportion of ego networks in relation
to these items. Participants chose from eight levels of contact frequency, ranging from talk every
day to less than once a year. Results for a $t$-test indicated a significant difference between egos in
the resilient group ($M = 13.34$, $SD = 8.02$) and those in the other groups ($M = 3.68$, $SD = 5.70$) in
the number of alters that they communicated with several times a month, $t(14) = 2.78$, $p = .015$, $d = 1.39$. On average, egos in the resilient group tended to report talking to their alters several
times a month more often than those in the maladaptive, competent, and vulnerable groups.
Whereas, egos in the competent group ($M = 48.02$, $SD = 20.26$) tended to report talking to their
alters every day more frequently than those in the other groups ($M = 23.65$, $SD = 17.41$), $t(14) = 2.47$, $p = .027$, $d = 1.29$.

With regard to closeness, findings from a $t$-test indicated a significant difference in the
number of alters that egos were very close with between those in the resilient groups ($M = 18.98$,
$SD = 5.43$) and those in the maladaptive, competent, and vulnerable groups ($M = 41.30$, $SD = 15.76$). Egos from the resilient group tended to report less alters with whom they were very
close, $t(14) = -3.036$, $p = .009$, $d = -1.89$.

One noticeable difference was that the networks for individuals in the maladaptive group
had a higher proportion of alters who hassled, caused problems, or made life difficult in the past
8 months to some degree, but results from a $t$-test indicated the difference was not significant,
In order to investigate the diversity of alters in each participant’s network, heterogeneity of specific variables was calculated. E-Net measures heterogeneity using Blau’s index and Agresti’s IQV (Halgin & Borgatti, 2012). Blau’s index is the probability that two randomly selected alters belong to different categories (Perry, 2017). The Agresti’s IQV is a normalized version of the Blau’s index (Crossley et al., 2015). Heterogeneity scores closer to 1 indicate more diversity in the ego-networks. Participants in the resilient group (\( M = .63, \) \( SD = .07 \)), on average had higher heterogeneity scores than participants in other groups (\( M = .49, \) \( SD = .18 \)). Results from a \( t \)-test indicated this difference did not reach significance, \( t(14) = 1.57, \) ns, \( d = -1.03 \). The effect size for this analysis (\( d = -1.03 \)) was found to exceed Cohen’s (1988) convention for a large effect (\( d = .80 \)).

On average, 51\% (\( n = 100 \)) of all alters provided emotional support for the ego and 43\% (\( n = 86 \)) provided instrumental support. Interestingly, egos in the competent group tended to have significantly higher proportions of alters who provided emotional support, \( t(14) = 2.84, p = .013, d = 1.52 \), and instrumental support, \( t(14) = 2.25, p < .05, d = 1.20 \), than egos in the other groups. Table 4 presents proportions for all groups.
Table 4

<table>
<thead>
<tr>
<th></th>
<th>All Groups</th>
<th>Resilient</th>
<th>Maladaptive</th>
<th>Competent</th>
<th>Vulnerable</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>198</td>
<td>5</td>
<td>4</td>
<td>5</td>
<td>2</td>
</tr>
<tr>
<td>Relationship</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Family</td>
<td>.57</td>
<td>.49</td>
<td>.67</td>
<td>.61</td>
<td>.50</td>
</tr>
<tr>
<td>Friends</td>
<td>.19</td>
<td>.25</td>
<td>.17</td>
<td>.14</td>
<td>.18</td>
</tr>
<tr>
<td>Professionals</td>
<td>.18</td>
<td>.20</td>
<td>.04*</td>
<td>.22</td>
<td>.32</td>
</tr>
<tr>
<td>Other</td>
<td>.06</td>
<td>.05</td>
<td>.13</td>
<td>.03</td>
<td>.00</td>
</tr>
<tr>
<td>Frequent contact</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Every day</td>
<td>.31</td>
<td>.21</td>
<td>.14</td>
<td>.48*</td>
<td>.50</td>
</tr>
<tr>
<td>Several times per month</td>
<td>.07</td>
<td>.13*</td>
<td>.08</td>
<td>.02</td>
<td>.00</td>
</tr>
<tr>
<td>Very close</td>
<td>.34</td>
<td>.19*</td>
<td>.33</td>
<td>.46</td>
<td>.46</td>
</tr>
<tr>
<td>Provides support</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Emotional</td>
<td>.51</td>
<td>.38</td>
<td>.48</td>
<td>.67*</td>
<td>.46</td>
</tr>
<tr>
<td>Instrumental</td>
<td>.43</td>
<td>.33</td>
<td>.41</td>
<td>.56*</td>
<td>.41</td>
</tr>
</tbody>
</table>

