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Perceived Stress of Grandparents Parenting Their Grandchildren

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This is to certify that the doctoral dissertation by

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Walden University
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Abstract

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MA, Walden University, 2013

BS, Langston University, 1994

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

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Abstract

Parenthood responsibilities are changing in the United States. The overall research problem for this study was that grandparents are parenting their grandchildren when their adult children are incarcerated for alcohol abuse or use. The importance of this problem is that as adults age, they are taking on the responsibilities of being parents rather than grandparents. In this new role, grandparents may not have the coping strategies or social support to ensure that they have life satisfaction during their senior years. The purpose of this study was to assess the independent variables, age and perceived stress (low, medium, and high), as viewed by grandparents when they provide parental care to their grandchildren. The cognitive theory of stress was the theoretical foundation for understanding how grandparents' age, perceived stress, and ability to recognize coping strategies and social support can help them care for their grandchildren. The key research questions addressed the age and perceived stress of grandparents in relation to coping strategies and social support as they raise their grandchildren. The research was quantitative, with a one-time correlational observational design using a nonprobability convenience sampling method. The findings were that regardless of age, when grandparents experienced perceived stress at any level, they were able to exhibit active coping strategies and only needed access to informal social support when their perceived stress was at a high level. This study may contribute to social change by giving insight into how grandparents' age and stress levels relate to coping strategies and social support when they assume parental care of their grandchildren, thereby promoting a stable environment.

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Dedication

My parents, as they age into their golden years, have been blessed to enjoy being grandparents and great grandparents. A special dedication goes to my beautiful children for staying on the right track so their parents and grandparents can teach and nurture their grandchildren rather than raise them. To my grandchildren, who I love with all my heart, I want to say that our time together will always be special. To my great grandchildren, life has only just begun and you two are special in my life.

Acknowledgments

I would like to acknowledge all my family and friends as they went on this journey with me. I would like to thank my committee members, Drs. Georita Frierson and Melody Moore, for being patient with me and steering me in the right direction. Last but not least, God for giving me strength and wisdom, and the understanding that my life experiences led me to this point in my life.

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Chapter 1: Introduction to the Study

When a parent becomes incarcerated because of their alcohol abuse or use, often the care of their children falls on the grandparents. Fauziningtyas et al. (2019) reported that the number of grandparents raising their grandchildren was 4.1% higher in 2010 than in 1970. When serving as a parental caregiver, a grandparent may find that their age and stress limit their mental and physical abilities. They may or may not be aware of how to identify double stressors such as having an adult child incarcerated and becoming the parental care provider for their grandchildren. Musil et al. (2010) reported that stress often results from life circumstances of having a family member incarcerated for alcohol abuse. Because grandparents can be a medically compromised population, placing the responsibility on grandparents to provide parental care for their grandchildren can mean a stressful and unstable environment for the children. Whitley et al. (2001) identified health risk as a factor when grandparents provide care a second time around, which could affect the stability of their grandchildren. Society should be made aware of the importance of providing care by this population in a broader environment. In this study, the research focused on the age limitations and perceived stress of a medically compromised population whose adult children were incarcerated and whose grandchildren were without another custodial parent or caregiver.

Approximately 2.3 million individuals in the United States are incarcerated (Skeem et al., 2016), and about 1.7 million of these individuals have at least one minor child for whom family members must provide care (Arditti, 2016). In a 2012 report by The Sentencing Project, statistics showed that 58% of imprisoned parents leave their children with their parents, whereas 5% leave their children with other family members.

Of the 1.1 million men and 120,000 women incarcerated in the United States, approximately 40% of their crimes were drug offenses (Drug Policy Alliance, 2016). When a parent is incarcerated, grandparents and other family members may feel a loss that they cannot mourn, experience stigma surrounding the incarcerated family member, and be overwhelmed by the aftermath of the events that led to the incarceration (Arditti, 2016).

Using the framework of the cognitive theory of stress (Lazarus & Folkman, 1984), I assessed grandparents' age and perceived stress in their role of providing parental care when their adult child could no longer parent due to their incarceration. Additionally, I assessed grandparents' age and perceived stress as they aligned with coping strategies and social support. When grandparents have the responsibility of caring for their grandchildren, grandparents' age and perceived stress may affect their coping skills and social support when providing care.

Problem Statement

The empirical problem is that some grandparents are facing a unique experience of double caregiving stressors: They have an adult incarcerated child and must provide parental care to their grandchildren. Driving under the influence (DUI) of alcohol can lead to incarceration; when such an incarcerated individual is a parent, they will not be able to provide adequate support to their child. About 1.4 million people are arrested each year for drunk driving in the United States, which can result in a child being taken away from their parent. DUIs present a road safety issue (Kanable, 2006), with 29 people dying each day from accidents involving alcohol (Centers for Disease Control and Prevention [CDC], 2019a). When children are taken away from their parents, grandparents may find

themselves in the position of providing primary care for their grandchildren. The outcomes for the family member providing parental care when a member of the family is incarcerated can be adverse and lead to economic struggles, joblessness, and health inequalities (Roos et al., 2016).

When grandparents are tasked with taking on the added responsibility of providing parental care for their incarcerated adult child's children, the situation can lead to a stressful time for the grandparents, requiring different coping strategies. Mohan (2011) reported that when grandparents take on parental care for a child who is not their own, the change in the family structure may require different coping strategies. This study focused on the age and levels of perceived stress of grandparents whose adult child's use of alcohol led to incarceration and left parental care for their children to their parents. This study also had the potential to identify effective interventions based on coping strategies and social supports that can lead to effective resources for grandparents and life satisfaction. Sampson and Hertlein (2015) identified effective coping strategies and a social support system that can enable grandparents to continue to have a satisfying lifestyle and healthy family unit. Likewise, Ye et al. (2014) revealed that grandparents need social support to be successful in providing for their grandchildren.

Society has made major changes over the last couple of decades in that grandparents have been selected to provide parental care for the children of their adult children because of incarceration due to alcohol abuse or use (Lo & Liu, 2009). In the late 20th century, grandparents started taking on this role due to increased social problems that directly affected the family structure (Conway & Jones, 2012). Becoming the caregiver for grandchildren can lead to dissatisfaction or more deleterious health

problems for grandparents because of their double role as parent and grandparent, which carries unique stressors.

The interest in this change has been recognized by societies across the world, and in some instances, other relatives may take on this challenge when grandparents are not available. Hayslip et al. (2014) reported that because of potential stress that can align with becoming a grandparent caregiver, the growing increase of grandparents serving in this role is a concern. This increase aligns with grandparents becoming parents again as they age. This stage of life can lead to stressors that include financial issues as they reach retirement, role confusion because they can be a grandparent to their grandchildren and a parent to others, and difficulty in adjusting to their changing lifestyle (Hayslip et al., 2014). Being a grandparent who provides parental care to their grandchildren can also contribute to depression, a decrease in social standing with peers, and an increase in isolation (Hayslip et al., 2014). These outcomes can be precursors to life dissatisfaction.

Insight from this study may promote social change by ensuring that grandparents assuming parental care of their grandchildren become aware of how their age and stress levels, as they relate to coping strategies and social support, could lead to a stable environment. Having this knowledge may empower grandparents to engage in intervention programs that will educate them on coping strategies and identify the social support that they need to be successful in providing care for their grandchildren. Having better coping strategies and an informal social-support system can ease economic struggles, joblessness, and health inequalities that grandparents may experience at this time in their life (Roos et al., 2016). Ye et al. (2014) suggested possible interventions for how grandparents and their grandchildren should be supported by the government.

Purpose of the Study

The purpose of this quantitative study was to assess the independent variables, age and perceived stress (low, medium, and high), as viewed by grandparents when they assume parental care of their grandchildren. Having an adult child incarcerated for an alcohol-related incident at least once can lead to grandchildren receiving parental care from their grandparent. I assessed (a) whether a statistical relationship exists between age and perceived stress of grandparents and their use of coping strategies (e.g., active and avoidance) and (b) whether a statistical relationship arises between age and perceived stress of grandparents and their use of social supports (e.g., formal and informal). Grandparents identified these variables as they adjusted to their new role as a parent to their grandchildren when their adult child was incarcerated for alcohol abuse or use.

Identifying appropriate coping strategies and social support to address lifestyle distress can be beneficial to families in which grandparents provide primary care to their grandchildren. Lo and Liu (2009) stated that literature reveals that some grandparents are willing to take on this role but still want to live a satisfying lifestyle. Manne et al. (2016) reported that people who give care to children can experience levels of distress, which can often be higher than those of people who do not give care to children.

Sands et al. (2009) conducted a study with a small sample size that concentrated on stress, well-being, and life satisfaction recorded by grandparents. Sands et al. concluded that an intervention is needed that identifies the caregiver's strengths. Grandparents providing parental care for their grandchildren may experience stress or lack social support, but receiving resources could promote life satisfaction (Sampson & Hertlein, 2015). Sampson and Hertlein (2015) reported findings that revealed that coping

strategies and social support can assist grandparents as they care for their grandchildren, which may lead to better outcomes for the family. A benefit of this study was that it identified components for future interventions that may promote quality of life and satisfaction for grandparents in the role of parent for their grandchildren.

Significance

The significance of this research study resided in the effort to assess grandparents' coping strategies and resources when their adult children become incarcerated and leave them with the care of their children. In identifying whether grandparents' age and perceived stress have a statistical relationship with their coping strategies and social support, different types of resources can be made available to the family. Meara (2014) reported an increase in the United States of grandparents informally raising their grandchildren and not receiving resources to aid them until their adult child can resume responsibility for their children. Ye et al. (2014) reported that grandparents who experience the burden of providing extra care to their grandchildren are considered as providing kinship foster care and are not paid to care for their grandchildren by state child protective services. Insight from this study may identify and promote social change by ensuring that grandparents, in providing parental care, are aware of their stress levels, coping strategies, and social support, leading to a more stable environment. The results of this research study may be used to inform members of the sample population about available resources to increase their satisfaction given their new responsibilities. Assessing the various ages and levels of perceived stress of grandparents who become responsible for parenting their grandchildren can lead to social change as it affects family needs in society at large.

The literature addressed the double stressor of having an adult child incarcerated for alcohol abuse or use and the grandparent becoming responsible for the care of their grandchildren. This double stressor is significant because grandparents may be experiencing stress from two sources simultaneously: having an adult child incarcerated and gaining parental care of their grandchildren. Thus, I aimed to address the gap in the literature so that society can be informed about the age and perceived stress of grandparents when they provide parental care for their grandchildren.

Background of the Study

Grandparents are important in fostering the emotional and cognitive development of their grandchildren. With increasing life expectancy, more adults can be grandparents (Zhou et al., 2016). Jackson and Jutte (2016) reported that grandparents serve as the vehicle to pass along family values and are called on in times of a crisis as a reliable support system. They further reported that the relationship between grandparents and their grandchildren can benefit both parties emotionally and lead to positive social interaction as well as increased self-esteem from the unconditional love that blooms (Jackson & Jutte, 2016). In addition, for grandchildren, the benefits of the relationship with their grandparents include feelings of closeness and having a role model, a mediator (between child and parent), and a financial advisor (Jackson & Jutte, 2016).

Recently, the role of grandparents has evolved to have new meaning in many families. When a biological parent has a substance use disorder as well as behavioral or emotional problems, it is most common that relatives will become caregivers (Harper & Hardesty, 2001). Kinship-caregiver research was rarely examined 10 years ago, but today research in this area is gaining from various perspectives (Harper & Hardesty, 2001).

Family members assuming this role of the parental caregiver have higher chances of an increase in ordinary problems and developing new problems such as increased tobacco use, drug and alcohol use, depression, or anxiety for the kinship caregiver (Harper & Hardesty, 2001).

From 1980 to 1990, there was a 44% increase in the number of grandparents rearing their grandchildren, and by 1997, 5.5% of all children were being raised by their grandparents for various reasons, including incarceration of the parent and parental drug abuse (Arditti, 2016). Of the 1.7 million people arrested annually, 52% of state and 63% of federal inmates are parents who have children under the age of 18 (Arditti, 2016). Statistics from the National Survey on Drug Use and Health showed that 15.1 million adults aged 18 and older reported having an alcohol disorder, and an estimated 88,000 of people die each year from alcohol-related accidents (National Institute on Alcohol Abuse and Alcoholism, 2017).

Incarceration of a parent can lead to even greater emotional problems for a child as they move in with their grandparent for parental care. Emick and Hayslip (1999) reported that it is not unusual that a child and their grandparent are exposed to emotional turmoil given their circumstances. The grandchild's emotional turmoil can be more than the grandparent can handle because of their own emotional turmoil stemming from their adult child's incarceration and the new parental role of providing care to their grandchildren. Studies show that grandparents are more agreeable about taking on the role of parent if the grandchildren do not have emotional or behavioral problems (Emick & Hayslip, 1999). Their grandchildren's emotional turmoil can disrupt the grandparent-

grandchild role, causing stress and lack of coping skills for many grandparents (Emick & Hayslip, 1999).

Parenting grandchildren can lead to dissatisfaction, poor quality of life, or more deleterious health problems for grandparents because of their double role as parent and grandparent, eliciting unique stressors and double stress. Lo and Liu (2009) reported that a change in society over the last 20 years is that grandparents are selected to provide care to their grandchildren when their adult child has been incarcerated due to alcohol abuse or use. Conway and Jones (2012) uncovered that in the late 20th century, grandparents started taking on the role of providing parental care due to increased social problems that directly affected the family structure. Multiple societal changes and problems have promoted the change in this family dynamic, due to increased social problems.

Theoretical Foundation Framework

Lazarus and Folkman's (1984) theory of cognitive stress indicates that *stress* can be defined as how well the individual can navigate through their environment based on their strategies and resources. The relationship between the individual's characteristics and their environment can identify what causes their stress (Lazarus & Folkman, 1984). People try to appraise their current situation to discern whether they deem it unmanageable and lacking in appropriate resources as found in environmental stressors (Lazarus & Folkman, as cited in Chen, 2015). Environmental stressors are conditions that, on average, people would consider to be threatening or harmful (Chen, 2015). As parents watch their adult children fall victim to alcohol, drugs, or the criminal-justice system, they may not have the coping skills or social support to adequately handle the added stress of caring for their grandchildren. Challenges experienced because of age,

different levels of stress, lack of coping strategies, and no social support can lead to dissatisfaction for grandparents as they provide care for their grandchildren (Sampson & Hertlein, 2015).

What are the ages and perceived stress levels that members of this growing population experience as they find themselves in a new role in their later years? Is there a statistical relationship between age of the grandparents, different levels of perceived stress (low, medium, and high) of the grandparents, and coping strategies (e.g., active and avoidance)? Is there and statistical relationship between the age of the grandparents, different levels of perceived stress (low, medium, and high) of the grandparents, and social support (e.g., formal and informal)?

Research Questions

RQ1—Quantitative: Is there a relationship between the independent variables (age and perceived stress) and the dependent variable coping strategies?

Ho1: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have no statistically significant relationship on coping strategy (e.g., active and avoidance).

Ha1: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have a statistically significant relationship on coping strategy (e.g., active and avoidance).

RQ2—Quantitative: Is there a relationship between the independent variables (age and perceived stress) and the dependent variable social support?

Ho2: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have no statistically significant relationship on their social support (e.g., informal and formal).

Ha2: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have a statistically significant relationship on their social support (e.g., informal and formal).

Nature of the Study

This study used a one-time correlation observational design with a nonprobability convenience sampling of men and women, ages 33-83, who reported that they were a grandparent and were responsible for providing parental care for their grandchildren at least once in their life. Inclusion criteria were male or female people with the parental care of at least one grandchild when their adult child was no longer able to care for them because they were incarcerated for alcohol abuse or use. I gave surveys to men and women in a convenience sample to address the selected variables. The independent variables were the age of grandparents and perceived level of stress (low, medium, and high) of the grandparents; the dependent variables were coping strategies (e.g., active and avoidance) and social support (e.g., formal and informal); and the control variables were decided as data accrued and were analyzed. I used several survey questionnaires to screen and gather information for the research questions.

Definitions of Key Terms

The following are definitions for key terms used in this study. These terms may be found in other arenas with other meanings that might not apply to the information that I convey in this study. I have outlined them in this section to add clarification for the reader.

Active coping: Meeting a problem directly with coping skills and techniques by reappraising the stressful situation and taking action to eliminate the identified stress without maladaptive behavior (Stowell et al., 2001).

Adult child: The male or female child of a grandparent, 18 years of age or older.

Avoidance coping: Avoiding a stressful situation altogether (Stowell et al., 2001).

Formal social support: Public services available that can help grandparents supplement their income (Cooper, 2012) when they are providing parental care for their grandchild.

Grandchildren: The children of the grandparents' adult child.

Grandparent: Mother or father of an adult child who gave or is giving primary care to at least one of their grandchildren when their adult child is no longer able to care for the children because of being incarcerated for alcohol abuse or use.

Incarcerated: Adult child who has been in jail or prison due to alcohol abuse or use (Kanable, 2006). Approximately 1.7 million of these individuals annually leave behind at least one minor child (Arditti, 2016).

Informal social support: Giving full-time care to a child in the welfare system by family members who comprise an informal support system (Kondrat et al., 2014).

Parental care: Grandparents providing parental care for at least one grandchild on a regular basis when their adult child can no longer hold the position of caregiver or custodial parent.

Perceived stress: Stress of grandparents as perceived through their cognitive appraisal regarding the severity of their experiences (Cohen et al., 1983, as cited in J. M. Taylor, 2015).

Assumptions

The scope of the study focused on whether there was a statistical relationship between the age and perceived stress of grandparents with their coping strategies and social support. Grandparents may experience a problem addressing stressors that involve an adult child going to prison and the grandparent becoming responsible for parenting their grandchildren (Lo & Lui, 2009). Lo and Lui (2009) stated with changing laws, adults have a higher risk of becoming incarcerated for alcohol abuse or use. When this happens, the grandparents could be left with the responsibility of providing care for their children. The two events happening simultaneously can lead to undue stress on the grandparent, who is considered a member of the older population in the community (Lo & Lui, 2009).