*indicates significant difference from other groups, $p < .05$.

**Alter to alter characteristics.** Four measures were used to capture structural holes, including density, effective size, efficiency, and constraint. Density is the number of ties between alters divided by the number of possible ties that exist. The higher the density, the more closely connected the alters of an ego’s network are (Crossley, et al., 2015). Effective size takes degree (size of the network) and the redundancy of certain ties into account (Crossley, et al., 2015). In other words, it measures how many different “pots” of information the ego has access to (Perry, 2017). Efficiency is the effective size divided by degree. It takes into account the resources it takes to maintain ties by assuming that it is inefficient to maintain ties with alters who have ties with other alters. Constraint measures the extent to which actors can move within their network.

Networks with high effective size, high efficiency, low density, and low constraint have a high number of structural holes and thus more opportunities for more nonredundant information. Whereas, networks with low effective size, low efficiency, high density, and high constraint are categorized as being more closed personal networks, which results in redundant information (Halgin & Borgatti, 2012). An analysis of effective size, density, efficiency and constraint
among the four resilience groups found that participants in the resilient group has the highest effective and efficiency scores and the lowest density and constraint scores, meaning that the networks for those in the resilient group tended to have more structural holes than those in the maladaptive, competent, and vulnerable groups.

**Qualitative Analysis**

Data from the interviews including open-ended questions (i.e., those not part of the SNA collection) were analyzed simultaneously with the data collection. Throughout the research process, I continuously engaged in comparative analysis of all the data collected. Analysis of the data followed Creswell’s (2007) representation of a spiral of analysis in which each loop of the spiral includes a specific step of the analysis process. The first loop of the spiral is data management in which data are organized into files or databases. The second loop includes reading and memoing. Memo writing is a qualitative analytic activity in which the researcher can write down her ideas and thoughts about participants, process, and phenomena (Saldaña, 2009). These analytic memos can then be used to keep track of the evolution of the study and can be coded as it is also a type of data (Saldaña, 2009). In this step, the researcher reads through all the data and notes preliminary interpretations (Creswell, 2007). In the third loop, the researcher describes, classifies, and interprets the data. This is also known as the thematic phase as it is in this phase that thematic data are grouped into categories and themes in order to find meaning and interpretation in the data. In the final loop, the researcher provides a representation of the data in either a report or visualization (Creswell, 2007).

Each interview was transcribed verbatim and analyzed. Once transcribed, interviews were read for preliminary reflections and notes. After the initial analysis of the transcript, the interview data were coded, which is a way to arrange data in a systematic order so that it can be
further segregated or grouped to create meaning (Saldaña, 2009). Data were organized based on the interview question it pertained to and then grouped based on the resilience group of the participant. For example, all responses to the question, “What services have been the most helpful in supporting you as a grandparent raising grandchildren?” from the resilient group were grouped together. Data were then compared for differences and similarities across groups. Due to the nature of SNA, and because SNA is the focus of the current study, the qualitative analysis was designed to provide context to the SNA data collected.

Through this process of discovery, some similarities and differences across groups were identified. For example, all groups included individuals in the egos’ networks that were supportive in their decision to raise their grandchildren. Unlike individuals in the resilient, competent, and vulnerable groups, egos in the maladaptive group all had family members who were not supportive of their decision. In many cases, relationships had been affected due to their decision to raise their grandchildren. For example, one grandmother described how her father stopped talking to her for 6 months after taking her grandchildren into her care. She went on to explain that even though many years have passed, she still cannot count on her father’s support when it comes to her grandchildren. Another grandmother described how her relationship with her older sister had changed since becoming a grandparent raising grandchildren:

My sister doesn’t support my decision at all. We used to do everything together. Now we talk or see each other once in a while but I can’t tell her too much because then she will start on me about being too involved and how I shouldn’t be raising them (grandmother, maladaptive group)

Other similarities between groups were in relation to services. The most common helpful services included monetary assistance programs such as TANF, grandfamily kinship programs, social groups, and schools. As Figure 5 shows, there were a number of services that were identified as most helpful across groups. Two differences should be noted, however. First, there
was one service, church, that was not brought up during interviews with participants in the maladaptive group but were mentioned in all three of the other groups. Secondly, there were not any services that were mentioned only by individuals in the resilient group. Individuals in the resilient group did not seem to be using a service or resource that was not being used by the other groups. Responses for what services are most needed also included a variation of responses across resilience groups and are reported in Table 5. Of the services mentioned, the most common services cited as needed were monetary assistance programs and help with home/car maintenance.

Participants were also asked, “When faced with a difficult or challenging situation, how do you handle it?” There was no distinct difference between groups on responses for this question, but there were some common themes that emerged throughout all of the interviews. Responses tended to fit one of four categories: discussing it with others, praying, analyzing the situation, and self-care (e.g., taking a walk or getting a massage). Of the four categories, discussing it with others and praying were mentioned by participants in all resilience groups.
Figure 5: Services identified as most helpful in supporting participants, by resilience group.

Table 5

<table>
<thead>
<tr>
<th>Service</th>
<th>Times mentioned</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial</td>
<td>4</td>
</tr>
<tr>
<td>Home maintenance</td>
<td>3</td>
</tr>
<tr>
<td>Car maintenance</td>
<td>3</td>
</tr>
<tr>
<td>Home repairs</td>
<td>2</td>
</tr>
<tr>
<td>Respite</td>
<td>2</td>
</tr>
<tr>
<td>Help with social services</td>
<td>2</td>
</tr>
<tr>
<td>Socializing opportunities for grandchildren</td>
<td>2</td>
</tr>
<tr>
<td>Housing</td>
<td>2</td>
</tr>
<tr>
<td>Help with schools</td>
<td>2</td>
</tr>
<tr>
<td>Mentors or facilitators for me</td>
<td>1</td>
</tr>
<tr>
<td>Socializing opportunities for me</td>
<td>1</td>
</tr>
<tr>
<td>Legal help</td>
<td>1</td>
</tr>
<tr>
<td>Help finding resources</td>
<td>1</td>
</tr>
<tr>
<td>Help with gifts</td>
<td>1</td>
</tr>
<tr>
<td>Childcare</td>
<td>1</td>
</tr>
</tbody>
</table>

Table 6 provides a list of participant quotes as they discuss the need for financial assistance and car/home maintenance and repairs.
Table 6
Participants Describe Commonly Identified Services Needed

<table>
<thead>
<tr>
<th>Type of service</th>
<th>Participant quotes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial assistance</td>
<td>“Financial is a big deal…anything in that area.” (grandmother, competent group)</td>
</tr>
<tr>
<td></td>
<td>“The biggest thing I struggle with is financial, being able to provide her with extra things, like a new party dress, that is a struggle.” (grandmother, vulnerable group)</td>
</tr>
<tr>
<td></td>
<td>“Anything that helps like that in a tangible way- I am all over it (smiles).” (grandmother, resilient group)</td>
</tr>
<tr>
<td></td>
<td>“Help with my mortgage payments, I am going to lose my house and no one can help me. There is nothing out there.” (grandmother, maladaptive group)</td>
</tr>
<tr>
<td>Home/car maintenance and repairs</td>
<td>“A program where they can help with oil change or just could teach us how to maintain our car. That would be something that would be very helpful.” (grandmother, maladaptive group)</td>
</tr>
<tr>
<td></td>
<td>“I need (pause) I know this seems silly but I need someone to come help me cut my lawn, move furniture, fix my electricity… things like that. A program to help with that.” (grandmother, resilient group)</td>
</tr>
<tr>
<td></td>
<td>“A place to help seniors with little repairs.” (grandmother, competent group)</td>
</tr>
<tr>
<td></td>
<td>“Programs to help with cars. My car has been in the shop four…” (grandmother, competent group).</td>
</tr>
</tbody>
</table>