Challenges can accrue in caregivers due to their age and ability to identify the stress that they experience because of having an adult child incarcerated and then providing parental care for the grandchildren. Sampson and Hertlein (2015) reported challenges such as economic difficulties, emotional health, lack of a support system, and the grandparent being too young to qualify for assistance. I examined the age of grandparents and the different levels of perceived stress associated with coping strategies

(e.g., active and avoidance), as well as the age of grandparents and the different levels of perceived stress associated with support systems (e.g., formal and informal). The results of this research study can be used to inform this population about coping techniques and available resources to accommodate their new lifestyle. In addition, this study may identify components for future interventions that will promote greater quality of life and satisfaction for grandparents who are providing parental care for their grandchildren.

Scope and Delimitations

In this study, I focused on grandparents who obtained parental responsibility and provided care for their grandchildren when the child's parent was no longer capable of providing care due to being incarcerated because of alcohol use. As discussed in the limitations and assumptions section and further detailed in Chapter 2, grandparents who provided parental care for their grandchildren may need to be aware of their coping strategies and social support to maintain life satisfaction. Grandparents may recognize that stress may be due to the double burden of having a child incarcerated and becoming the responsible parent for their grandchildren. In this study, I investigated how grandparents' age and perceived stress when taking on parental care for their grandchildren affected their coping strategies and access to social support.

The research participants ranged from 33 to 83 years old and were not limited by specific gender. Sands and Goldberg-Glen (2000) conducted a previous study in this age range that provided insight into stress as grandparents look forward to life satisfaction in their senior years. The sample population for this study was men and women who were grandparents and provided parental care for at least one grandchild for any amount of time while their adult child was incarcerated for alcohol abuse or use. As participants in

this study, grandparents had the opportunity to receive information regarding effective coping strategies and available social support.

The methodology section of Chapter 3 provides the outline and tools to reproduce this study. As this study's data were preserved in their original form and the research design and methodology were clearly outlined, this research could be replicated and used as a model for future studies. The spirit of this research lends itself to future explorations by exploring statistical data about a vulnerable population for society's scrutiny.

Limitations

Limitations that might influence the outcomes were considered throughout the study because being aware of limitations throughout the research study led to a heartier outcome. The grandparents' age might have been a limitation on their ability to fully comprehend the nature of the study when completing self-report questionnaires that influenced the outcome of the data collected. I had assistants available to read the questions to each participant and help record their responses. Gathering participants through Facebook, text messages, and email were another limitation. Perrin and Anderson (2019) reported that although social media are used in the United States, there has not been an increase in use since 2018, which may affect the quality and quantity of participants. Additionally, some individuals identified in this population may not have access to or may be unfamiliar with this technology. To address this issue, I used additional sampling methods, such as sending letters.

Another limitation was imposed assumptions, which might have allowed my experience or personal point of view to influence the data-collection processes or the study results, as reported by Patton (2002). Patton suggested that working to adopt a

neutral, objective role can lead to better understanding of how the variables can naturally emerge from the data. To address this issue, I used ethics and communication skills to show the same rigor and discipline during this research project. McCaslin and Scott (2003) suggested that maintaining the same rigor and discipline throughout the entire research process will promote a reliable study.

Significance of the Study

Significance to Practice

This study may raise awareness of the age and perceived stress experienced by grandparents as they provide parental care to their grandchildren without sufficient coping strategies or social support. Being a relative or kinship placement does not automatically make a grandparent the best candidate to provide parental care for their grandchildren. Conway and Jones (2012) discussed the inequalities of being a kinship placement for grandparents because they do not necessarily have the emotional health and financial and physical support to care for their grandchildren. Identifying whether current strategies and resources used by grandparents are effective in caring for their grandchildren can give awareness for change. This study identified components for future interventions on a social level that might promote active coping strategies and identified formal and informal social support for grandparents parenting their grandchildren. Insights from this study may identify and promote social change by bringing awareness about the age and stress levels of grandparents providing parental care to their grandchildren as they relate to coping strategies and social support.

Significant Theory

I selected the cognitive theory of stress because it provided a basic understanding of how age and perceived stress of the grandparent affected the family dynamics and relationship with their environment when providing parental care to their grandchildren. In the cognitive theory of stress, Lazarus and Folkman (1984) discussed the dynamics and relationship between an individual and their environment. Applying the cognitive theory of stress provided a better understanding of how age and perceived stress were related to individuals' ability to maneuver in their environment (Lazarus & Folkman, 1984). The age of the grandparent affected how they maneuvered through their neighborhood and for resources while the perceived stress of the grandparent might have come from their role in their family and community.

Summary and Transition

In this chapter, I introduced the research study and identified the problem: the double stressors for grandparents of having an adult child incarcerated and providing parental care for their grandchildren. I identified the problem statement and the purpose of the study: to assess the variables age of grandparents and perceived stress of grandparents as they related to coping strategies and social support. The chapter included a discussion of the significance of the study, background of the study, and theoretical foundational framework. In this chapter, I described the research questions and hypotheses, identified the nature of the study, and listed possible sources of data.

Chapter 2: Literature Review

The empirical research problem was that grandparents are experiencing the unique problem of addressing the double stressors of an adult child being incarcerated and the subsequent position of providing parental care for their grandchildren. This study focused specifically on the age and different levels of perceived stress of grandparents whose adult child's use of alcohol led to their incarceration, in turn leaving the responsibility of giving care to their grandchildren. In this study, I investigated age and different levels of perceived stress as they aligned with coping strategies (i.e., active and avoidance) and identified appropriate social-support systems for this population.

Individuals usually assume the title of grandparent during middle adulthood or later, and it is not unusual for a grandparent to have custody of their grandchildren (Neely-Barnes et al., 2010). Grandparents typically have reached middle age and may take on the responsibility of keeping their family together by agreeing to get custody of their grandchildren. Several studies have focused on grandparents as parental care providers and how financial, health, and emotional concerns can accompany aging. Grandparents in this parental care role may find themselves having doubts about their ability to be a parent the second time around due to financial strain, health issues, and emotional concerns.

In some cases, children are removed from their parent's home and placed with their grandparent without prior notice and before presenting issues are addressed, leading to undue stress. Baker and Mutchler (2010) reported that some grandparent-headed households are assembled abruptly in an unorganized fashion, and abrupt living space is not recognized by state or federal governments. The age and perceived stress of

grandparents are some of the factors necessary to consider in providing an adequate home for their grandchildren because of mental health and financial stability issues (Baker & Mutchler, 2010). This study focused on how the age of grandparents statistically affected their ability to display effective coping strategies and social support.

Perceived stress means how a person views a stressor through cognitive appraisal of the severity of their experience of the stressful event and the way that they perceive their ability to cope with that stressful event (Cohen et al., 1983, as cited in J. M. Taylor, 2015). This study referred to perceived stress as defined by Cohen et al. (1983, as cited in J. M. Taylor, 2015) and the aspects of the general adaptation syndrome model defined by Selye (1946). Perceived stress is the grandparents' view of stress in their life measured on three levels: low, medium, and high (Radel et al., 2011). Perceived stress was conceptualized as the stressor antecedent rather than the stress response, which is the consequence or outcome highlighted through Selye's general adaptation syndrome.

One purpose of this research study was to assess the independent variable, perceived stress (low, medium, and high), as viewed by grandparents. The grandparents in this study had experienced the double stressor of having an adult child incarcerated for alcohol abuse or use and being the provider of parental care for their grandchildren because their adult child was incarcerated. This double stressor may impact grandparent's ability to live a satisfying lifestyle. In this study, I examined the age and the level of perceived stress statistically related with coping strategies (i.e., active or avoidance), and the age and the level of perceived stress statistically related with social support identified by grandparents as they adjusted to their new role as a parent to their grandchildren. This study may raise awareness of the stress experienced by grandparents as they become

kinship parental care providers for their grandchildren, especially when the grandparent does not have sufficient coping strategies or social support.

Coping skills and social support can be important tools to better manage day-to-day stress. In a recent pilot study, Hayslip and Kaminski (2005) had 36 participants: 18 grandparents in the intervention group and 18 grandparents in the control group. Findings from the study indicated that grandparents who participated in social-support groups and received parenting training showed a decrease in negative scores. In addition, Hayslip and Kaminski noted an increase in the self-efficacy of grandparents in the parental role when providing care for their grandchildren. In my study, I identified whether there is a statistical relationship between age and perceived stress as it aligns with coping strategies and social support for grandparents as they experience incarceration of an adult child and provide parental care for their grandchildren.

Literature Search Strategy

For this review, I conducted a comprehensive search by choosing multiple databases available online: Education Research Complete, Education Resources Information Center, PsycARTICLES, PsycINFO, and SOCIndex through EBSCO*host*. Using EBSCO*host* provided me access to a large collection of full-text educational journals, a list of academic journals that featured peer-reviewed scholarly and scientific articles in psychology, dissertations and theses, books, editorials on research, and resources from the American Psychological Association.

Last, using the search engine scholar.google.com led to a wider variety of scholarly journal articles and books. This search engine, developed in 2004, increased access to scholarly literature by providing searches for academic resources, peer-

reviewed articles, conference proceedings, and other professional sources (Henderson, 2005). Boeker et al., (2013) acknowledged Google Scholar as a source of literature retrieval for individuals in many different life-science fields that accelerated their search for quality literature with scientific data. Henderson (2005) agreed that individuals use Google to reference links for resources and large quantities of collected information, which can make searching very tedious.

My aim was to provide credible sources to support my chosen subject matter. Google Scholar provided me with reliable experts who were knowledgeable on the topic of grandparents raising their grandchildren. I used the Google Scholar search engine to condense literature topics needed for this study and access resources from experts cited most often by other scholars. By selecting the most relevant articles, my purpose was to use these resources to support the research in this study. More importantly, this search led to related articles in the library's database. Google Scholar is popular among graduate students because it gives them access to scholarly articles in many disciplines and access to many resources that include books, theses, and court opinions (Wu & Chen, 2014). I used phrases such as *age and stress*, *perceived stressors*, *different levels of perceived stressors*, *perceived stressor coping skills*, and *perceived stressor social support for my search*. In addition, I accessed journal sources that focused on education research, peer-reviewed literature in behavioral science and criminal justice, and a high-quality sociology research database. My search included *age and grandparent caregivers*, *age and coping skills*, *grandparents as caregivers*, *women and incarceration*, *statistics on drinking while driving in the United States*, *grandparents raising their grandchildren*, *social support*, *coping mechanism*, *perceived stress*, *intervention*, and *assessment tools.*

Theoretical Foundation: Cognitive Theory of Stress

Numerous theories could have provided a basic construct for research in this study. The theory that I selected to provide nuanced understanding of how stress is perceived by grandparents and their ability to make changes to better serve their grandchildren was the cognitive theory of stress. This theory showcases how grandparents try to manage their environment.

Lazarus and Folkman's theory of cognitive stress (1984) indicates that stress can be defined as how well the individual can navigate through their environment based on their strategies and resources. This relationship can move in directions that are usually oppositional (Frankfort-Nachmias & Nachmias, 2008). People try to appraise their current situation but may deem it unmanageable and lack appropriate resources (Chen, 2015). Chen (2015) stated that people tend to think that stressors have an environmental source. For example, as parents watch their adult child enter the criminal justice system due to alcohol abuse or use, they may not have the coping skills or sufficient social support to adequately handle the added stress of taking care of their grandchildren (Chen, 2015). Environmental stressors are conditions that, on average, a person would find threatening or harmful (Chen, 2015). As the level of stress increases, coping skills and social supports used in the past may be challenged or inadequate, leading to dissatisfaction for grandparents as they provide parental care for their grandchildren.

A grandparent's perception of their coping strategies to handle the extra stress of providing care for their grandchildren may lead to exhibiting ineffective behaviors. People perceive their ability to solve problems as compatible with their stress and coping capabilities (MacNair & Elliott, 1992). Stress is a blend of the relationship between the

environment and the person where their well-being is nurtured and challenged (Bargiel-Matusiewicz & Omar, 2015). Grandparents can envision their well-being as a challenge to their environment when they care for their grandchildren. They may change their goals to better cope with the situation of raising a grandchild. By reassessing the situation, they will be better prepared to meet the requirements of their new family role (Bargiel-Matusiewicz & Omar, 2015). In the current study, the cognitive theory of stress model was used to examine whether a change emerges in the variables linked to the current behavior of grandparents and their perceived stress. Sometimes, when grandparents can make positive changes in their behavior, their perceived stress level will be lower.

Experiencing one stress at a time may not be a problem for most people when their age ranges from 33 to 84 years. Koffer et al. (2016) analyzed two independent daily--diary studies that involved interviewing a wide range of people. The first study, conducted using the National Survey of Daily Experiences, consisted of 2,022 participants ranging in age from 33 to 84 years; the second study, conducted using the Intraindividual Study of Affect, Health, and Interpersonal Behavior, consisted of 150 participants between the ages of 18 and 89 years. Findings showed that age was not a factor when handling stress in either study.

Literature Review

Grandparents Accepting Parental Care and Responsibilities

A growing population of older people living in the United States has an important role in shaping the family structure as grandparents. The family structure has taken on new roles in the United States where older people have a better opportunity to become a grandparent and provide parental care for their grandchildren (Zhou et al., 2016). An

increase in the number of cases in which grandparents are providing parental care for their grandchildren has created a new family structure in the United States (Mohan, 2011). This study explored whether a statistical relationship emerges between age and perceived stress (low, medium, or high) and coping strategies, and between age and perceived stress (low, medium, and high) and social support used by grandparents providing parental care to their grandchildren. Grandparents who become the provider of parenting care for their grandchildren are in the unique situation of experiencing parenthood a second time. This situation should be given substantial attention by individuals working in the child-welfare system and helping professions (Conway & Jones, 2012). This issue has gained increased attention from researchers because when grandparents are raising their grandchildren without help from their adult child, the situation can be traumatic for the grandparent (Smith et al., 2018).

Literature has shown that not only is the family structure changing due to grandparents living longer and frequently being placed in the role of providing parental care, but grandchildren are at a greater risk of neglect and abuse when their parents can no longer provide care for them. This role is becoming increasingly noticeable in society when adult children put their children at risk by becoming incarcerated for alcohol abuse or use (Sands et al., 2009). Interest has increased because of the change in the function of grandparents in society (Lo & Liu, 2009).

A grandparent's role as parent can be very confusing to the grandparent as well as their adult child. Not all grandparents see their role as important to their family unit; instead, grandparents may be unsure of what is expected of them (Strom & Strom, 2000). In some ways, the adult child feels similarly because they get insufficient help from their

parents in raising their children (Strom & Strom, 2000). Grandparents who volunteer to provide parental care do much better than grandparents who are placed in that position (Zhou et al., 2016).

Increase in the Role as Providing Parental Care

Literature from the 1970s and the U.S. Census report for 2000 revealed an increase in the number of grandparents in the role of parent. A 2000 census report identified an increase of households being maintained by 641,000 grandparents since 1992 (Mohan, 2011). The number of grandparents in the role of the parent providing care has increased over the last 10 years (Conway & Jones, 2012; Yoon, 2005). From 1980 to 1997, the number of children living with their grandparents went from 2.3 million to 3.9 million (Yoon, 2005). By 2000, the number of children under the age of 18 living with their grandparents was 4.9 million. This was an increase of 30% from the 1990s to the 2000s (Yoon, 2005).

Data collected in the 1980s and 1990s indicated an increase in the number of grandparents with at least one grandchild living in their household. Landry-Meyer et al. (2008) reported that a 44% increase emerged in the number of children being raised by their grandparents in the10-year period between 1980 and 1990, and more recent data that include children under the age of 18 identified 5.6 million grandparents providing housing for their grandchildren. A national survey revealed that 14.5% of grandmothers raised their grandchildren for at least 6 months (Landry-Meyer et al., 2008). Hayslip and Kaminski (2005) identified 5.7 million grandchildren living with their grandparents and 2.4 million grandparents raising their grandchildren on a full-time basis in 2000, which was 30% above data from the 1990s. Conway and Jones (2012) identified 5.4 million

grandchildren living with their grandparents, and 35% of those grandparents had provided care for at least 4 years.

Data from the 2010 U.S. Census showed a continuing rise in the number of grandparents responsible for the parental care of their grandchildren. The U.S. Census of 2010 identified 7.8 million children living with a grandparent, and 2.5 million received primary care from that grandparent (Meara, 2014). Of the 2.5 million, 1 million of these households did not have their parent living in the home (Meara, 2014). Grandparents have always been called on to raise their grandchildren when the family experiences a tragedy such as death or abandonment, and becoming the parent places an additional burden on them (McGowen et al., 2006). Burnette (1999) also reported an increase in the number of grandparents serving as caregiver in the household with no parents present and grandparents taking responsibility for the parental care of their grandchild.

Characteristics of Grandparents Providing Parental Care

Grandparents in the role of providing parental care are depicted as older adults in a neighborhood providing care for at least one grandchild on a regular basis. Grandparents becoming providers of parental care for their grandchildren are evident in all ethnic groups (Cox, 2002). The prevalent descriptions of caregivers who are giving parental care to their grandchildren today are of older adults living on a fixed income in urban neighborhoods (McCallion et al., 2000). Of 2.4 million grandparent caregivers in 2011, 1.6 million were grandmothers and 896,000 were grandfathers (Gilmore, 2011). African American grandparents are 13.5% more likely to raise their grandchildren, whereas Caucasian grandparents are 4.1% and Hispanic grandparents are 6.5% more likely to raise their grandchildren (Cox, 2002).

The demographics of grandparents providing primary care for their grandchildren are similar in some cultures and are important to understanding how this role affects the life satisfaction of grandparents and their grandchildren. In demographic terms, grandparents fulfilling this role are usually African Americans or Latinos receiving public assistance, lacking health insurance, and classified as poor (Cox, 2008; Harper & Hardesty, 2001). Between 2000 and 2010, 60% of Native American grandchildren received parental care from their grandparents (Cross et al., 2010). One-third of the time, the average age of grandparents providing parental care for their grandchildren was 55 years, and the age of the child being raised was over 6 years (Meara, 2014).