**Researcher’s memoing.** Data from the memoing were analyzed for emerging themes. A reoccurring theme I noticed among resilient grandparents was resourcefulness. In each of the interviews with the grandparents in the resilient group, there was an example of how they demonstrated resourcefulness. For example, one of the grandmothers shared, “There is no shame in my game (laughs). I have learned to ask and ask everyone because the worst they can say is no, and every little bit helps” (grandmother, resilient group). Another grandmother discussed the
many services and resources her family was using and how it had cost her time and effort to
learn about them. She went on to tell me, “It’s all about being resourceful; if you don’t know the
answer, ask someone who does” (grandmother, resilient group).

In reflecting, I do not recall, nor did I write in my notes, that any of the maladaptive
grandparents demonstrated resourcefulness. There were two themes that stood out to me from
my memoing in relation to maladaptive grandparent caregivers. First, all four of the participants
in this group were in need of a number of resources that were available to them. Some
grandparents knew about resources and had chosen not to use them, whereas others had not
known such resources existed. Specifically, I facilitated a number of connections for one
grandmother, but learned from those individuals with whom I had connected her with that she
had not responded to their emails or phone calls. Second, two of the grandmothers had stopped
working since taking primary responsibility for their grandchildren. In both cases, they shared
that it was not what they had wanted to do, but instead felt forced into it. I should note that this
was not the case with the other grandparent caregivers in this group, but it did not come up with
any of the other grandparents from the other groups either. These interactions stood out to me
because they could provide some insight into the experiences of maladaptive grandparents
raising grandchildren. These grandparents were dealing with additional stressors. For example,
having to leave their job led to a decrease in income and therefore an increase in financial
stressors. It also brings into question why they are not reaching out and using the resources
available to them.

Discussion Study 2

The current study was to determine if there was a difference in the social networks of
resilient and maladaptive grandparent caregivers. Using data from Study 1, participants’ scores
on the hassles and life satisfaction scales were used to create resilience quadrants that categorized individuals as resilient, maladaptive, competent, or vulnerable. Individuals from each of the four groups were randomly chosen for interviews in which they were asked about their social network. Using social network analysis and qualitative analysis techniques, interview data were analyzed and compared among groups to look for commonalities and distinguishing features across all four groups.

**Maladaptive Grandparent Caregivers**

Maladaptive grandparent caregivers were those with high levels of stress and low life satisfaction. There were some key differences between those in the maladaptive group and those in the other groups (resilient, competent, and vulnerable). For example, the proportion of professionals in maladaptive grandparent caregivers’ networks tended to be less than for other networks. This could suggest that for grandparent caregivers, having professionals in one’s network can be beneficial. Furthermore, churches were often cited as most helpful services across the other resilience groups. This is interesting because none of the maladaptive grandparents mentioned church as one of the most helpful services, yet when asked what they do in difficult situations, praying was mentioned by all resilience groups, including maladaptive grandparents. These findings, in combination my reflections on the lack of service usage of maladaptive grandparents, is indicative that maladaptive grandparents may not be utilizing services and resources available to them.

Grandparents raising grandchildren experience many challenges and are at an increased risk for physical and psychological issues (Bullock, 2005; Coon, 2012; Hayslip & Kaminski, 2005; Hill, 2008; Kolomer, 2008). With all of the stress grandparents face, they may not have the time or energy for self-care (Fruhauf & Bundy-Fazioli, 2013). Self-care is important because it
promotes positive health practices which can improve health and prevent future health complications (Connelly, 1993). When compared to the other groups, grandparents in the maladaptive group also reported significantly fewer alters with whom they spent leisure time. Maladaptive grandparents may not be taking the time to do things they enjoy, such as go out with friends or participate in leisure activities, and are therefore not taking the time to care for themselves.

Another notable difference was that none of the grandparent caregivers in the maladaptive group were married. It may be that having a spouse is a protective factor because partners often take care of each other, offer emotional support, and often are more financially secure. It is well documented that adults who are married have better overall physical health and psychological well-being than those who are not married (Bookwala & Franks, 2005; Mancini & Bonanno, 2006; Murphy, Glaser, & Grundy, 1997; Pienta, Hayward, & Jenkins, 2000; Prigerson, Maciejewski, & Rosenheck, 2000). Marriage is thought to act as a buffer to the negative impact of stressors (Bookwala & Franks, 2005; Mancini & Bonanno, 2006). Spouses can serve as a significant source of support (Antonucci, Lansfore, & Akiyama, 2001) as couples can cope collectively with stressors and can offer each other support and guidance.

In addition to not having a spouse to support and accompany them in their journey as a grandparent caregiver, maladaptive grandparents had a family member that was unsupportive to their decision to raise their grandchildren and who demonstrated their opposition in a way that affected their relationship with the grandparent caregiver. This is of concern because having unsupportive family has been found to interfere with life satisfaction (Brown, Cosgrove & DeSelm, 1997) associated with psychological distress (Holm, Bowler, Make, & Wambolt, 2009), and predicts higher levels of depression (Ostrander, Weinfurt, & Nay, 1998). This is consistent
with the findings of this study in that maladaptive grandparents reported some degree of life dissatisfaction.

**Resilient Grandparent Caregivers**

Resilient grandparent caregivers were those with high levels of stress and high life satisfaction. Data collected from grandparent caregivers in the resilient group connected to key concepts and assumptions related to social capital theories.

For example, grandparent caregivers in the resilient group tended to report fewer alters with whom they indicated the relationship as very close. This is consistent with the idea that having strong ties with alters is often not as useful as having weak ties with alters (Cochran et al., 1990). This is because strong ties exhibit closure in networks, meaning that alters are tied to another alter or person and therefore these individuals likely have access to the same information. Weak ties are beneficial because they provide connectivity between denser (closed) regions of the network and likely transmit new information (Crossley et al., 2015; Robins, 2015). Thus, grandparents raising grandchildren in the resilient group may be benefiting from having fewer strong ties within their network and therefore more access to new information and innovations. This access to different pools of information may also be further increased by the trend that resilient grandparent caregivers had more diverse ego-networks than individuals in the maladaptive, competent, and vulnerable groups. According to Halgin and DeJordy (2008), the more diverse a network is, the more access there is to different information, opinions, and opportunities. This would mean that grandparents in the resilient group have more access to different pools of information and resources.

According to Burt’s structural hole theory (Burt, 1992), networks that are closed likely have more redundancy of ideas and resources and thus tend to stagnate. On the other hand, an
ego with a network that has structural holes, defined as the absence of ties between components of various networks (Crossley et al., 2015), can control the flow of information and resources between the alters, is less constrained by the alters in the network, and has more avenues for new information to flow (Crossley, et al., 2015; Perry, 2017; Robins, 2015). Resilient grandparent caregivers had more structural holes than grandparents in the other resilience groups. This could also be related to the finding that all the grandparents in the resilient group demonstrated resourcefulness. This is an interesting finding because greater resourcefulness in grandmothers raising grandchildren has be shown to be correlated with fewer depressive symptoms (Musil, et al., 2009).