This description of grandparents providing parental care might not be prevalent across all areas of the United States because research has been confined to certain locations. Most research on grandparents providing parental care was conducted in urban communities in the South (Letiecq et al., 2008). One study reported the same problems for grandparents in urban communities (Letiecq et al., 2008).

Reasons to Have a Parent Caregiver

Taking the role of parent is not the first time that grandparents have been in this position in the United States. Research studies have shown that, depending on the culture, grandparents have assumed parental-caregiver roles for their grandchildren for a number of reasons in the past (Mohan, 2011). Grandparents have taken care of their grandchildren while their parents worked (Mohan, 2011). Grandparents have provided parental care due to their adolescent child becoming pregnant or their adult child developing an addiction to alcohol or illegal drugs (Strom & Strom, 2000).

The need for grandparents in a parental caregiving role can be an important factor within the family unit. Grandparents are needed to be caregivers for their grandchildren for three main reasons (Musil, 1998): parenting with or without legal custody; living with a grandchild not receiving parental care; and the grandparent providing childcare while the parents work. Musil (1998) compared the coping skills and social support of grandparents who were not the caregivers of their grandchildren to those who had parental responsibilities. The study comprised sampling 58 grandparents who were parental caregivers for their grandchildren and 32 who were not. Grandparents self-reported significant stress from parenting and experienced less social support (Musil, 1998).

When examining the reasons for grandchildren being left in the care of their grandparent, researchers pointed to various reasons that rest on the fate and hardship of the adult child. Grandparents raise their grandchildren because of teen pregnancy, substance abuse, incarceration, or death (Cox, 2008; Harper & Hardesty, 2001; Hayslip & Kaminski, 2005; Letiecq et al., 2008). The literature provides many examples of situations that lead to the placement of grandchildren with their grandparents, sighting substance abuse as a common reason (Sands et al., 2009). Grandparents may be put in the role of a parental caregiver because their adult child is experiencing emotional issues, drug problems, and issues stemming from alcohol use (Mohan, 2011). Parents are not always available to take care of their children because of substance abuse, imprisonment, child abuse, or financial hardship (Lo & Liu, 2009). The absence of the biological parent in the home due to incarceration and alcohol abuse or use causes parents to be consistently absent from their children's life (Meara, 2014).

Grandparents providing parental care for their grandchildren because of some of the challenges seen today were not seen in the past. These issues were not prevalent in the past when grandparents provided primary care to their grandchildren (Mohan, 2011). In today's challenging times, authorities often prefer grandparents as parental caregivers when their adult child are incarcerated (Arditti, 2016).

Effects of Incarceration on the Family Unit

The current literature reported it is too early to identify the effects of incarceration on families and children in the United States. Arditti (2016) discussed the potential harms from having a parent incarcerated, but little has been explored due to limited access to families to research this issue. With a solid foundation in the family unit, activities such as education and socialization can affect the child and family members who are not incarcerated. Arditti cited that family members can experience a sense of loss when they lack an appropriate way to grieve the loss because the person is still alive. Stress experienced by caregivers who provides parental care to their grandchild whose parents are incarcerated may be present because of three factors: the child's characteristics, characteristics or vulnerabilities of the caregiver, or stigma for having a family member incarcerated.

Demographics of Incarcerated Family Members

Recent data showed that the demographics of individuals incarcerated over the last 20 years have affected the well-being of the family unit. Although men outnumber women being incarcerated, women are more than likely to leave children behind for someone to provide care (Goshin, 2015). They reported that women being incarcerated have increased to about 213,000, which is a 657% increase since 1980. Although the

prison rate seems to be stabilizing, 36 states still show an increase in the incarceration of women for more than a year, which links to the state's drug policies and changes in the law. Statistics as shown by Goshin acknowledges that the incarceration rate of women aligned with an increase in children (147,400) whose mothers were incarcerated (131%) from 1991 to 2007. Goshin conducted a study of individuals participating in a program that was an alternative to incarceration for mothers. A total of 29 participants took part in the program: 12 children, eight parents, three staff members, one administrator, and gave prosecutors and district attorneys.

Changing Family Structure

Because of the changing structure of families and social circumstances, grandparents in the role of providing parenting care for their grandchildren deserve increased attention. Grad and Sainsbury in 1963 (as cited in Vitaliano et al., 1991) first acknowledged the growing problem. In subsequent years, several researchers raised concerns about the growing problem. By 1999, 4 million children lived in the homes of their grandparents in the U.S. (Bowers & Myers, 1999), an increase of 76% of children living with their grandparents full-time. In 1993, one of 10 grandparents raised their grandchildren for at least 6 months (Fuller-Thomson et al., 1997).

The family dynamics across the U.S. has taken on a different look to include the role of the grandparent. The U.S. family has changed over the past 10 years ending in 2012, where grandparents have taken the position of head of household in 50% of homes across the country, dubbed the grand family (Bachay & Buzzi, 2012). They conducted a study to examine the health and stress of grandparents raising their grandchildren because their parents were incarcerated or not in the home. They interviewed 50 participants (45

women), of whom 58% were Black, 28% White, and 6% Hispanic. Of participants, 46% were married, 36% divorced, and 16% widowed. Findings identified that despite being put in the position of head of household and raising a grandchild, participants preferred to raise their grandchildren and work through the stress.

Level of Functioning Providing Parental Care and Responsibilities

Grandparents taking on the role of providing parental care may need to change the way they function in their lifestyle and community. Grandparents in this role experience mental and physical consequences because of providing care for their grandchildren (Neeley-Barnes et al., 2010). Although studies showed grandparents raising their grandchildren are a growing population, Whitley et al. (2015) insisted that studies be revised to divide grandparents into subgroups to get an accurate level of functioning. Regardless of subgroups, the well-being of grandparents taking on the parental care of their grandchildren can affect the grandparents' functioning, mainly because their households start out at a disadvantage (Hadfield, 2014). Hadfield (2014) explained most households are below the poverty line and grandparents usually live-in, overcrowded conditions in a rented dwelling and reported numerous health disparities that can lead to lower well-being among this population.

Some studies have been conducted that raise awareness about the role that grandparents play within their family unit and how it affects their sense of well-being. A 2002 study conducted by Goodman and Silverstein raised awareness of grandparents in the custodial role and the function they played as the caregiver. They found that the 1990s have seen the biggest increase in grandparents becoming the parental caregivers for their grandchild without the presence of their parent. Through the school's social

media, the researchers solicited participants from three different cultures: African American (247 custodial), Caucasian (176 custodial), and Latino (158 custodial). It was discussed by Goodman and Silverstein that belonging to a specific ethnic group was key to identifying parental caregiver roles and expectations. African American grandmothers reported more well-being as the custodial grandparent; Latino families showed less well-being as the custodial grandparent, whereas Caucasian grandparents found custodial care for their grandchildren promoted well-being.

Physical and Psychological Issues

Taking on the role of parent for their grandchildren can also lead to issues such as health problems, poverty, stress which can be embedded within their culture. Custodial grandparents caring for at least one grandchild experienced health problems, stress, and poverty, which could impact the well-being of their grandchild (Scott, 2015). Arditti (2016) reported that grandparents providing parental care for their grandchildren were often poor or unhealthy. Culture can play a role especially with grandparents of color because of some of the inequalities in systemic structures as the reason for the negative health issues and financial burden experienced by grandparents (Burnette, 1999). It was noted by Strom and Strom (2000) that the role of providing parental care of a grandchildren among minorities and low-income families is growing fast for grandparents. Being a caregiver for a grandchild does not discriminate by culture, and the White community has seen the fastest increase in this occurrence (Harper & Hardesty, 2001).

Social Issues

In contrast, as far back as the 1990s, providing parental care for most grandparents can be devastating for family dynamics on a social level as well. The level of function for grandparents as caregivers became challenging, including social issues, health problems, and legal needs that can move through the generations (Burnette, 1999). Strom and Strom (2000) reported that some grandparents are unhappy about taking on the role of a parent again due to the extra demands on their time and energy. Grandparents performing the duties of parental care reported feelings of obligation to their child to take care of their grandchildren (Gilmore, 2011). Conway and Jones (2012) discussed that grandparents taking on the role of the provider of parental care are subject to becoming affected by physical demands that are emotionally draining as they attempt to stay current with the demands of raising children in this age of technology.

Grandparents providing parental care for their grandchildren can experience added stress and emotional disparity to cope with the new demands. Grandparents often feel resentment and think about where they went wrong when raising their own children rather than taking the opportunity to validate their parenting skills by effectively raising a new generation (Strom & Strom, 2000). Grandparents providing parental care are more likely to experience emotional problems that put them at risk for negative behaviors such as increased smoking and alcohol consumption (Scott, 2015). Scott (2015) also reported that becoming the caregiver for their grandchildren can lead to a less satisfying life in their marital status, as well as giving up relationships formed prior to being responsible for their grandchildren, adding to emotional dysfunction.

Socioeconomic Status

Providing parental care for their grandchildren can affect grandparents' socioeconomic status, moving them into a lower financial bracket and standings in their community. Some grandparent caregivers can be living in poverty, unemployed, and have less education than parents raising their children (Meara, 2014). Cox (2008) reported that 20% of grandparents live in poverty and their new role as a parent can cause undue stress because of a lack of financial resources. Children living with their grandparents may have lived in poverty before moving in, but grandparents often live below the poverty levels (Hayslip & Kaminski, 2005). Having limited income already put the family unit in jeopardy of experiencing an increase in financial issues and a lower socioeconomic status (Meara, 2014).

Families composed of grandparents and their grandchildren can feel loneliness and despair by their family members and community. Lo and Liu (2009) reviewed recent research which concurred with past research that overcrowded, small living quarters may isolate grandparents and their grandchildren from family and the community and promote more stress and financial difficulty. Grandparents providing parental care in the U.S. have been living in overcrowded conditions to provide for their grandchildren. They go on to say that grandparents as a provider of parental care can lack family ties and have little interaction with the community, correlating with loneliness and psychological stress.

Assessing Strengths and Needs

Grandparents may lack certain qualities that can become predictors of their success when they provide parental care for their grandchildren. In a survey of grandmothers ranging in age from 37 to 78 years who had legal custody of their

grandchild (most were younger than 59 years old), 73% had graduated from high school, 32% had some college, 64% were married, and 47% had a full-time job (McGowen et al., 2006). The researchers used Survey-Monkey to reach grandmothers in 31 states from the Southwest, South, and Midwest and the instrument used was the Grandparents Strengths and Needs Inventory, which was validated for factor analysis. The alpha coefficient was between .90 to .94 and a multivariate analysis of variance was used for a regression analysis on custodial, co-resident, and nonresident grandmothers' parenting style.

Another study was conducted to assess the hardiness grandparents' physical health and social functioning that could identify strengths and needs in those areas. To assess grandparents' physical health in role functioning and social functioning, researchers performed a one-time, face-to-face interview with 119 custodial grandparents (Neely-Barnes et al., 2010). They identified participants using convenience sampling for their age, education, marital status, and employment status. Age ranged from 37 to 82 years, 2.5% completed college, 42.9% completed high school, 79.8% married, and 68.1% were not working. The study concentrated on grandparents' health-related quality of life (HRQOL), which consisted of using version 2 of the Short Form-12 Health Survey. The researchers asked grandparents to take the 2--minute questionnaire commonly used to measure HRQOL. Outcome differed on a continuum of good to poor on the HRQOL with a significant difference between predictors: level of grandparents' education, number of grandchildren in the home, and health problems of their grandchildren. This study identified that education level if the grandparent can be a strength when providing parental care for their grandchildren.

Advantages of Providing Parental Care to Grandchildren

Providing parental care to their grandchildren also has its advantages for the grandparent as well as the grandchild, regardless of the reason for being placed with the grandparents. When grandchildren are cared for by their grandparents, it promotes family unity, provides support during times of hardship, and helps the family recover from traumatic events surrounding their lives (Sands et al., 2009). Mohan (2011) reported that the relationship between grandparents and grandchildren is warm and friendly, with feelings of familiarity between them. Since raising a grandchild leads to a readjustment of lifestyle and role as a parent, some advocates believe that children adjust better when they are raised by a family member which include their grandparents (Rankin, 2002).

The relationship between the grandparents and their grandchildren can be extremely rewarding, promoting life satisfaction for the grandparents. For example, raising their grandchildren can lead to life satisfaction and the opportunity to form a connection with their grandchild (Lo & Liu, 2009). In a cross-sectional comparative study conducted by them, it included a convenience sample in a pilot study where they queried 93 grandparents and divided them into two groups: 45 grandparent caregivers and 48 non-caregivers. They used a face-to-face interview to collect data, revealing no statistical significance for the well-being of the caregiver when they cared for their grandchildren or not. When grandparents only cared for one or two children, satisfaction was higher. The researchers noted that some limitations of the study were that there was a small group being studied.

When grandparents have access to their grandchildren on a regular basis, it can lead to a more solid relationship for all family members. Meara (2014) noted that the

relationship between grandparents and their grandchildren can benefit both parties emotionally and lead to positive social interactions as well as self-esteem from unconditional love that has started to bloom. The benefits of the relationship do not stop once the child has reached adulthood (Meara, 2014). Meara goes on to further report that when a grandchild has the opportunity to know and has a relationship with their grandparents, it promotes feelings of closeness, a role model, a mediator (between child and parent), and a financial advisor. Hayslip and Kaminski (2005) also indicated that the benefits of being a grandparent providing parental care to their grandchildren can be serving as role model. Researchers also observed positive behaviors by the grandchildren when raised by grandparents in a single-parent home such as less reliance on welfare and autonomy in decision-making skills (Hayslip & Kaminski, 2005).

Life Satisfaction

Life satisfaction can change for grandparents who provide parental care for their grandchildren because a number of different factors. Hayslip et al. (2014) discussed that grandparents who provide parental care to their grandchildren are at serious risk of experiencing a lack of life satisfaction as they get older, due to increased stress, the lack of positive coping skills, and isolation from their friends. Becoming a parent again as they age, can be stressful for grandparents which is a concern for some social groups. There is a growing concern by some social groups regarding the increase of potential stress that can align with a grandparent becoming a caregiver.

As we age, life satisfaction automatically changes as we move throughout our lives and becoming a parent while a grandparent can have challenges. Hayslip et al. (2014) reported that stage of life itself can lead to life stressors that include financial

issues as grandparents reach retirement age, eliciting role confusion as they are grandparents to some grandchildren, parents to others, and try to adjust to their changing lifestyle. Being the grandparent providing parental care can also connected to mental illness like depression and a decrease in social standing with peers, leading to increased isolation. These challenges and issues can be used to predict life dissatisfaction.

In addition to psychological and physical problems, grandparents are at additional risk of experiencing other dissatisfaction in life. Financial status can become strained when grandparents experience emotional difficulties and health issues intensify (Lo & Liu, 2009; Meara, 2014). Landry et al. (2008) emphasized financial issues due to retirement status when changing roles from grandparent to parent and trying to revert to a more difficult lifestyle. Single grandmothers living in the U.S. may experience extreme poverty when raising their grandchildren (Lo & Liu, 2009).

Resilience When Raising Grandchildren

The hardship and burden of raising their grandchildren can lead to resilience when grandparents are able to form new coping skills and social supports to promote life satisfaction. Hayslip et al. (2014) conducted a study to assess the resilience of grandparents in becoming the provider of parental care for their grandchildren. The researchers conducted a study using the Resilience Scale, which is a 15-item self-report survey that promotes good psychometric properties noting that the higher the score, the higher the resilience for the grandparents. Findings indicated better perceived health for the grandparent and grandchildren which might play a part in grandparents maintaining a healthier prognosis as they age.

Grandparents as Kinship Caregivers

Although most states have been flexible in upholding federal rules, grandparents are usually the first choice as kinship caregivers. Cross et al. (2010) reported that Native Americans would rather raise their grandchildren than let them be placed in the child--welfare system. The U.S. child--welfare system relies on the extended family as kinship care providers, saving money on the federal and state levels while causing problems for the grandparent as the care provider (Meara, 2014). Most of the time, grandparents do not have the same legal rights as the parents, which leads to complications in answering the educational and medical needs of their grandchildren (Meara, 2014). But this support by the child--welfare system has allowed families to remain together, weather difficulties, and develop the resilience families need to cope with daily life and survival (Sands et al., 2009). Sands et al. further discussed that the child--welfare system falls behind in providing for coping strategies and social support.

No Compensation for Grandparents

Grandparents are often not compensated for their role as kinship caregiver although they might be the best choices to care for their grandchildren. Cooper (2012) reported that grandparents are the logical alternative for providing care to their grandchildren when their parents are unable to provide support. Most people do not believe family should be compensated for raising related family members and believe the justice system should not be involved in the family structure (Rankin, 2002). The Supreme Court ruled that kinship caregivers should not have the same funding as nonkinship caregivers, which might mean nonkinship placement is more financially stable (Rankin, 2002).

Changing Laws and Policies in the United States

Crime throughout the U.S. is on the rise which can lead to incarceration and an unmanageable budget to keep these people incarcerated. Changing laws and policies throughout the U.S. has caused more adults to be identified as criminals in the criminal-justice system which is marked by an unprecedented rise in incarceration in the 21st century (Skeem et al., 2016). Roos et al. (2016) reported that the U.S. spends approximately $80 billion on correctional programs annually to incarcerate working age men. Skeem et al. (2016) identified that the cost to incarcerate the growing number of individuals in jail or prison is unsustainable.

The number of individuals that are currently being incarcerated, placed on probation, or having a criminal record is shocking. Arditti (2016) reported that the number of people involved in the criminal--justice system has sharply increased; however, insufficient evidence shows concern for this increase. Approximately 735,601 individuals are in and out of local jails, and 1.6 million people are in the prison system in the U.S. as reported by Arditti (2016), whereas Skeem et al. (2016) reported that 2.3 million people are incarcerated in the U.S. Individuals are not always incarcerated for their first offense, but instead are put on probation (Arditti, 2016). Individuals participating in probation are at an all-time high of 4 million, whereas 65 million individuals have a criminal record (Arditti, 2016).

Current literature does not describe involvement in the criminal-justice system and the effects it will have on the family structure. Large numbers of incarcerated individuals leave behind children who need custodial care, and many of those children left behind are minors (Arditti, 2016). It was further discussed that because of this rapid

growth of individuals being incarcerated, social scientists are working to better understand the effects an incarcerated parent will have on their family unit's well-being in the future. As of 2016, 1.7 million minor children have a parent in the state prison (52%) or federal prison (63%), which is 2.3% of the children in the United States Recent estimates purport that 5 million children, 7% of children in the United States, have a parent who had been incarcerated before they were 18 years old.

Traditional Roles of Grandparents

Caucasian American Grandparents

Recent statistics show that the characteristic of the fastest growing culture for grandparents as the provider of parental care for their grandchildren is the Caucasian population. Hayslip and Kaminski (2005) described many grandparents taking on the role of the parent to their grandchildren as 51% Caucasian, 72% under the age of 65, and 72% are women. Many of these grandparents are married (54%; Hayslip & Kaminski, 2005). Caucasian people are less likely to set goals and boundaries and are well suited to care for their grandchildren. However, those in the Caucasian culture generally do not take an interest in raising their grandchildren (Zhou et al., 2016). When Caucasian grandparents take on this role of custodial parent, they take advantage of the support available to them (Goodman & Silverstein, 2002).

African American Grandparents

The role the grandparents play in raising their grandchildren endears them to family kinship and community ties (Rankin, 2002). Raising their grandchildren has been a family tradition for African Americans and grandparents are usually those who provide continuous support to their grandchildren (Zhou et al., 2016). Throughout generations,

African American families have kept the traditions of blurred family roles that originated in Africa (Rankin, 2002). The 2000 Census showed that, in the African American community, 2.35 million children in the United States are raised by their grandparents (Harper & Hardesty, 2001). One of the primary reason grandchildren lived with grandparents is because adult children were abusing or using alcohol (Cox, 2002).

Hispanic American Grandparents

Hispanic American grandparents might be called on by their adult children to provide care for their grandchildren for various reasons, and not always as the provider of parental care. Hispanic American grandparents preferred to raise their grandchildren themselves rather than letting them enter the welfare system (Mohan, 2011). Raising their grandchildren is a family tradition for Latino Americans in the United States (Zhou et al., 2016). The review of the literature did not account for Latino grandparents caring for their grandchildren; rather, grandparents are providing secondary care such as childcare (Burnette, 1999). Hispanic grandmothers provide daycare for their grandchildren rather than primary care (Yoon, 2005).

Asian American Grandparents

The Asian population has many elderly people, but little research has been performed to identify their role as grandparents and any services that are available to them. When Asian Americans are not included in studies for caregivers, it becomes harder for them to be considered for social services from the community (Yoon, 2005). Asian American grandparents are more likely to care for their grandchildren than grandparents of other cultures in the United States (Yoon, 2005). This population usually provides childcare for their grandchildren while the biological parents are in the

workforce, which takes the primary parental care away from Asian American grandparents (Yoon, 2005).

Native American Grandparents

Native Americans have experienced trauma and hardship throughout history as they tried to find their role and place in the United States (Cross et al., 2010). Native Americans are three times more likely to be providers of parental care for their grandchildren. Reasons include teen pregnancy, substance abuse, child abuse, domestic violence, or death of a parent. In one study, grandparents ($N = 10$) experienced stress due to the lack of connection with their adult children and providing parental care for their grandchildren.

Stress

Stress and Grandparent Providing Parental Care

Researchers agree that providing parental care for their grandchildren can lead to stress, distress, and anxiety for the grandparents. Stress is a major issue when providing parenting care for their grandchildren. Of caregivers, 33% reported they experienced distress and anxiety (Jackson & Jutte, 2016). Grandparents parenting their grandchildren are subject to considerable stress, which can affect all areas of their lives including physical health, financial issues, and social support (Lo & Liu, 2009). Grandparents feel greater stress when they do not have the capabilities to provide for unexpected problems such as special diets and behavior issues that may intensify in the future (Manne et al., 2016).

Stress from caring for one's grandchildren is only one part of the stress grandparents may experience. Their adult child's absence from the home and removal

from the family dynamic can trigger emotional issues and additional stress for grandparents. Although grandparents struggle to answer the needs of their grandchildren, they are also stressed because of the loss of the relationship with their loved one who is now incarcerated (Meara, 2014). Some stresses experienced by grandparents, stem from their relationships with their children (Hayslip & Kaminski, 2005). One-third of grandparents are disappointed by the behavior of their children, which includes resentment and being exploited (Hayslip & Kaminski, 2005). Grandparents who did not have a good relationship with their children experienced these stresses (Hayslip & Kaminski, 2005).

Stress and the Immune System

Stress can account for most reactions the individual might experience during any situation. Stress is the basis for all reactions, derived from chemical changes that occur when a stressful situation occurs (Koeske & Koeske, 1990). Koeske and Koeske (1990) discussed it can manifest in reducing the efficacy of the immune system and other chronic physical problems such as high blood pressure, eating disorders, and substance abuse. Physiological stress-response pathways, stress, and the immune system interact when humans experience trauma, and pathways link to infections (Contrada & Baum, 2011). Physiological stress-response pathways respond to chronic stress as individuals develop chronic diseases, problems with substance abuse, eating problems, and lifestyles devoid of activities (Contrada & Baum, 2011).

People adapt to stressors in their own way. Understanding how an individual adapts to stress can lead to a better understanding of the different levels of stress hormones (Morgan at el., 2014). When monitoring stress levels, a spike in heart rate,

peak levels of hormones, increases in blood pressure, and the length of time it takes for changes in these areas will continue to the end of the stressful event (Contrada & Baum, 2011). Psychological stress links to health problems and can increase the development of coronary--artery disease (Miller et al., 2002).

Double Stressor

The gap in the literature does not address the double stressor of having an adult child incarcerated for alcohol abuse or use and then providing parental care for the grandchildren. This study was developed to identify if there is a statistical relationship between age and perceived stress (low, medium, and high) of the grandparent with coping strategies, and social support used by grandparents who provide parental care for their grandchildren. The gap in the literature does not address if there is a statistical relationship between age and perceived stress with coping strategies, and social support identified by grandparents when having the responsibility of raising their grandchildren.

Moderating Variables

Age of the Grandparent

Age can be a factor when a grandparent becomes a parent a second time, whether they are older or younger. Grandparents' age can be a factor when they provide parental care for their grandchildren (Sands & Goldberg-Glen, 2000). As grandparents age, they may experience more stress when becoming a full-time parent, a second time. Younger grandparents may also be stressed because they are coming to terms with their adult child being incarcerated and becoming a full-time parent a second time. The study was conducted using age as one of the independent variables in a two-way analysis of variance. Age significantly aligned with stress, $F(3, 25) = 9.41$, $p < .01$. In the first block

of the multiple regression analysis, age and years of caregiving were significant, $F(13, 115) = 4.85$, $p < .001$.

Sands and Goldberg-Glen (2000) 129 middle--aged (age 50 to 59) and older (age 60 to 69) grandparents: 64 middle- aged (32 African American and 32 Caucasian) and 65 older age (34 African American and 31 Caucasian). A linear, hierarchical multiple regression analysis was used to assess conceptual units of stress. Study findings were middle--aged grandparents had stress and higher psychological anxiety when they had the added responsibility of providing care for their grandchildren.

Kresak et al. (2014) conducted a study examining grandparents' age to identify an impact on the family unit, including psychological stress and physical health when raising their grandchildren. The mean age of grandparents participating in the study was 60.16 years old and a total of 50 grandparents participated in the study, discussing the issues they experienced when raising their grandchildren. These researchers used a multiple regression analysis to identify the strongest variables, with age used as one of the control variables. In this study the overall relationships were not significant in the study's finding, $F(1, 45) = 2.440$, $p > .05$.

Age was also used in a study by Stowell et al. (2001) to measure immune function as the dependent variable. They used hierarchical regression models to determine if health behaviors or demographic factors statistically related to how the immune system functions. The study used age as the control variable and entered it first in all regression equations followed by perceived stress, active or avoidance coping strategies, and the stress-by-coping interaction term. Although weakly, age related negatively to the CD3+ cells, indicating increased phytohemagglutinin for high levels of stress only.

Other researchers identified that middle-aged grandparents' experienced stress as they aged and became the main provider of parental care for their grandchildren. In their study, Whitley et al. (2001) identified the age of the grandparent providing parental care for their grandchildren to be 55 to 57 years old. They identified that other studies have shown that providing parental care for their grandchildren can increase a grandparent's level of distress, which should be followed with interventions and treatment. Age of the grandparent can play a significant role when grandparents provide parenting care for their grandchildren after their adult child are incarcerated for substance abuse and use. The expectation of becoming a parent again predicted increased distress.

Perceived Stress

Stress can occur on a day-to-day basis and the individual experiencing the stress will rely on their perceptions to show their stress level. Perceived stress means how an individual perceives the stress in their lives over the past couple of months (Soderstrom et al., 2000). Also, researchers in the health field assume that when an event is stressful, it is determined by the individual's perception of their stress (Cohen et al., 1983, as cited in J. M. Taylor, 2015). Stressors are people, places, or things perceived by an individual to be intimidating, which can create more stress than the person can handle (Shields et al., 2016).

When a stressful event occurs, it is difficult to assess the actual stressor when compared to one's perception of the stressor. Cohen et al. (as cited in J. M. Taylor, 2015) defined perceived stress as how one perceives stressors through the cognitive appraisal of the individual assessing the severity of their experiences of the stressful event and the way they perceive their ability to cope with that stressful event. For this study, I use

perceived stress as defined by Cohen et al. (as cited in Selye, 1946; Radel et al., 2011) and the aspects of general adaptation-syndrome mode. These perspectives help to describe grandparents' perceived stress as their view of stress in their life measured on three levels: low, medium, and high (Radel et al., 2011). In this study, I conceptualize perceived stress as the stressor antecedent rather than the stress response, which is the consequence or outcome highlighted through general-adaptation syndrome (Selye, 1949).

In this study, it was my purpose to discern if a statistical relationship exists between perceived stress with coping skills, and social support. Perceived stress is the independent variable. Perceived stress was used as the independent variable in several studies such as a study by Munozk et al. (2015). These authors assessed whether perceived stress predicted cognitive change in older adults (Munozk et al., 2015).

Taylor (2015) assessed the effectiveness of using the 10-item Perceived Stress Scale (PSS) to predict cognitive change for men (see Appendices A and B). Also, Scott et al. (2013) used perceived stress as the independent variable to compare stress levels of young adults to older adults as they tried to cope with stress. A study conducted by Rueggeberg et al. (2012) also used perceived stress as an independent variable as it applies to physical activity and health. Perceived stress was used as the independent variable in a study to identify an association between the levels of perceived stress and worse symptom severity on body-focused repetitive behavior by Grant et al. (2015).

Stressors are typically the independent variable in the stress literature. Miller et al. (2002) performed a study that used the PSS 10-item scale to assess the stress level of parents. Study results showed PSS levels, with an internal consistency for the sample of .92 when examining how individual's lives are unpredictable, uncontrollable, and

unmanageable (Miller et al., 2002). Koffer et al. (2016) studied the daily stressors people experienced related to the extent of stressor reactivity using stress as the independent variable. Bhanji et al. (2016) used two groups of stress (stress and non-stress controls) to assess the effect of setback controllability in their study where stress was the independent variable.

What are the age and perceived stress levels this growing population experiences as they find themselves in a new role of parenting their grandchildren in their later years? When compared to age what is the statistical relationship between active and avoidance coping strategies, and formal and informal social support, for grandparents providing parental care to their grandchildren? Is there a statistical relationship among different levels of perceived stress (low, medium, and high), and active and avoidance coping strategies, and informal and formal social support for grandparents providing parental care to their grandchildren?

Coping Skills

Human beings can adapt to the changing world around them and find strategies to cope with their stress as they grow in experience and wisdom. Humans can manage stress by design and are able to manage their emotions (Compas et al., 2001). Humans can adapt to the changing world around them, which starts when they are young and continues to develop into maturity. People learn to regulate their emotions as an adolescent which helps them adapt to their environment and the behavior around them.

Researching stress is helpful as it can warn people of possible psychopathological issues experienced in childhood, such as not being able to live with one's biological parent (Compas et al., 2001). Coping means trying to control the effects of an event,

thereby reducing the effect it will have on an individual and looking at a number of different ways to handle stressful events that are more productive than crippling (Lilly & Graham-Bermann, 2010). Taking on the additional stressor of having an adult child incarcerated and becoming the provider of parental care for their grandchildren can be stressful to grandparents but they can adapt.

Active and Avoidance Coping Skills

Researchers agree that utilizing coping skills helps individuals handle stress and their reaction to stress. However, grandparents may not be equipped with these coping skills as they become a parent again. When coping on an emotional or behavioral level, coping can mean having good skills to handle personal assets (Soderstrom et al., 2000). Measuring active or avoidance coping style provides an opportunity to assess behavior as it applies to successfully managing stress (Stowell et al., 2001). When people confront a problem that can lead to stress, they choose from active approaches or avoidance coping techniques (Soderstrom et al., 2000). Individuals who are actively coping meet the problem directly using coping skills and techniques; those using avoidance coping avoid the stressful situation, which can also elicit stress (Soderstrom et al., 2000). Physical coping skills and problem-focused skills connect with pre--coping skills (MacFarlane & Montgomery, 2010).

The number of studies on coping strategies for various functions has increased over the decades. Over the last 20 years, many valid studies have been designed to test the relationship of coping strategies against perceived stress and illness (Soderstrom et al., 2000). A correlation emerged between having a healthy personality and good coping

skills to handle stress, asserting that good coping skills mean good health (Soderstrom et al., 2000).

Sands et al. (2009) conducted a quantitative study in the 1990s on grandparents raising their grandchildren when the parents were not co-residents. They used the strength perspective to give individuals the opportunity to believe they possessed the skills to cope with stress and frustration and the study was small with self-selected participants. The researchers interviewed 129 grandparents who were 50 years old and older using a videotaped interview and the study concentrated on stress, well-being, and life satisfaction, as recorded by the grandparents. The finding for this study led to a strong intervention for the grandparents and their grandchildren.

Using Active or Avoidance Coping Styles

Researchers worked to better understand if everyone used the same coping strategies in the same situations. Stowell et al. (2001) reported that the ability to effectively cope with stressful situations can differ for everyone, depending on their preferred coping strategy. They compared active-coping styles with avoidance- coping styles when perceived stressors are present (Stowell et al., 2001). Those using the active-coping style reappraised the stressful situation and took action to mitigate the identified stress without maladaptive behavior, such as alcohol misuse; in contrast, those using an avoidance-coping style avoided the stressful situation altogether (Stowell et al., 2001). The benefits of coping strategies include positive thinking and problem solving because each shows resilience while ignoring a problem can hinder feelings of well-being (Booth & Neill, 2017).

I used the dependent variable of coping strategies to see if a statistical relationship emerged between age and different levels of perceived stress, with active or avoidance coping styles. Individuals with active coping skills try to confront a situation while avoidant coping skills avoid addressing the problems (Holahan & Moos, 1987). Researchers found avoidance coping strategies positively aligned with distress, whereas active strategies gave the individuals the opportunity to negotiate the outcome of the stressor (Holahan & Moos, 1987).

Caregivers are in a better position to handle stress when using active coping strategies (Goode et al., 1998). These strategies focus on the problem (problem-focused coping) rather than avoiding the problem (emotional-focused coping; Haley et al., 1988; Haley et al., 1996). Coping strategies can be measured as they apply to perceived levels of stress that grandparents might experience because of their role as the provider of parental care for their grandchildren.

Many studies have assessed coping strategies for areas of stress and well-being. For example, Sands et al. (2009) conducted a follow-up study using interviews taped a year earlier. The researchers only examined the high and low scores in a couple of areas including stress and well-being of 68 of the original 129 grandparents. The authors used only 20 grandparents in this follow-up study to assess their perceptions of stress and well-being. The study examined whether an association emerged between using active coping strategies to promote lower perceived stress and using avoidance strategies to promote lower perceived. Findings from this study rested on the information provided by grandchildren which identifies if grandparents who used active coping strategies can build attachment and resilience through education and community support.

Social Support

The other dependent variable social support, was used in this study to assess if there was a statistical relationship between age and levels of perceived stress when having access to community resources and people. Taylor et al. (2000) discussed that a lack of community support, might keep an individual isolated rather than integrated into the community. Women gravitate toward social events and women's groups to better handle their stress as they strive to survive and protect their offspring (Taylor et al., 2000). Leder et al. (2007) conducted a study that examined if social support was a predictor of the health status of grandparents who were caregivers. Findings showed a positive correlation between social support and good health (Leder et al., 2007). Moskowitz et al. (2012) conducted a study to identify social support for low-income families' reported health issues where good social support linked to better self-reported health. The present study examined if age and the level of perceived stress has a statically significant impact with social support.

Social Programs to Assist Grandparents Providing Parental Care or Responsibilities

Some social service programs have been developed to assist grandparents who care for their grandchildren. Strom and Strom (2000) suggested that most grandparents do not know about the social services available to them or how to access them. Most studies linked stress directly to lack of social support that can help grandparents supplement their income (Landry et al., 2008). Grandparents cited that financial needs and supplements for daycare could help relieve stress in the new family unit (Cooper, 2012). Social support systems should include elements that will promote positive

development and availability to grandparents (Cooper, 2012). Having access to positive social support can alleviate some of the stress grandparents may feel when providing parental care for their grandchildren (Landry et al., 2008).

Two federal government programs that provide policies to support grandparents taking on parental care of their grandchildren are the Adoption of Safe Families Act of 1997 and the Personal Responsibility and Work Opportunity Reconciliation Act of 1996 (Rankin, 2002). Federal grants and free meals at school are other programs available to grandparents who provide parental care for their grandchildren (Strom & Strom, 2000). However, some schools charge grandparents because the children are not in the school district (Strom & Strom, 2000). Grandparents need assistance in raising their grandchildren, such as providing clothes, food, and childcare assistance.