All Grandparent Groups

The qualitative analyses of the interviews provided insights as to some of the most helpful and most needed services identified by grandparent caregivers. For example, it was noted that financial assistance was identified as one of the most helpful services as well as one of the most commonly cited services needed by grandparents in all of the groups. The need for financial assistance has been a common theme in the grandparent caregiver literature (Gladstone, Brown, & Fitzgerald, 2009; Hayslip et al., 2005; Winefield & Air, 2010; Yancura, 2013). For example, in a study by Gladstone et al. (2009), finances were an issue for most of the grandparents in their sample. In another study by Letiecq, Bailey, and Kurtz (2008), grandparent caregivers with lower household incomes reported more stress and more depressive symptoms. This may indicate a gap in the services and resources that are currently available to grandparents raising grandchildren, or it may be an indication that the financial assistance programs that exist are not effective in lessening the financial burden on grandparent caregivers. Perhaps other alternatives need to be pursued to complement the existing services. Many grandparent
caregivers, much like the two grandmothers mentioned previously, give up working outside of
the home in order to raise their grandchildren (Hayslip et al., 2005; Musil et al., 2000). This not
only leads to a loss in income, but it also means the loss of benefits that come with being
employed, such as health insurance, less parental stress, and better physical and psychological
health (Musil et al., 2000). Therefore, it could be beneficial to grandparent caregivers if the
barriers of continued employment for grandparent caregivers, such as childcare, were reduced,
thus allowing them to continue to work (Winefield & Air, 2010).

Limitations

The current study has some limitations that come with smaller sample sizes used in
qualitative research methods. For example, convenience sampling was used to enroll
participants, and even though this was the most appropriate type of sampling for this particular
study, it does come with its limitations such as limited power and concerns about
generalizability. Future research with larger samples may be more representative of the
population and provide for generalizability of findings. Additionally, due to time and resource
constraints, the current study included information for 16 grandparent caregivers. This in
combination with the difficulties encountered in recruiting participants for this study resulted in
limited statistical power. As a result, researchers should focus on recruiting larger numbers of
grandparent caregivers who fit the criteria for resilient and maladaptive caregivers.

Future Research

In the process of examining the social networks of grandparent caregivers from four
resilience groups, opportunities for further research arose. For example, the finding that resilient
grandparents tended to have more structural holes in their networks provide avenues for future
research in finding ways to build structural holes in the networks of grandparents raising
grandchildren. A more in-depth examination of these structural holes in the network of resilient grandparents may provide insight into what type of alters are the most beneficial to the ego (i.e., grandparent). Such structural holes may also be due to individuals’ resourcefulness. As seen in the current study, resilient grandparents tended to be resourceful. Conversely, maladaptive grandparents tended to not use services available to them. These findings are consistent with Zauszniewski, Au, and Musil’s (2012) work in which they found a need and desire from grandmothers raising grandchildren for resourcefulness training. Additionally, Musil and colleagues (2009) found an association between low resourcefulness and more depressive symptoms among grandmothers raising grandchildren.

Future work should be especially attentive to issues such as why grandparent caregivers are not using resources that are available to meet their needs and what practitioners can do to increase the use of such resources. Future work could further investigate the impact resourcefulness has on resilience and ways in which grandparent caregivers can learn to be resourceful.

More information also is needed to better understand the effects unsupportive alters have in grandparent caregivers’ social networks. Having unsupportive family members has been found to have negative effects on the individual associated with less life satisfaction, psychological distress, and more depressive symptoms (Brown et al., 1997; Holm et al., 2009; Ostrander et al., 1998). In the current study, maladaptive grandparents had lower life satisfaction than grandparents in the competent and resilient groups. It would be interesting to observe if they also experienced higher levels of psychological distress and depressive symptoms than their resilient or competent counterparts. Future research should include measures of psychological distress and depressive symptoms in an effort to further assess the affect unsupportive family members
have on the well-being of grandparent caregivers. Such measures would also be beneficial in exploring the effects of having to stop working because of raising grandchildren. In addition to causing financial strains, leaving a job may also have detrimental effects on grandparents’ psychological well-being. In the current study, two grandmothers in the maladaptive group shared they had to stop working when they took on full responsibility for their grandchildren. In both situations, the grandparents stated that they did not have a choice and both were struggling financially. Future work measuring psychological well-being may provide evidence of the work-psychological well-being link for grandparent raising grandchildren in an effort to promote family-friendly work places in which grandparent caregivers are able to work and raise their grandchildren.

Last, future research assessing the benefits of faith among grandparent caregivers would be interesting as it was a topic brought up frequently in the interviews with grandparent caregivers. Church was a resource that was identified by three of the four groups as being most helpful. Additionally, when asked about their strategies for dealing with challenging or difficult situations, spiritual strategies such as praying and attending church were mentioned by grandparents across all groups. Researchers could explore the role of faith, optimism, and/or hope in helping grandparents raising grandchildren cope with the challenges of being a grandparent caregiver.

Implications for Practice

Based on this study’s findings, resilient grandparent caregivers seem to be better able to access to new information, opportunities, and resources. This is contrary to grandparents in the maladaptive group where they experience less support from professionals and partners. These findings create a number of implications for practice and avenues for future research.
Findings from this study provide some insight into the social networks of grandparent caregivers who seem to be adapting positively to their role as a grandparent caregiver (i.e., resilient) and those who are struggling (i.e., maladaptive). Results indicated that maladaptive grandparent caregivers tended to not be married, had unsupportive family members, had fewer professionals in their social networks, and identified fewer alters with whom they spent leisure time. Finding demonstrated resilient grandparents in this study experienced low overall social support. Practitioners working with grandparent caregivers should be mindful of whether the grandparent caregiver is receiving adequate support. In being aware, practitioner may be more able to help the grandparent caregiver in the areas in which they are lacking social support. For instance, if a grandparent caregiver has an unsupportive family member in the social network, she may benefit from a referral to a counselor where they can work through and express their frustrations about feeling unsupported. Additionally, if a grandparent caregiver is not taking time to care for himself or herself (e.g., going out to lunch with a friend), a practitioner may help the grandparent by reminding the grandparent that they need to be healthy in order to care for their grandchildren. It may also be beneficial to refer him or her to a program that teaches the importance of self-care.

As practitioners and researchers, we should find ways to help grandparent caregivers build their social network with individuals who are beneficial to them. For instance, resilient grandparent caregivers tended to have fewer alters to whom they were very close and had more structural holes within their social networks. Both of these are indications that for grandparent caregivers, it may be more important what an alter can offer rather than the closeness of the relationship. Helping grandparent caregivers expand their social network to include more individuals who can provide them with new information, resources, and opportunities can
promote resilience. For example, kinship navigators who guided grandparents to services available to them was a common service listed as most helpful. This could be because these professionals provide grandparents with access to information they may not otherwise attain. Kinship navigators are a rare commodity and thus policy should focus on creating a national program in which kinship navigators are available to all grandparent caregivers. Such a program would be beneficial in combination with resources that are designed to fit the needs of grandparent caregivers.

Creating policies that encourage employers and create programs to support caregivers in the workforce may also promote resilience in grandparent caregivers. In addition to the psychological benefits of working, being able to work will also decrease financial burden, which is a common concern for grandparents raising grandchildren. In addition to monetary needs, help with home/car maintenance and repairs was also identified as a need for grandparent caregivers. In conducting a search of current resources available in the counties from where grandparent caregivers were recruited, I found that there were not any services that were specific to grandparent caregivers. There were some services targeted for older adults (e.g., elderly veterans), but even these had limitations on the types and frequency of services provided. This is indicative of a strong need for services such as these for grandparents raising grandchildren. If grandparents are not able to complete home repairs on their own and are not able to pay for someone to come in and help them, this could lead to unsafe living situations for grandparents and the grandchildren they are raising. Additionally, such hassles can increase the intensity of stress grandparents are dealing with thus increasing their risk for physical, emotional, and psychological issues. This seems to be an area of need for grandparents raising grandchildren that is not being met and hence an opportunity for practitioners and policy makers.
CONCLUSIONS

The primary aim of the current studies was to extend knowledge of how social support is related to grandparent caregivers’ resilience. These studies aimed to fill a gap in the literature regarding how social networks may contribute to the resilience of grandparents raising grandchildren. This was done using a mixed-methods approach that incorporated social network analysis, which is a method that had not previously been used with grandparent caregivers.