Informal and Formal Social Support

Landry et al. (2008) drew data from the Grandparent Family Project to investigate evidence of informal and formal social support. The researchers recruited 133 grandparent participants who met criteria through social service agencies and used a hierarchical multiple regression to analyze the data. Using the regression analysis, they examined whether four variables linked through association. This study did not show an association between social support and stress, which is documented in other literature highlighting caregivers. A noticeable association arose between having support from the community (formal social support) and life satisfaction.

In a more recent study, the kinship-care informal support system had become a tool for the child-welfare system (Kondrat et al., 2014). Kinship care means giving full-time care to a child in the welfare system by family members who comprise the informal

support system. The researchers used the Family Support Scale to measure social support reported by kinship caregivers. Of the 367 participants, 257 (70%) were grandparents, 53.2% were Caucasian, and 41% were African American (Kondrat et al., 2014). Findings showed that the Fatigue Severity Scale is a valid and reliable scale to use when measuring social support (Kondrat et al., 2014). Informal support is helpful in the caregiving setting but does not comprehensively replace formal support (Bakker et al., 2013). Informal and formal support should be used to complement each other rather than being substituted for one another (Bakker et al., 2013). In the current study, grandparents will report their statistical relationship between the social support they can access and their age and stress level.

Family members who find themselves in the role of providing parental care can experience chronic stress and may require a support system (Gouin et al., 2016). Chronic stress affects the neuroendocrine and immune systems and starts to weaken immunity at a cellular level (Gouin et al., 2016). Having a large support network of informal and formal support promotes lower levels of chronic stress experienced by caregivers (Gouin et al., 2016). To measure informal support, Gouin et al. (2016) used the Multidimensional Scale of Perceived Social Support (MSPSS; see Appendices E and F) and the services checklist by Warfield and Gulley (2006) to measure formal support.

Effects of Social Isolation

When grandparents take on the role of parent, they can find themselves isolated from their social-support system that includes their family. Hayslip and Kaminski (2005) supported their theory of social isolation of grandparents by gathering data from two independent samples of grandparents. The researchers gathered data from 52 White

grandmothers with a mean age of 60.2 years and examined the correlation of instrumental and emotional support with three variables, one of which was parental—role strain. Results (r = -29, p < .05) led to a correlation of social support and role satisfaction. Hayslip and colleagues conducted a second study in 1998 of predominantly custodial grandmothers. Study participants were 80% Caucasian, 15% African American, and 5% Hispanic. Overall, social support did not correlate with well-being or role satisfaction.

More recent literature compared grandparent-headed households with at least one parent in the home to households without the parent in the home. In households without the parent, grandparents experienced greater isolation from their social group because of their new obligations to their grandchildren (Montoro-Rodriquez et al., 2012). Compared to households where the grandparent and parent provided care for the grandchildren, grandparents in the household without the parent experienced more social isolation. These grandparents experienced a change in social support because of their new responsibilities to their grandchild as well as added stress and poverty. They often experienced social isolation, stigma, and disruption in their retirement plans while providing primary care to their grandchildren.

Other literature focused on grandparents being underserved in resources because of social isolation. Grandparents might not have the knowledge to access resources that would help them better care for their grandchildren. A. L. Miller et al. (2013) discussed the growing incidence of at least one parent becoming incarcerated and leaving their child to be raised by a caregiver, which is usually the grandparent. It can be challenging for a grandparent placed in the role to provide parental care, especially when they are already isolated from a social-support group. Isolation from social support aligns with

these grandparents becoming underserved when finding resources, as they take on the job of raising their grandchildren.

Summary and Conclusion

Literature showed that grandparents taking on the role of providing parental care for their grandchildren is not a new position in some cultures. African Americans, Latinos, Asians, and Native Americans grandparents have stepped into the role of parenting throughout history for various reasons. In the primary parental role, grandparents and their grandchildren live in the same household and grandparents provide daycare services for their grandchildren (Musil, 1998). Grandparent caregivers encounter factors that lead to greater risk, such as financial and emotional hardship (Lo & Liu, 2009). My aim in this study was to identify age and perceived stress that grandparents experience when raising their grandchildren due to the lack of appropriate tools such as coping skills and social support.

Stress as the Leading Factor

Current studies identify stress as a leading factor when grandparents provide parental care for their grandchildren mainly because their adult child can no longer take care of them. Due to societal laws and norms, some adults are unable to take care of their child because of incarceration for alcohol use or abuse. Statistics show that about 1.4 million people are arrested each year for DUI (Kanable, 2006). Grandparents from all cultures are raising their grandchild because of family crises (Letiecq et al., 2008).

Grandparents' Unique Role of Providing Parental Care

Grandparents are now called on to provide parental care of their grandchildren, placing them in a unique role that grandparents may not have encountered in the past.

Incarceration, substance abuse, financial hardship, and HIV directly affect the family structure and role that grandparents play as caregivers (Conway & Jones, 2012). Grandparents are aware that their changing role as a grandparent, aligned with changes in social hardship (McGowen et al., 2006).

Grandparents from some cultures relish the role of parenting their grandchildren because of family tradition; however, having their adult child incarcerated can bring unique stress to the family unit. When an adult child is incarcerated, their parents can experience new stress associated with their grandchildren's characteristics, their vulnerabilities as a caregiver, and the social stigma of having an incarcerated adult child (Arditti, 2016). Grandparents can experience a sense of loss they cannot discuss in public because of the social stigma that leaves them socially isolated (Arditti, 2016). A gap in the literature does not identify age and perceived stress as it interrelates with coping skills and social support when an adult child has been incarcerated.

In Chapter 3, I describe the research design, rationale, and nature of this study, and include discussion of the demographic questionnaire and survey assessments. I outline the role of the researcher, which includes the different avenues to be used to sample the population while examining ethical considerations. The methodology and instrumentation are discussed. I examine the data-analysis plan and the issues of trustworthiness aligned with credibility and transferability of the study.

Chapter 3: Research Method

The purpose of this quantitative study was to assess the relationship between the independent variables (age and perceived stress) and the dependent variables (coping strategies and social support). For this study, I conducted a survey to assess whether a statistical relationship exists between grandparents' age, perceived stress (low, medium, and high), and coping strategies (active and avoidance). Additionally, I used a survey method to assess whether a statistical relationship exists between grandparents' age, perceived stress (low, medium, and high) and social support (informal and formal).

In this chapter, I describe the research design and rationale, the nature of this study, and the survey assessments. I outline my role as the researcher, which also includes the different avenues used to sample the population while keeping in line with ethical considerations. In the methodology section, I describe the targeted population and the logic behind selecting participants. The instruments, procedures for recruitment, participation, data collection, and survey method for this study are discussed in this chapter. Further, I discuss the data analysis plan, issues of trustworthiness, credibility, and transferability. This chapter concludes with a description of ethical procedures.

The literature reveals that grandparents are willing to take on the role of providing parenting but still want to live a satisfying lifestyle (Lo & Liu, 2009). The age of grandparents as they take on the role of providing parental care can impinge on their life satisfaction (Sands & Goldberg-Glen, 2000). People who provide parental care to their grandchildren can experience varying levels of distress that are often elevated (Manne et al., 2016). Identifying appropriate coping strategies and social support to address this distress can be beneficial to grandparents providing parental care to their grandchildren.

Sands et al. (2009) conducted a small-scale study that concentrated on stress, well-being, and life satisfaction, as recorded by grandparents, and concluded that strength-based interventions are needed.

Purpose of the Study

The purpose of this quantitative study was to assess the independent variables, age and perceived stress (low, medium, and high), as viewed by grandparents when they assume parental care of their grandchildren. Having an adult child incarcerated for alcohol abuse or use and other alcohol-related incidents at least once can lead to grandchildren receiving parental care from their grandparent. I assessed (a) whether a statistical relationship exists between age and perceived stress of grandparents and their use of coping strategies (e.g., active and avoidance); and (b) whether a statistical relationship exists between age and perceived stress of grandparents and their use of social supports (e.g., formal and informal). Grandparents were able to identify these variables as they adjusted to their new role as a parent to their grandchildren when their adult child was incarcerated for alcohol abuse or use.

Identifying appropriate coping strategies and social support to address lifestyle distress can be beneficial to families in which grandparents provide parental care to their grandchildren. Lo and Liu (2009) stated that some grandparents are willing to take on this role but still want to live a satisfying lifestyle. Manne et al. (2016) reported that people who give care to children can experience different levels of distress, which can often be higher than those of people who do not give care to children.

Sands et al. (2009) conducted a study with a small sample size that concentrated on stress, well-being, and life satisfaction as recorded by grandparents. The authors

concluded that an intervention is needed that identifies the caregiver's strengths (Sands et al., 2009). An aim of the present study was to promote social change through identifying grandparents' strengths in providing care for their grandchildren and possible help from a support system. Grandparents providing parental care for their grandchildren might experience stress or lack social support, but receiving resources could promote life satisfaction (Sampson & Hertlein, 2015). Sampson and Hertlein (2015) reported findings from their study that revealed that coping strategies and social support can assist grandparents as they care for their grandchildren, which might lead to better outcomes for the family.

Research Design and Rationale

The guiding question that led this study was as follows: How do age and level of perceived stress that grandparents report impact them when they are tasked with raising their grandchildren because their adult child is incarcerated for alcohol abuse or use? What are the ages and perceived stress levels that this growing population experiences as they find themselves in a new role in their later years? Is there a statistical relationship between age and levels of perceived stress (low, medium, and high) of grandparents, with coping strategies (e.g., active and avoidance)? Is there a statistical relationship between the age and levels of perceived stress (low, medium, and high) of grandparents, with social support (e.g., formal and informal)? Researchable hypotheses based on the research problem addressed whether the independent variables, age and level of perceived stress (low, medium, and high) of the grandparent, have a statistically significant impact on the dependent variables, coping strategies and social support. The research questions and hypotheses examined in this quantitative study were as follows:

RQ1—Quantitative: Is there a relationship between the independent variables (age and perceived stress) and the dependent variable coping strategies?

Ho1: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have no statistically significant relationship on coping strategy (e.g., active and avoidance).

Ha1: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have a statistically significant relationship on the coping strategy (e.g., active and avoidance).

RQ2—Quantitative: Is there a relationship between the independent variables (age and perceived stress) and the dependent variable social support?

Ho2: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have no statistically significant relationship on their social support (e.g., informal and formal).

Ha2: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have a statistically significant relationship on their social support (e.g., informal and formal).

Quantitative Design

This study was a one-time correlation observation quantitative design using the nonprobability convenience sampling method. This study used a nondirectional design

with inferential questions to assess whether a relationship exists between the independent and dependent variables (Creswell, 2009). The survey method was used to provide a picture of the current data collected that could be sorted numerically. A survey was given to men and women who reported that they were grandparents and had provided parental care to their grandchildren at least once in their lifetime.

Using this design allowed me to identify a sample group and test the impact of the experiment, which could then be generalized across populations. Using nonprobability convenience sampling, I identified individuals who were grandparents and had taken on the role of providing parental care for their grandchildren. The inclusion criteria applied to individuals of male or female gender who provided parental care of their grandchildren when their adult child was incarcerated for alcohol abuse or use.

Participants accessed the questionnaires and surveys through a survey engine from a convenience sampling to address the selected variables. The independent variables were age and perceived level of stress (low, medium, and high) of the grandparent, and the dependent variables were coping strategies (active or avoidance) and social support (formal or informal). The control variables were decided as I accrued and analyzed data. I used several survey assessments to screen and gather information. The assessments that were used consisted of a demographic questionnaire and three self-report survey assessments. This survey method was selected because it allowed for the same surveys to be administered to participants in the study (Lucasey, 2002). The survey design worked well in similar studies assessing age, perceived stress, coping skills, and social support as well as data such as gender, employment, education, and income (Lucasey, 2002).

The rationale for using a quantitative-design survey method was that specific questions needed to be answered regarding a relationship between the independent variable and dependent variables. Using the quantitative design, I was able to receive a numeric prediction to answer this study's questions. I used the SPSS (Windows, version 27) program and multiple regression analysis to discern a statistical relationship between these variables. The current study examined whether a statistical relationship exists between age of grandparents and levels of perceived stress of grandparents with coping strategies and social support.

Role of the Researcher

I served as the primary instrument to collect and analyze data for the study through the survey engine. I was involved in each step of the research process because researcher bias and error can be an issue (see Patton, 2002). I did not impose assumptions or allow my experience or personal point of view to influence the data collection process or the study results (as suggested by Patton, 2002). I worked to adopt a neutral, objective role to promote an understanding of the age of the grandparents, perceived stress, coping strategies used, and social support, as they emerged from the data (as in Patton, 2002). I applied the same rigor and discipline to myself throughout the entire research process as I did to the research design (aligned with McCaslin & Scott, 2003).

Sampled Population

Recent studies using grandparents as participants have identified men and women in an age range of 33 to 83 years, partitioned into groups: middle age and older age. Sands and Goldberg-Glen (2000) conducted a study identifying the middle-age range group as people aged 50 to 59 years and the older age group as people aged 60 to 69

years. I decided upon the age groups as I accrued and analyzed data so that I could use the entire age range of 33 and above. Whitley et al. (2016) conducted a study that included the age range for grandparents as 33 to 83 using 667 participants, whereas Sanders and Kirby (2014) had 45 male and female grandparents with an average age of 61.4 in their study.

The appropriate sample population for this study was men and women who were grandparents in the age range of 33 and above to attract the best sample size. I screened participants to ensure that they adhered to my intended sample group on the handouts and flyers left at each agency. The sample group was grandparents taking on the role of providing parental care for at least one grandchild for any amount of time while their adult child was incarcerated for alcohol abuse or use. I used the same screening process for each group of grandparents who wanted to participate in the study to promote reliability and validity (as in Frankfort-Nachmias & Nachmias, 2008).

I designed this study to collect the most appropriate data that could be generalized to other populations. Frankfort-Nachmias and Nachmias (2008) reported that collecting the best possible data allows the data to be generalized to other populations, which is an important aspect of research. For example, the screening question asked whether grandparents had provided, at one time or another, parental care of at least one grandchild when their adult child was in jail or prison for alcohol abuse or use. If the grandparent answered "yes," they were able to access the research study online. The target population was grandparents across the United States. Using a survey method allowed me to collect data using a demographic questionnaire (see Appendix G) and survey assessments that had acceptable reliability to measure the variables in the study.

Surveying both men and women allowed for a larger sample pool and access to a large sampling. Using the convenience sampling design allowed me the freedom to choose who was available to participate in the study. The convenience-sampling design also averts researcher bias and promotes random participation. By providing handouts and posting flyers at identified agencies, at the YMCA, at local community centers, on Facebook, and using the Walden Participation Pool, I was able to reach potential participants using an effective and economical method. Just using Facebook to obtain a sample for this population could have made the study weaker. The targeted population might not have had access to or might not be familiar with this technology but might have been able to access the survey through the survey engine.

Ethical Considerations

I educated potential participants on the intended study and what their participation would entail. The ethical consideration for conducting a research project is extremely specific in providing the participant with informed consent and confidentiality. The American Psychological Association (APA, 2017) established that participants must have the choice to participate in a study and indicated that their privacy must be protected throughout their participation. Having a choice ensured that the potential participants freely reached, without coercion, a truly informed decision about participating in the study. This process also ensured that participants would be aware of all requirements and how the information would be used.

A copy of the informed consent was provided to all participants in this study through the survey engine. I did not disclose any information that might influence or lead the participant to respond untruthfully. APA (2017) stated that the counselor must plan,

design, and conduct research in a manner aligned with ethical principles and federal and state laws. The consent form included the purpose of the research, the procedures to be followed, and any risks or discomforts. Additionally, the participants were informed of any benefits associated with participating in the study such as possible resources and confidentiality of information. The consent form informed the participants of their right to discontinue participation in the study at any time, even after providing consent. In addition, the participants were informed that the collected data would be maintained for 7 years in a secure location.

As the researcher, I was expected to uphold standards when conducting and planning a survey research study. The APA (2017) stated that deviation from survey standards or acceptable practices is not acceptable without consultation regarding any issues. A link was provided to the participants in case they wanted to participate in the research study. Additionally, the questionnaire and survey assessments chosen to collect data from participants through the survey engine were culturally competent.

Methodology

Participant-Selection Logic

The target population for this study was grandparents who took on the role of providing parental care for their grandchildren because their adult child was incarcerated for alcohol abuse or use. I posted on Facebook, posted flyers at the YMCA, sent flyers to local community centers, and hung flyers in identified agencies to publicize the opportunity for grandparents to participate in a local study. Participants received educational information surrounding the research study's topic and were offered a gift card when they completed the questionnaire and survey assessments through the survey

engine. Information was gathered from this group through a demographic questionnaire and three survey assessments using a survey engine. The survey assessments that were provided were the 10-item scale of the PSS (Cohen et al., 1983, as cited in J. M. Taylor, 2015; see Appendices A and B), the MSPSS (Zimet et al., 2010; see Appendices C and D), and the 13-item COPE inventory (Carver et al., 1989; see Appendices E and F). The PSS-10 is a measure of the degree to which situations in one's life are appraised as stressful. The COPE was used to evaluate coping strategies from grandparents participating in the study. The MSPSS is a 12-item scale that measures social support. The information gathered from the questionnaire and survey instruments allowed me to test the null and alternative hypotheses.

Individuals who met all criteria to participate in the study made the choice to participate in the study by using the link on the handouts and flyers. Each participant was screened by the handouts and flyers to affirm that they were a grandparent who provided parental care to their grandchildren because their adult child was incarcerated for alcohol abuse or use. The participants meeting the criteria received a link to access further instructions, read and sign the informed consent, and complete the demographic questionnaire and the three survey instruments. If an individual did not sign the informed consent or did not want to participate in the study, their information was not included in the study. Each grandparent took the questionnaire and survey instruments through the survey engine.

A sampling strategy appropriate to this quantitative research survey plan was the nonprobability sampling design of convenience samplings. This design allowed the researcher to select a sample by choosing whoever was available including men and

women who reported being a grandparent. The computer program, SPSS (version 27), tables was used as simples for better understand. I posted on Facebook, posted flyers at the YMCA, sent flyers to local community centers, and hung flyers in identified agencies requesting the opportunity for grandparents to participate in a local study to search for participants. This sampling method was appropriate because I wanted to be able to generalize the results of my study to people of both genders and have a good sample pool to choose from for statistical power, alpha, and effect size (G. Burkholder, personal communication, n.d.).