Strengths and Implications of Findings

Both studies had several key strengths that should be acknowledged. First, the current studies introduced methodological considerations for the investigation of social networks using SNA in grandparents raising grandchildren. Although prior work has theorized that social support and coping skills are related to people’s resilience (Friborg et al., 2003; Hayslip et al., 2017; Smith & Hayslip, 2012), to my knowledge no researcher had used SNA to examine the impact social support has on grandparent caregivers’ resilience.

The combination of quantitative data with SNA allowed for the examination of how social networks are related to grandparent caregivers’ resilience in a way that had not been conducted before. Findings from both studies provide insight into the experiences of grandparents raising grandchildren and offer opportunities for future work and interventions supporting grandfamilies. For example, in both studies, being married seemed to serve as a protective factor. Finances were also an important factor to the experiences of grandparents in both studies. For example, in Study 1 limited finances were some of the most frequent and annoying hassles identified by grandparent caregivers. In Study 2, financial support was identified as the most helpful service and most needed service. Perhaps, adequate finances are a resource that support grandparent caregivers in their daily hassles. Such findings warrant
consideration for the investigation and development of interventions, resources, and perhaps aging-related policies for grandparents raising grandchildren.

This work also highlights the complex nature of assessing social support. Results from these studies provide a more in-depth understanding of the relation between social support and resilience, but it also demonstrates the intricacy of grandparent caregivers’ social networks. Social networks consisted of different layers of alters. For example, within family members there were grandchildren, adult children, siblings, and parents. Among professionals, there were those that they knew personally (e.g., through work or their own needs) and also those who worked with their grandchildren. This finding is supported by Ungar’s (2005, 2011) research arguing that resilience can best be understood from multiple ecological levels. The current studies were guided by Bronfenbrenner’s Bioecological theory, and it is essential that future work continue to investigate social support through a bioecological lens. In Study 2, grandparents in the maladaptive group tended to have unsupportive family members in their networks. This finding further provides evidence of the importance of examining social support at each of the bioecological levels. That is, the structure of an individual’s social network may offer the individual opportunities (Bronfenbrenner, 1977). For instance, in gaining a better understanding of the impact of such alters, researchers are primed to ask different questions and investigate this further. Additionally, practitioners can be better informed to create interventions and resources to assist in diminishing the negative effects of unsupportive family members. Further dissection of social networks can provide insight on how to help grandparents raising grandchildren increase their opportunities for success with coping as it relates to the stressors they experience by examining what types of alters and functions of alters are most helpful to grandparent caregivers positive coping.
The current studies add evidence of the importance of social support and coping skills in the resilience of grandparents raising grandchildren. Specifically, these studies demonstrate grandparent caregivers can experience positive outcomes despite the negative effects of stressors they experience (Hayslip et al., 2013; Masten, 2001). On the other hand, these studies also provide evidence of the negative effects these stressors can have on grandparents raising grandchildren. Consistent with the literature, grandparents experienced high levels of stress (Bullock, 2005; Coon, 2012; Hayslip & Kaminski, 2005) and low levels of social support (Doley et al., 2015). From past research, we know that it is possible to reduce risk factors (e.g., social isolation; Bigbee, Boegh, Prengaman, & Shaklee, 2011). This in combination with the findings of these studies reinforce the need for further investigation for ways to promote resilience in grandparents raising grandchildren.

In conclusion, findings from the current study provide numerous opportunities for future research and implications for practice. Future work should consider both the strengths and limitations of these studies in the investigation of resilience in grandparents raising grandchildren. Findings should be considered as researchers and practitioners continue efforts to improve the quality of life of grandparent caregivers and the children they are raising.


Cox, C.B. (2000). Why grandchildren are going to and staying at grandmother’s house and what happens when they get there. In C. B. Cox (Ed.), *To grandmother’s house we go and stay* (pp. 3-19). New York, NY: Springer.