Instrumentation

Perceived Stress Scale (PSS)

The PSS was developed to measure perceived stress. Federenko et al. (2006) stated that the PSS is a reliable scale used in studies to measure perceived stress because it is consistent and reliable. The PSS is the most used questionnaire in studies involving stress and health with a global measurement of stress internal consistency in the range of 0.84 and 0.86. The PSS was designed to be implemented in the community with respondents who have at least a middle school education.

Three standard versions of the PSS are the original scale, which consists of 14-ites; the 10-item scale; and the 4-item scale. The PSS-10 version has the most satisfactory psychometric properties and is highly recommended over the PSS-14 and PSS-4 (Maroufizadeh et al., 2018). The PSS-10 supports internal and test--retest reliability and can be correlated with a range of self-report and behavior measures. Maroufizadeh et al. conducted a study to evaluate the validity of the PSS-10. They performed a cross-sectional study with a sample of 240 women who reported they suffered from infertility.

The instrument was used for women who could read, write, comprehend Persian, were married, and were between the ages of 18 and 45. Using the PSS-10, the study assessed how unpredictable, uncontrollable, and overloaded the women reported their lives were becoming. Cronbach's alpha for the PSS-10 in this study was .842 meaning it had good internal consistency for what the study set out to assess. The PSS-10 is a public domain instrument and permission to use this instrument is in Appendix B.

The 10-item scale of the PSS was a reliable scale to use in the current study (see Appendix A). It is a self-report measure that examines the degree to which an individual assesses their ability to cope with stressful situations, making it the most used scale on perceived stress (Cohen et al, 1983, as cited in Taylor, 2015). The scale contains Likert-type items that ask the individual to rate their experiences over the last month and assesses their predisposition to the experienced stress; a high score means a high level of perceived stress (Morgan et al., 2014). The scale can be used across a broad field of questions and help lead clinical practitioners in the appropriate direction (Morgan et al., 2014).

Coping Orientation to Problem Experiences (COPE)

Carver et al. (1989) developed the COPE inventory to accurately measure ways individuals respond to stress. The inventory has a total of 53-items that identifies coping styles that are unique to the individual taking the assessment. The instrument uses a Likert-type scale that asks the individual to choose from 1 (I usually don't do this at all) to 4 (I usually do this a lot). Higher numbers indicate better coping strategies. The inventory has a total of 13 scales with the first five scales consisting of four items, each measuring how an individual actually coped with problems such as planning, active

coping, avoidant coping, and incorporating social support. The next five scales measure the emotional side of coping such as emotions participants can feel as a result of receiving social support, acceptance, or denial of stress, and aligning with their religious beliefs. The last three scales are less useful in some studies but measure how individuals respond to coping with stress. The researchers used three studies to develop scale items: correlated between the scales to ensure convergent validity, associated the way individuals may act, and identified the strategies people might use in any given situation. They calculated each scale with Cronbach's alpha reliability coefficients and used two samples to test and retest for reliability (see Appendix C).

Stowell et al. (2001) used the COPE inventory to examine if differences arose between active and avoidance coping methods and immune functioning. The researchers were able to use the COPE inventory to identify that perceived stress level was a factor in the relationship between coping methods and immune function. Cronbach's alpha for the scales were .88 for the active coping scale and .72 for the avoidance coping scale.

Chou et al. (2015) used the COPE inventory in their study to investigate a relationship between response and a difficult or stressful event if the event was not specific. They measured responses on the 4-point Likert-type scale and noted that higher scores indicate better coping strategies. They reported that the COPE has a high reliability and validity. Their study found Cronbach's alpha on a 13-point Likert-type scale with a range of .73 to .92, which shows excellent internal consistency reliability. I administered this scale to grandparents to assess coping strategies: active or avoidance. The COPE inventory is a public domain and permission to use this instrument is in Appendix D.

Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS, which was developed by Zimet et al. (2010), is easily administered. The instrument was developed to measure perception of support from 3 sources: family, friends, and a significant other. This instrument is 12 questions long and has been found to be reliable and valid. The three areas have 4-four subscales, and the measurement is a 7-point Likert-type scale with 1 = very strongly disagree and 7 = very strongly agree. Higher scores mean higher levels of perceived social support. Undergraduate students at a Malaysian university completed the English version of the MSPSS and the Kaiser--Meyer--Olkin test confirmed the sample was adequate and appropriate for the factor analysis. Fadzil and Fadzil also used Cronbach's alpha to examine the consistency of the MSPSS, which was between .92 and .88, above the reliable coefficient (.7) indicating a low homogeneity index (see Appendices E and F).

Wilson et al. (2006) believed their study was the first to assess perceived social support with youth participants. The youth reported their perceived social support was from family and friends because they were less likely to have a spouse. For this reason the researchers only used the Family and Friends 4-item subscales as predictors of the study (a total of 8 items). The MSPSS was used to assess the youth's perceived social support by using a 7-point Likert-type scale which yielded scores ranging from 4 to 28 with higher scores predicting higher levels of perceived support. The MSPSS showed a good internal reliability with Cronbach's alpha of .88 when examining youth's perceived social support (Wilson et al., 2006). The results from Wilson et al. study yielded a global score of .86, a score of .80 for the family and a score of .88 for friends.

The MSPSS scale was selected to be administered to grandparents in the current study because of its good reputation of internal consistency for adults taking the assessment (Wilson et al., 2006). The current study will use the MSPSS scale to measure the perceived social support of the grandparents when they provide parenting care to their grandchildren. The MSPSS is a public domain and permission to use this instrument is in Appendix F.

Procedures for Recruitment, Participation, and Data Collection

Prior to any preliminary contact with potential participants, Walden University Institutional Review Board's (IRB) received my application ensuring ethical standards and adherence to U.S. federal regulations are maintained. The IRB approval and permission was obtained; approval number is 03-31-21-0248485. Approval from the IRB ensured that data collection conducted through this study follows and adheres to Walden University's IRB ethical standards. No data was collected or analyzed until Walden University's IRB gave the approval.

I distributed handouts and posted flyers at identified agencies, YMCA, local community centers, and Facebook for this study. By disseminating these handouts, and flyers, I formally invited grandparents interested in the study to use the link provided on the handout and flyers. Once the participants made the decision to participate in the survey, they accessed the link to participate to complete the informed consent and the survey.

The consent form included the purpose of the research, the procedures to be followed, any risk or discomforts, and any benefits associated with participation. The form also included possible therapy conditions because of participation and

confidentiality of information such as some risk of minor discomforts that can be encountered in daily life to include being tired, teased, stressed, or becoming upset. Last, the consent form advised participants that the collected data will be maintained for 7 years and provided my contact information. I ensured participants understood that they could opt to participate or not participate in the study at any time throughout the process. Participants who decided to participate in the study had access to the informed consent through the survey engine. Only participants who agreed to the information provided on the informed-consent form participated in the study.

Survey Method

To collect data, a popular survey method to sample large populations was using the probability sampling and using structured questions (Groves, 2011). Researchers can conduct surveys by mailing questionnaires and conducting personal interviews (Groves). Researcher accomplished this feat by using different methods such as mailing out questionnaires and conducting face-to-face interviews (Groves). Groves identified that mailed questionnaires are very impersonal but have low cost, lower biasing error, and good accessibility. Researchers conduct personal interviews face-to-face, giving the presenter flexibility, control of the session, and a high response rate (Frankfort-Nachmias & Nachmias, 2008). Although these methods would have been convenient for me, I chose to use an online survey engine for convenience and safety because of the coronavirus.

I posted handouts and flyers at identified agencies who had grandparent programs and these grandparents might be interested in taking the survey. The participant received the link which was found on the handouts and flyers to complete the questionnaire and survey assessments. Confidentiality and informed consent were reviewed and signed at

the beginning of the survey. The questionnaire and survey instruments did not have a time limit.

The data collected from the survey engine was put in SPSS program for analysis. Once data was collected and analyzed, instrument questions were explained through descriptive statistics to allow for a clearer understanding and interpretation of the data. The printed results from the survey engine were secured and placed in a locked file cabinet. On the informed consent form, the participants received the email address of the researcher and the telephone number of Walden University's Research Participant Advocate if they had any questions regarding rights as a participant.

Data Analysis

Behavioral and social scientists most frequently use linear models to describe data, based on a straight line (Field, 2013). Researchers use regression methods to examine if a relationship exists between sets of variables and to make predictions for the future or the past (Field, 2013). Regression is a statistical technique that finds the best straight line for the data and can predict the statistical relationship between the variables (Morrow, 2014). The statistical relationship can be positive as it moves in the same direction or negative when it moves in the opposite direction, if the variables have covariance (Morrow, 2014).

I used multiple regression analysis to statistically predict the likelihood of the dependent variables on two levels against the occurrence of the independent variables: age and perceived stress of the grandparents on seven different levels (low, medium, and high). In multiple regression analysis, the independent variables must be either

continuous or categorical while the dependent variables must be continuous. The dependent variable in this study was continuous.

The independent variable is the X and the predicted dependent variable is the Y, which forms a linear combination (Green & Salkind, 2014). Using linear regression will help relate the Y scores to the X scores (Green & Salkind, 2014). Using this model signifies that the independent variable, X, has more than one level. The independent variables (age and perceived stress) have the potential to have at least six levels. The model can also be used to analyze data from a nonexperimental design method, as in this study, which requires a survey and assessment method (Green & Salkind, 2014).

This linear regression can examine whether age and perceived stress of the grandparent are useful when predicting coping skills (active or avoidance) (Green & Salkind, 2014). In addition, linear regression can examine if age of the grandparent and perceived stress are useful when predicting social support (informal and formal). This analysis can be performed by evaluating the null hypothesis that is set up for the independent variables and dependent variable. The population of the slope weight or the correlation coefficient will be equal to zero. Because this study used a nonexperimental model, the random-effects model is appropriate and supports the statistical relationship between the independent and dependent variables.

To examine the assumption for the random-effects model of the linear regression, I paid close attention to how the variables were distributed; that is, were they normal at all levels of each variable. When the cases are moderate to large, the significance is valid when examining Type I errors (Green & Salkind, 2014). When both variables (X and Y) are normally distributed, the relationship will be linear. When scores for the variables are

independent of each other on the same variable, the *p* values will be inaccurate and no independence for the variables should be assumed.

SPSS reports were used to show the strength in the relationships of statistics from the regression analysis because more than one predictor was used. The correlations used to examine the statistical relationships between the independent and dependent variables are the Pearson product-moment correlation coefficient (*r*), the multiple correlation coefficients (*R*), the squared value (R^2), and the adjusted multiple correlation coefficient R^2 (Green & Salkind, 2014). Pearson product-moment correlation coefficient scores of -1 or +1 mean that the linear relationship is stronger and coefficients of .10, .30, and .50, regardless of the sign, are seen as small, medium, and large coefficients.

The G*power analysis promotes statistical power and can be used for different tests such as *t*-tests, *F* tests, and *z* tests, as well as computing effect sizes (Buchner et al. 2018). I used the G* Power to determine the sample size using a prior power-analysis test specifically with an alpha level of .05, a medium effect size of .15, and a power level of .95 (Faul et al., 2009). I used this G*power to compute an appropriate effect size for this research study. The recommendation I used for this study is 100 participants to increase statistical power in this research. Thus, I screened for at least 100 participants in this study. I gathered and reviewed data from 101 grandparents' questionnaires and survey instruments which ensured I had sufficient and effective information for my study. The questionnaire and instruments were completed on-line through Google Forms.

Issues of Trustworthiness

Credibility

The primary purpose of conducting this research study was to determine if a statistical relationship exists between the independent variables (age and perceived stress of the grandparents) and dependent variables (coping strategies and social support). To assure the authenticity of the relationship among variables and the study in general, it was vital to avoid factors that could pose a threat to the validity of the study results. The three types of validity discussed in this section are internal, external, and statistical-conclusion validity.

For internal validity, Creswell (2009) suggested threats are confounding factors that may affect the researcher's ability to establish a causal relationship and impede their ability to devise accurate inferences from data. In this study, facilitators trained and familiar with the questionnaire and survey instruments maintained internal validity. The goal was to ensure everyone received the appropriate information before completing the survey.

External validity refers to the ability to generalize the results of research to other settings and populations (Creswell, 2009; Frankfort-Nachmias & Nachmias, 2008). The sample size was powerful enough for this study, and the questionnaire and survey instruments were numbered, once turned in, to maintain privacy. Sample size is particularly important because if the sample is too small, it can diminish external validity (Norman, 2010). To be concerned with the robustness of the test and smaller samples requires more work in identifying significant data. Each participant had the opportunity

to complete the questionnaire and surveys separately through an online search engine, even if couples participated in the study.

Transferability

Men and women in the age range of 33 and above were screened to achieve the biggest sample size at each facility where participation in a research information was posted. The handouts and flyers were used to screened out all potential participants who did not adhere to the inclusion criteria. The sample group was grandparents taking on the role of providing parental care for their grandchildren at least once in their lifetime when an adult child was incarcerated because of alcohol abuse or use. I used the same type of scale for all variables to promoted reliability and validity (as suggested by Frankfort-Nachmias & Nachmias, 2008). I am interested in generalizing the findings from this study to people of both genders, so I sat up the scales and measures to apply to both genders.

Summary

The purpose of this chapter was to present the research design, rationale, role of the researcher, methodology, instruments used, recruitment, participation, data collection, analysis plan, issues of trustworthiness, ethical procedures, and a summary of the study. The chapter was divided into nine sections. The first section identified and discussed the study's independent and dependent variables, research design, and research questions. The second section explained the role of the researcher, whereas the third and fourth sections explained the methodology, followed by the instruments that were used. The fifth section explained the recruitment of participants, participation, and data collection. The sixth, seventh, and eighth sections explained how data was analyzed, issues of

trustworthiness, and ethical procedures of the study. The assessment of the relationship of the independent variable on the dependent variable and the statistical analysis are reported in Chapter 4.

Chapter 4: Results

Introduction

Having an adult child incarcerated for alcohol abuse or use and other alcohol-related incident at least once can lead to grandparents providing parental care to their grandchildren. The purpose of this quantitative study was to assess the independent variables, age and perceived stress (low, medium, and high), as viewed by grandparents when they assumed parental care of their grandchildren because their adult child was incarcerated for alcohol use or abuse. The study was designed to determine whether a significant statistical relationship existed between age and perceived stress (low, medium, high) and coping strategies (active and avoidance). When grandparents have effective coping strategies and social support, there is a lessening effect as it relates to stress and mental illness (Hweta et al., 2021).

This study also was designed to determine whether a significant relationship exists between age and perceived stress (low, medium, high) and social support (formal and informal). This chapter presents how the data were collected, the timeframe for data collection, the population, and a detailed analysis of the results. The chapter concludes with a brief summary of the chapter findings. All cases were discrete because of the nature of the surveying instruments about incarceration. Due to stigma, some participants did not want this information to be disclosed.

The following research questions and hypotheses guided this study:

RQ1—Quantitative: Is there a relationship between the independent variables (age and perceived stress) and the dependent variable coping strategies?

Ho1: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have no statistically significant relationship on coping strategy (e.g., active and avoidance).

Ha1: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have a statistically significant relationship on the coping strategy (e.g., active and avoidance).

RQ2—Quantitative: Is there a relationship between the independent variables (age and perceived stress) and the dependent variable social support?

Ho2: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have no statistically significant relationship on their social support (e.g., informal and formal).

Ha2: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have a statistically significant relationship on their social support (e.g., informal and formal).

Data Collection

The time frame for data collection was April through May 2021. Data collection consisted of using one demographic questionnaire and three surveys. The demographic questionnaire was developed to collect data that were characteristic to the study. The PSS, COPE, and MSPSS were used. The PSS was used to identify levels of perceived

stress of the grandparents, the COPE was used to identify levels of coping strategies of the grandparents, and the MSPSS was used to identify levels of social support of the grandparents. The PSS and COPE had Likert scales, which were used to develop the statistical variables in SPSS. For the MSPSS, I paired the questions and then used the Likert scale to develop statistical variables in SPSS.

I handed out flyers and handouts at agencies identified to have grandparents who participated in the agency's programs. I posted the handout and flyer to Facebook on a couple of grandparents' sites. Data was collected from participants through an online survey that I designed for grandparents to access if they met the requirements. I used the survey engine Google Forms and entered the data for the demographic questionnaire and three established surveys that were used to make the study reliable.

Demographic Characteristics

For this study, I collected data for over a 2-month period. I collected data from grandparents who provided parenting care for their grandchild when their adult child was incarcerated for alcohol use or abuse. The participants included grandparents aged 33 years and above who had provided parental care for at least one grandchild. The grandparents completed three surveys: the PSS, COPE, and MSSPS. The PSS was measured on three levels (low, medium, and high). COPE was used to identify coping strategies for grandparents. Finally, the MSSPS was used to identify whether the grandparents used informal or formal social support. Table 1 shows the demographic characteristics for the clients in this archival data set.

Of the 101 grandparents who volunteered to participate in the study, all 101 completed all three surveys over the course of 2 months. The following descriptive

statistics were obtained and include the number responding to the 10 particular demographic questions, as well as mean, standard deviation, and minimum and maximum. Of the 101 grandparents participating, 96 indicated their gender. The majority of grandparents participating were female (84.4% or 81 participants), with 15.6% or 15 participants being male. Of the 101 grandparents participating, 101 indicated their age. The data was divided into three age groups: 33-45 years old (20.8% or 24 participants), 46-66 years old (71.3% or 72 participants), and 67 and older (8% or five participants). Of the 101 grandparents, 43.6% indicated that they were married, 20.8% were living as married, 14.9% were divorced, 15.8% had never married, 2% were separated, and 1% were widowed. Thirty-three percent of the participants had three children living with them for at least 24 hours, while 24.8% had two children, 16% had four children, 13.9% had five or more children, and 10% had one child. Among the grandparents, 15% identified that their grandchildren had lived with them for less than 3 months, 21% indicated that their grandchildren had lived with them for less than 6 months, 22% indicated that their grandchildren had lived with them for less than 12 months, and 27% indicated that their grandchildren had lived with them for more than 12 months. Concerning their free time, grandparents reported that they spent 46.9% of it with family, 36.5% of it alone, and 16.7% of it with friends. Grandparents reported how many friends they had: two friends—29%, one friend—25.5%, four or more friends—24.5%, and three friends—15.3%. Grandparents reported their religious preferences as follows: Protestant—48%, none—29.7%, other—12.9%, Catholic—7.9%, and Jewish—5%. Grandparents identified their race as follows: 47.5% selected Black/African American,

38.6% selected White, 9.8% selected Hispanic, 5% selected Native American, 1% selected Asian, and 0% selected other.

Table 1

Demographic Characteristics of Study Sample

	Number	Percentage
Age		
38–45	24	20.8%
46–66	72	71.3%
67 and above	5	5.9%
Gender		
Male	15	15.6%
Female	81	84.4%
# adult children		
1 child		
2 children	11	10.9%
3 children	25	24.8%
4 children	34	33.7%
5 or more children	17	16.8%
# grandchildren in home	14	13.9%
1 child		
2 children	33	33.3%
3 children	36	36.4%
4 children	24	24.2%
5 or more children	5	5.0%
Length of time in home	1	2.1%
Less than 3 months		
3 months	15	15%
6 months	14	14%
12 months	21	21%
5 or more	22	22%
Marital status	27	27%
Married		
Living as married	44	43.6%
Never married	21	20.8%
Divorced	16	15.8%
Separated	15	14.9%
Widowed	3	5.8%
Race	2	2.1%
White		
Black/African American	39	38.6%
Hispanic	48	47.5%
Native American	8	9.8%
Asian	5	5%
Religious preference	1	1%
Protestant		
Catholic	49	48.5%
Jewish	8	7.9%
None	1	.09%

Other	30	29.7%
	13	12.9%

Table 2

Means and Standard Deviation of Dependent Variables

	Mean	Std. deviation	*N*
Age	2.45	.877	101
PSSM	2.49	.673	101
COPEActive	9.54	1.61	101
COPEAvoidance	8.93	1.79	101
MSPSSInformal	4.18	1.05	101
MSPSSFormal	3.95	.882	101

Note. PSSM = Perceived Stress Scale. COPEActive = Coping Orientation to Problem Experiences Active. COPEAvoidance = Cooping Orientation to Problem Experiences Avoidance. MSPSSInformal = Informal Multidimensional Scale of Perceived Social Support. MSPSSFormal = Formal Multidimensional Scale of Perceived Social Support. Means and standard deviations of dependent variables descriptive results for the dependent variables of coping strategies and social support for 101 participants with unadjusted means and standard deviations in each group are shown.

Results

In this section, I detail the primary analysis for each research question and its corresponding hypotheses. The data in this study were analyzed (see Table 2) through the use of the Statistical Package for the Social Sciences (SPSS) Version 24 software (Green & Salkind, 2014). The linear multiple regression for each research question and description of results are also presented in this section. Researchable hypotheses based on the research problem examined whether the independent variables, age and level of perceived stress (low, medium, and high) of the grandparent, have a statistically

significant impact on the dependent variables, coping strategies (active and avoidance) and social support (formal and informal). The research questions and hypotheses examined in this quantitative study were as follows:

Research Question 1

The null hypothesis in RQ1 was tested using multiple regression analysis to assess the range and variability of the independent variables (age and perceived stress [low, medium, and high] of grandparents) as they interact with the dependent variable (coping strategies: active and avoidant; aligned with Stowell et al., 2001).

RQ1—Quantitative: Is there a relationship between the independent variables (age and perceived stress) and the dependent variable coping strategies?

Ho1: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have no statistically significant relationship on coping strategy (e.g., active and avoidance).

Ha1: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have a statistically significant relationship on the coping strategy (e.g., active and avoidance).

Analysis for Research Question 1

To examine RQ1, I conducted a linear multiple regression to assess whether there was a significant relationship between the dependent variable (coping strategies: active and avoidance) and independent variables, age and perceived stress. In light of findings for the dependent variable, coping strategies avoidance (COPEAvoidance ($F = 2.014$; p

< .139), the null hypothesis failed to reject as indicated by no significant statistical relationship with the independent variable, perceived stress (PSSM). The findings for the dependent variable, coping strategies (COPEAvoidance), and the independent variable, age (ageave; $p < .081$), was not significant, so I failed to reject the null hypothesis for no statistical significance in the variables. Grandparents indicated that their age or perceived stress did not have an effect on avoidant coping strategies.

In examining if there is a relationship between the dependent variable, active coping strategies (COPEActive ($F = .581$; $p < .561$), and the independent variable, perceived stress (PSSM; $p < .297$), there was not a significant statistical relationship, so I failed to reject the null hypothesis. In examining if there is a relationship between the dependent variable, coping strategies, and the independent variable, age (ageave; $p < .781$) there was not a significant statistical relationship, so I failed to reject the null hypothesis. Grandparents indicated that their age and perceived stress did not impact their use of active coping strategies.

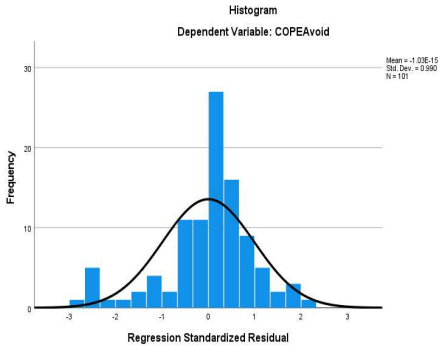
Table 3 shows the results of the linear multiple analysis for the dependent variables, coping strategies: active and avoidance (COPEActive and COPEAvoidance), and independent variables, age (Ageave) and perceived stress (PSSM) of the grandparents. I examined whether there was a statistical relationship between the dependent and independent variables by using subscales of the COPE survey: Active Coping, Acceptance, Denial, and Behavior Disengagement. In doing so, I was able to have a better understanding of the relation between the dependent variables, coping strategies (active and avoidance) and independent variables, perceived stress. I looked at the results of the analysis of variance (ANOVA) *F* test, *t* test, *p* value, and *R*-squared.

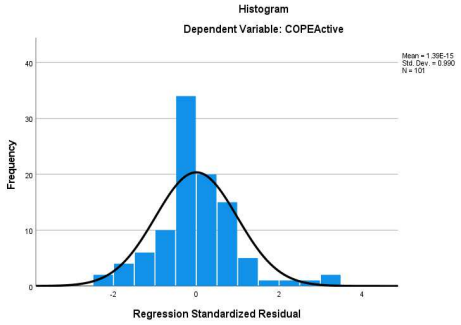
Table 3

Dependent Variable, COPE, as Related to the Independent Variables, Age and Perceived Stress

	Variables	*F*	*t*	*p*	R^2
COPEActive					
	Ageave	.581	.279	.781	.012
	PSSM		1.049	.297	
COPEAvoidance					
	Ageave	2.014	-1.764	.081	.039
	PSSM		.901	.370	

Note. PSSM = Perceived Stress Scale. COPEActive = Coping Orientation to Problems Experiences Active. COPEAvoidance = Coping Orientation to Problem Experiences Avoidance. PSSlow = Perceived Stress Scale low level. PSSmedium = Perceived Stress Scale medium level. PSShigh = Perceived Stress Scale high level. * = COPEActive and PSShigh cannot be computed because they are a perfect fit.





Research Question 2

To examine RQ2, I conducted a linear multiple regression to assess whether there was a significant relationship between the dependent variable, social support (informal and formal) and independent variables, age and perceived stress. The null hypothesis in RQ2 was tested to assess the range and variability of the dependent variable social

support; formal and informal as they interact with the independent variables (age and perceived stress: low, medium, and high; aligned with Stowell et al., 2001).

RQ2—Quantitative: Is there a relationship between the independent variables (age and perceived stress) and the dependent variable social support?

Ho2: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have no statistically significant relationship on their social support (e.g., informal and formal).

Ha2: The age and perceived stress at three different levels (low, medium, and high) of grandparents will have a statistically significant relationship on their social support (e.g., informal and formal).

Analysis for Research Question 2

For the dependent variable, social support; formal and informal, (MSPSSFormal; $F = 6.208$; $p < .003$), findings indicate I failed to reject the null hypothesis for the independent variable, perceived stress high, (PSSM; $p < .001$). For independent variable, age, (Ageave; $p < .618$) and perceived stress low and medium I rejected the null hypothesis. The grandparents indicated that having access to formal social support such as community resources was important to them regardless of their age. In addition, for the dependent variable, social support (MSPSSInformal; $F = 1.101$; $p < .336$) I failed to reject the null hypothesis as indicated by independent variables, age, ($p < .145$) and perceived stress (PSSM; $p < .800$). The grandparents indicated that having access to

informal social support such as helpful relationship with relatives was not necessary when stressed.

The independent variable, perceived stress (PSSM) was divided into three levels (low, medium, high) and a linear multiple regression was conducted to have a better understand of the stress levels the grandparents perceived as they reported access to social support. The variable was divided into levels so I could identify if there were any significant relationship between the variables. For the dependent variable, social support (MSPSSFormal), the null hypothesis was rejected for the independent variable, perceived stress for the low level (low; $F = 7.75$; $p < .458$) and medium levels (medium; $F = 4.11$; $p < .09$). For the high level (high; $F = .56$; $p < .01$) findings, I failed to rejected the null hypothesis. Grandparents reported that when they had access to formal social support, they may experience medium to high perceived stress and needed help from resources in their community.

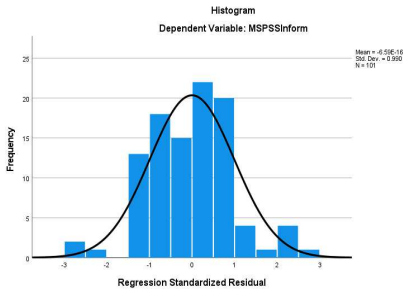
For the dependent variable, social support informal (MSPSSInformal) and independent variable, perceived stress (PSSM), on three different levels of perceived stress (low, medium, and high). The findings indicated I failed to reject the null hypothesis on all three levels: low ($F = .79$; $p < .38$), medium ($F = 4.21$; $p < .08$), and high ($F = 1.60$; $p < .21$) for the dependent and independent variables. Grandparents reported that when they had access to informal social support their age and perceived stress was not affected.

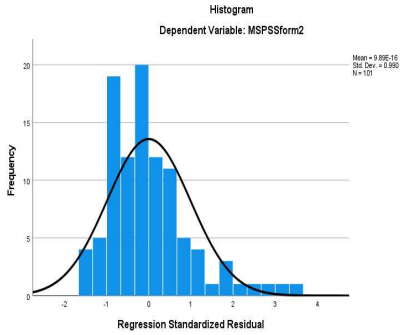
Table 4

Dependent Variable, MSPSS, as It Relates to the Independent Variables, Age and Perceived Stress

	Variables	*F*	*t*	*p*	R^2
MSPSSInformal					
	Age	1.101	-1.469	.145	.022
	PSSM		-.254	.800	
MSPSSFormal					
	Age	6.208	-.500	.618	.112
	PSSM		-3.502	.001	
MSPSSInformal					
	PSSM				
	PSSlow	.79	-.89	.38	.01
	PSSmedium	4.21	-2.05	.08	.04
	PSShigh	1.60	1.26	.21	.02
MSPSSFormal					
	PSSM				
	PSSlow	.56	-.75	.46	.01
	PSSmedium	4.11	-2.03	.05	.04
	PSShigh	7.75	2.78	.01	.07

Note. PSSM = Perceived Stress Scale. PSSlow = Perceived Stress Scale low level. PSSmedium = Perceived Stress Scale medium level. PSShigh = Perceived Stress Scale high level. MSPSSInformal = Multidimensional Scale of Perceived Social Support informal. MSPSSFormal = Multidimensional Scale of Perceived Social Support informal. *p* Value less than .05 means there is a significant relationship between the dependent variable and independent variables.





In Table 4, I present the dependent variables social support: formal and informal (MSPSSFormal and MSPSSInformal) and independent variables, age and perceived

stress (PSSM) of the grandparents. The perceived stress of grandparents was broken down into three levels, low, medium, and high (PSSlow, PSSmedium, and PSShigh). A linear multiple analysis was conducted on the dependent variable and independent variables to examine if there is a statistical relationship between the variables. I examined whether there was a statistical relationship between the dependent and independent variables by using subscales of the MSPSS survey: Family, Significant Other, and Friends. I looked at the results indicated by the ANOVA F test, t test, *p* value, and R-squared.

Summary

In this study, the use of active coping strategies such as meeting a problem head on and developing a plan for a solution did not have an effect on grandparent's age or perceived stress. When experiencing stress, the grandparents were able to use active strategies as they parent their grandchild regardless of their age based on the COPE Subscales, Active Coping and Acceptance. In addition, when grandparents did not used avoidance coping strategies such as running away from the problem. They indicated that these strategies had no effect on their age or perceived stress which indicate that grandparents providing parental care to the grandchildren did not avoid stressful situation. I used the COPE Subscales, Denial and Behavior Disengagement to examine if there was a statistical relationship between coping strategies (avoidance) and age and perceived stress. Findings from this study indicate that grandparents can be very resilient when providing parental care to their grandchildren. Previous findings have shown that when grandparents use active coping strategies rather than avoidant they report positive health outcomes (Park et al., 2021). Also, in this study, grandparents indicated that when

they had access to informal social support such as being able to share problems with family members and family members help them make decisions there was not an effect on their age and perceived stress using the MSPSS Subscales, Family, Significant Other, and Friends. Grandparents also indicated that when using formal social support such as sharing needs with a friend and going out to a social event their perceived stress was not affected but formal social support did affect their age. In addition, grandparents indicated that when they have access to informal social support such as getting help from their family members, they did not experience perceived stress and it did not affect their age.

Section 5: Discussion, Conclusions, and Recommendations

Introduction

The purpose of this quantitative study was to assess the independent variables: age and perceived stress (low, medium, and high) as viewed by grandparents when they assume parental care of their grandchildren. Having an adult child incarcerated for alcohol abuse or use and can lead to the grandchildren receiving parental care from their grandparent. Furthermore, the current research in the field was predominantly qualitative in nature; there was a number of quantitative research to support the current practice. Through this study, I attempted to address the gap in the literature.

The findings of this quantitative study are limited to 101 grandparents across the United States who provided parental care to at least one grandchild and who completed three surveys for an unlimited time frame over a 2-month period. In this study, I assessed that when grandparents experience stress from two sources simultaneously, their coping strategies and social support can be affected. The sampling included grandparents ages 38 and above, male and female, who provided parental care to at least one grandchild and had an adult child incarcerated for alcohol abuse or use. I chose to use three survey assessments because of a linear analysis to assess the range and variability of the independent variables (age of the grandparent and perceived stress: low, medium, and high) as they interact with the dependent variables (coping strategies: active and avoidant, and coping strategies: active and avoidant; aligned with Stowell et al., 2001). After analyzing the data in this study, I rejected the null hypothesis for the first research question, which confirmed that when stressed, grandparents use active and avoidance coping strategies. In addition, for the second research question, I failed to reject the null

hypothesis for informal and formal social support when stress was low and medium but I rejected the null hypothesis for the second research question, which confirmed that grandparents did not have formal social support when they experienced a high level of stress.

This chapter is divided into five sections. In the first section, I address my interpretation of the findings as they relate to the research discussed in Chapter 2 and the emerging themes that are growing in this field. In the following section, I discuss the theoretical framework and how it relates to my research findings. In the third section, I discuss the strengths and limitations of the study as well as my recommendations for further research. Included in my discussion on future research is the application of grandparent programs in the community. The impact on positive social change and my recommendations in light of the findings are presented next. In the final section, I summarize and highlight the key findings of study.

Interpretation of the Findings

Due to the lack of quantitative studies examining coping strategies and social support, my findings are important because of the change in societal norms and family structure whereby children are being raised in their grandparent's home when their parent is incarcerated for alcohol abuse or use (Arditti, 2016). My findings add new research in this field and suggest that grandparents have the coping strategies and social support that they need to take care of their grandchildren. The null hypothesis did not show a statistical significant difference for the first research question which means the alterative hypothesis was not supported because there was not a statistical relationship between grandparent's age and perceived stress and their coping strategies. For the second

research question, the null hypothesis did not show a statistical significant difference for grandparent's age and perceived stress and informal and formal social support except for high perceived stress. The alternate hypothesis for the second research question for high stress and social supported was found to be statistically significant which supported the alternative hypothesis that there is a statistical relationship between grandparent's age and perceived stress and social support (formal).

Coping Strategies

In RQ1, I examined whether grandparents' coping strategies were related to their age and perceived stress on two levels: active and avoidance. Grandparents' age was not statistically significant for active or avoidance coping strategies. Grandparents' perceived stress were not statistically significant for coping strategies active (COPE Subscales, Active Coping and Acceptance) and avoidance (COPE Subscales, Denial and Behavior Disengagement). Grandparents reported that they did use active coping strategies such as meeting a problem head on and developing a plan for a solution. Additionally, the findings were that for the age and perceived stress grandparents reported that they did use avoidance coping strategies such as running away from the problem. Grandparents indicated that they used the appropriate coping strategies when stressed. Ross et al. (2020) also reported findings in their study linking a significant correlation between coping strategies and less stress, which means that grandparents are able to accept responsibility, exhibit self-control, problem solve, and distancing.

Social Support

For RQ2, I examined whether the grandparents' social support was statistically significant with their age and perceived stress on two levels: informal or

formal. The findings indicated that the grandparents' age and perceived stress was not statistically significant for informal level of social support. Grandparents' age and perceived stress did not have an effect on their use of informal social support such as being able to share problems with family members and family members helping them make decisions, which did not lead to stress. Additionally, grandparents' age and perceived stress did have an effect on their formal social support, such as attending social activities, which did not lead to stress. Mendoza et al. (2020) discussed that their findings showed that half the grandparents enjoyed their new life style even though they were providing parental care their grandchild because they used social support that was available to them.

Further, I examined whether the grandparents' perceived stress was statistically significant for social support on three levels: low, medium or high. For further analysis for the grandparents' perceived stress, I divided it into three levels (low, medium, and high) to examine the interaction effect of each level of formal support (informal and formal). Findings for grandparents' perceived stress and social support were statistically significant when grandparents needed informal social support, with medium perceived stress and when grandparents needed formal social support with medium and high perceived stress. These findings indicate that grandparents did not know have informal supports such as a friend's support when medium stressed and did not have access to formal support when looking for community resources if they had stress at a medium and high level. The findings from the studies I have highlighted seem promising; however, further research is still needed.

Age

Age can be a factor when a grandparent becomes a parent a second time. Younger grandparents may also be stressed because they are coming to terms with their adult child being incarcerated and becoming a full-time parent a second time (Sands & Goldberg-Glen, 2000). Middle-aged grandparents had stress and higher psychological anxiety when they had the added responsibility of providing care for their grandchild (Sands and Goldberg-Glen, 2000). For this study, middle age was 45-65 years old, and the medium for age was 52 years old, which was used to identify whether there is a statistical relationship between active and avoidance coping strategies and between formal and informal social support. Findings indicated that for the dependent variable coping strategies (active and avoidance) and one level of social support (informal), age of the grandparent was not a factor when they provided parental care to their grandchild. For the dependent variable social support (formal and informal), age was not statistically significant when grandparents attempted to find resources in their community as they provided parental care to their grandchild when their adult child was incarcerated because of alcohol abuse or use.

Perceived Stress

Perceived stress referred to how an individual perceived the stress in their lives over the past couple of months (Soderstrom et al., 2000). When experiencing a stressful event, an individual usually determines if the event was stressful through their cognitive appraisal of the severity of their experiences of the stressful event. In this study, the event was becoming a parent for the second time, which might have affected participants' age and perceived stress (Cohen et al., 1983, as cited in J. M. Taylor, 2015). The perceived

stress for the grandparent was used as the stressor antecedent and was measured on three levels (low, medium, and high; Radel et al., 2011). The 10-item PSS has been widely used in past studies (Liset et al., 2021; Lundeen et al., 2021; Sorensen et al., 2021; Tan et al., 2021; Tekin et al., 2021) to predict, compare, and identify a relationship to measure stress levels when an individual is trying to cope with stress (Scott et al., 2013).

Another research study has shown that when grandparents are providing care to their grandchild, they feel isolated because they do not have access to community resources (Martin et al., 2020). Shovali et al. (2020) reported in their study that grandparents who provide parental care for their grandchild lack community resources. Grandparents might have negative outcomes when they provide parental care for their grandchild, but they can always gain access to social support for happier outcomes. Shovali et al.'s findings also showed a positive outcome; grandparents who provide parental care to their grandchild should have access to formal social support. They should have access to resources in their community to be successful as parents when their adult child has been incarcerated due to alcohol abuse or use.

Hayslip and Smith (2012) reported in their book that there is too much focus on the negative factors that grandparents might experience when they give parental care to their grandchild rather than their ability to bounce back and to find resources. Findings in a study conducted by Harasankar (2019) indicated that grandparents had positive outcomes when providing parental care to their grandchild because they had the opportunity to bond with them, which could mean less isolation and more companionship. The current study showed that grandparents reported that they did not have any stress with finding social support informal support (stressed to find formal

support in their community) and having coping strategies when they provided parental care for their grandchild when their adult child was incarcerated for alcohol abuse or use.

Theoretical Framework

The findings in this study focus on whether the age and perceived stress of grandparents have a significant statistical relationship with their coping strategies and social support when they provide parental care to their grandchild while their adult child is incarcerated. The theoretical framework that was used was the Theory of Cognitive Stress (Lazarus and Folkman, 1984). Lazarus and Folkman (1984) suggested that this theory showcases how individuals try to manage their environment based on their strategies and resources. However, trying to navigate through their environment does not always mean that people have the skills and resources to do so, which might make them view their situation as uncontrollable.

The findings from my study indicated that there was not a statistically significant difference in age, coping strategies (active and avoidance), and social support (informal), but there was a statistically significant difference for age and social support (formal). The findings further indicated that there was not a statistically significant difference in perceived stress (low, medium, and high) and social support (informal). Based on Lazarus and Folkman's framework, I assume that grandparent's age was significant when providing parental care for their grandchild and that their perceived stress (low) was significant when using active coping strategies and high when using avoidance coping strategies. This is consistent with the findings of Park et al. (2020), who stated that active coping strategies are associated with positive health results and mental illness. In this study, age and perceived stress were not statistically significant with coping strategies

based on the subscales I used in calculating the data. Other researchers, such as Hweta et al. (2021), found support through their findings that there is a relationship between coping strategies and social support at least being moderate when stress was less.

In examination of the literature in this field, findings suggest that there is a connection between coping strategies and stress. Ross et al. (2020) conducted a study that suggested that there is not a significant correlation between coping strategies and age and perceived stress when coping strategies are active or avoidance. This study's findings were not consistent with the current literature in the field and does not support the idea that active coping strategies have an effect on grandparents who are providing parental support to their grandchild while their adult child is incarcerated based on the subscales I used on the COPE survey. This study's findings also indicate that age of the grandparents was not statistically significant as well as having social support except for when grandparents needed formal support based on the subscales breakdown on the MSPSS survey. This study adds to the current body of research by providing quantitative support for the existence of a double stressor for the grandparent who has an adult child incarcerated and is tasked with providing parental support to their grandchild. When grandparents lose their adult child to being incarcerated for alcohol abuse or use and then must provide parental care for their grandchild, the situation can lead to stress because of their inability to have appropriate social support.

In this study, the use of active coping strategies such as meeting a problem head on or developing a plan for a solution did not have an effect on participants' perceived stress. In addition, when grandparents used avoidance coping strategies such as running away from the problem, they indicated that these strategies still did not have an effect on

their perceived stress. Additionally, in this study, grandparents indicated that when they had access to informal social support such as being able to share problems with family members and family members helping them make decisions, there was not an effect on their perceived stress. Grandparents indicated that when using formal social support such as sharing their needs with a friend and attending social events, their level of perceived stress was affected on low or medium, but when they experienced high stress, social resources were important.

Although my study is supported by the current literature in the field, it is also important to examine the limitations of the study.

Limitations

Limitations that might influence the outcomes were considered throughout the study because being aware of limitations throughout the research study led to a heartier outcome. A major limitation in this study was the change in the data collection procedure due to the COVID-19 pandemic. Initially, I was set to conduct in-person interviews to collect data from participants for this study. This method could have allowed me to observe nonverbal cues and answer questions regarding the assessments themselves during the process. In addition, when conducting an in-person interview, I could potentially build rapport with the participants. Technology such as Zoom or FaceTime was not used because it could potentially impose a technological barrier for the participants in the study.

Another limitation was imposed assumptions, which might have allowed my experience or personal point of view to influence the data collection process or the study results as reported by the participants (Patton, 2002). Patton suggested that working to

adopt a neutral, objective role can lead to a better understanding of how the variables can naturally emerge from the data. To address this issue, I used ethics and communication skills to show the same rigor and discipline during this research project. McCaslin and Scott (2003) suggested that maintaining the same rigor and discipline throughout the entire research process will promote a reliable study.

In addition, grandparents' age might have been a limitation on their ability to fully comprehend the nature of the study when completing self-report questionnaires that might have influenced the outcome of the data collected. Gathering participants through Facebook, text messages, and email was another limitation. Perrin and Anderson (2019) reported that although social media are used in the United States, there has not been an increase in use since 2018, which can affect the quality and quantity of participants. Additionally, some individuals identified in this population might not have had access to or might have been unfamiliar with this technology.

Another significant limitation in the field regarding coping strategies and social support is that grandparents might have reported that they had high levels of stress but were still satisfied with their lifestyle and ability to raise their grandchild. Mendoza et al. (2020) examined the effects of coping strategies and social support when grandparents reported high stress. They suggested that grandparents were satisfied with their life when they had effective coping strategies and social support despite their high level of stress (Mendoza et al., 2020).

A final limitation is that the definition of coping strategies and social support can be applied in many different areas by grandparents and are not always measured on active, avoidance, formal, and informal elements. I chose to use the PSS, COPE, and

MSPSS assessments because previous studies supported their reliability and validity (Taylor, 2015; Chou et al., 2015; Gouin et al., 2016). This is supported by the current literature I examined in Chapter 2 and adds to the body of research, while using operationally defined terms and providing quantitative support to the current body of literature.

Recommendations

I recommend that when grandparents take on the added responsibilities of raising their grandchildren continue to use coping strategies they reported based on the Subscales Active Coping and Acceptance on the COPE survey and social support they reported based on the Subscale Family and Significant Other on the MSPSS. Also, I recommend they seek additional treatment to help them learn different coping strategies which will help them hone their parenting skills for parenting their grandchild and be aware of the resources available in their community. In addition, grandparents should be made aware of the double stressor of having an adult child incarcerated while providing parental care to their grandchild so they can seek help if needed. I also recommend that additional studies be conducted to examine the lived experiences of grandparent providing parental care for their grandchild when their adult child is incarcerated from the grandchild's point of view. The grandchild has a double stress as well as their grandparent when their parent is incarcerated, and they must live with their grandparent. In my study, I was able to recruit participants in different parts of the United States for a quantitative study. Future research should include the view point of the grandchild and grandparents from a qualitative perspective in multiple states to increase the generalizability of the study and a better understanding of their needs.

References

American Counseling Association. (2005). *G.1. Research responsibilities G.1.a. Use of human research participants.* https://www.counseling.org/docs/default-source/library-archives/archived-code-of-ethics/codeethics05.pdf?sfvrsn=4

Arditti, J. (2016). A family stress-proximal process model for understanding the effects of parental incarceration on children and their families. *Couple and Family Psychology: Research & Practice, 5,* 65–88. https://doi.org/10.1037/cfp0000058

Bachay, J. B., & Buzzi, B. M. (2012). When Grandma and Grandpa become Mom and Dad: Engaging grandfamilies in clinical practice. *Kriminologija & Socijalna Integracija: Zagreb [Criminology and Social Integration], 20*(1), 63–70.

Baker, L. A., & Mutchler, J. E. (2010). Poverty and material hardship in grandparent-headed households. *Journal of Marriage and Family, 72,* 947–962. https://doi.org/10.1111/j.1741-3737.2010.00741.x

Bakker, C., de Vugt, M. E., van Vliet, D., & Frans, J. R. (2013). The use of formal and informal care in early onset dementia: Results from the need YD study. *American Journal of Geriatric Psychiatry, 21,* 37–45. https://doi.org/10.1016/j.jagp.2012.10.004

Bargiel-Matusiewicz, K., & Omar, H. (2015). Factors facilitating constructive coping with stress. *International Journal of Child and Adolescent Health, 8,* 41–47. https://uknowledge.uky.edu/cgi/viewcontent.cgi?article=117&context=pediatrics_facpub

Bhanji, J., Kim, E., & Delgado, M. (2016). Perceived control alters the effect of acute stress on persistence. *Journal of Experimental Psychology: General, 145,* 356–365. https://doi.org/10.1037/xge0000137

Boeker, M., Vach, W., & Motschall, E. (2013). Google Scholar as replacement for systematic literature searches: Good relative recall and precision are not enough. *BMC Medical Center Medical Research Methodology, 13,* Article 131. https://doi.org/10.1186/1471-2288-13-131

Booth, J. W., & Neill, J. T. (2017). Coping strategies and the development of psychological resilience. *Journal of Outdoor and Environmental Education, 20,* 47–54. https://doi.org/10.1007/BF034010

Bowers, B. F., & Myers, B. J. (1999). Grandmothers providing care for grandchildren: Consequences of various levels of caregiving. *Family Relations, 48,* 303–311. https://doi.org/10.2307/585641

Buchner, A., Faul, F., & Erdfelder, E. (2018). *G*Power: Statistical power analyses for windows and Mac*. http://www.gpower.hhu.de

Burkholder, G. (n.d.). *Sample size analysis for quantitative studies.* Walden University.

Burnette, D. (1999). Social relationships of Latino grandparents' caregivers: A role theory perspective. *Gerontologist, 39,* 49–58. https://doi.org/10.1093/geront/39.1.49

Carver, C. S., Scheier, M. F., & Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56,* 267–283. https://doi.org/10.1037//0022-3514.56.2.267

Centers for Disease Control and Prevention (2019a). *CDC in action*. https://www.cdc.gov/coronavirus/2019-ncov/communication/guidance-list.html

Centers for Disease Control and Prevention. (2019b, March). *Impaired driving: Get the facts*. https://www.cdc.gov/motorvehiclesafety/impaired_driving/impaired-drv_factsheet.html

Chen, M. (2015). Self-efficacy or collective efficacy within the cognitive theory of stress model: Which more effectively explains people's self-reported proenvironmental behavior. *Journal of Environmental Psychology, 42,* 66–75. https://doi.org/10.1016/j.jenvp.2015.02.002

Chou, W. P., Ko, C. H., Kaufman, E. A., Crowell, S. E., Hsiao, R. C., Wang, P. W., … Yen, C. F. (2015). Association of stress coping strategies with Internet addiction in college students: The moderating effect of depression. *Comprehensive Psychiatry, 62,* 27–33. https://doi.org/10.1016/j.comppsych.2015.06.004

Compas, B. E., Connor-Smith, J. K., Saltzman, H., Thomsen, A. H., & Wadsworth, M. E. (2001). Coping with stress during childhood and adolescence: Problems, progress, and potential in theory and research. *Psychological Bulletin, 127,* 87–127. https://doi.org/10.1037//0033-2909.127.1.87

Contrada, R. J., & Baum, A. (Eds.). (2011). *The handbook of stress science: Biology, psychology, and health*. Springer.

Conway, F., & Jones, S. C. (2012). Training Bachelor of Social Work students to meet the needs of grandparent caregivers. *Educational Gerontology, 38,* 127–137. https://doi.org/10.1080/03601277 .2010.515912

Cooper, C. (2012). Kinship families: Grandparents and other relatives as primary caregivers for children. *International Journal of Childbirth Education, 27*(4), 27–31.

Cox, C. B. (2002). Empowering African American custodial grandparents. *Social Work, 47,* 45–54. https://doi.org/10.1093/sw/47.1.45

Cox, C. (2008). Empowerment as an intervention with grandparent caregivers practice. *Journal of Intergenerational Relationships, 6,* 465–477. https://doi.org/10.1080/15350770802466161

Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage.

Cross, S. L., Day, A. G., & Byers, L. G. (2010). American Indian grand families: A qualitative study conducted with grandmothers and grandfathers who provide sole care for their grandchildren. *Journal of Cross Culture Gerontology, 25,* 371–383. https://doi.org/10.1007/s10823-010-9127-5

Emick, M. A., & Hayslip, B. (1999). Custodial grandparenting: Stresses, coping skills, and Relationships with grandchildren. *International Journal of Aging & Human Development, 48,* 35–61. https://doi.org/10.2190/1FH2-AHWT-1Q3J-PC1K

Fact Sheet: Women, Prison, and Drug War. Drug Policy Alliance (2016). https://www.drugpolicy.org/sites/default/files/DPA_Fact%20Sheet_Women%20Prison%20and%20Drug%20War%20%28Feb.%202016%29.pdf

Fadzil, T. P., & Fadzil, M. (n.d.). *Perceived social support among university students in Malaysia: A reliability study.* http://mjpsychiatry.org/index.php/mjp/article/viewFile/226/177

Faul, F., Erdfelder, E., Buchner, A., & Lang, A-G. (2009). Statistical power analyses using G*Power 3.1: Tests for correlation and regression analyses. *Behavior Research Methods, 41,* 1149–1160. https://doi.org/10.3758/brm..41.4.1149

Faizomomgtyas, R, Indarwati, R. Alfriani, D., Haryanto, J., Ulfiana, E., Efendi, F., Nursalam, N., & Abdullah, L. (2019). The experiences of grandparents raising grandchildren in Indonesia. *Working With Older People*; *Brighton*, *24(1)*, 16-26. https://doi.org/10.1108/WWOP-10-2018-0019

Federenko, I. S., Schlotz, W., Kirschbaum, C., Bartels, M., Hellhammer, D. H., & Wust, S. (2006). The heritability of perceived stress. *Psychological Medicine, 36,* 375–385. https://doi.org/10.1017/S0033291705006616

Field, A. (2013). *Discovering statistics using IBM SPSS statistics* (4th ed.). London, England: Sage.

Frankfort-Nachmias, C., & Nachmias, D. (2008). *Research methods in the social sciences* (7th ed.). New York, NY: Worth.

Fuller-Thomson, E., Minkler, M., & Driver, D. (1997). A profile of grandparents raising grandchildren in the United States. *Gerontologist, 37,* 406–411. https://doi.org/10.1093/geront/37.3.406

Gilmore D. L. (2011). Grandmother and grandfather perspectives: An insight into the lived experiences of being a grandparent caregiver. *Dissertation Abstracts International Section A: Humanities and Social Sciences,* 1–2.

Goode, K., Haley, W., Roth, D., & Ford, G. (1998). Predicting longitudinal changes in caregiver physical and mental health: A stress process model. *Health Psychology, 17,* 190–198. https://doi.org/10.1037/0278-6133.17.2.190

Goodman, C., & Silverstein, M. (2002). Grandmothers raising grandchildren: Family structure and well-being in culturally diverse families. *Gerontologist, 42,* 676–689. https://doi.org/10.1093/geront/42.5.676

Goshin, L. S. (2015). Ethnographic assessment of an alternative to incarceration for women with minor children. *American Journal of Orthopsychiatry, 85,* 469–482. https://doi.org/10.1037/ort0000097

Gouin, J., daEstrea, C., Desmarais, K., & Barker, E. T. (2016). The impact of formal and informal support on health in the context of caregiving stress. *Family Relations, 65,* 191–206. https://doi.org/10.1111/fare.12183

Grant, J., Leppink, E., & Chamberlain, S. (2015). Body focused repetitive behavior disorders and perceived stress: Clinical and cognitive associations. *Journal of Obsessive-Compulsive and Related Disorders, 5,* 82–86. https://doi.org/10.1016/j.jocrd.2015.01.008

Green, S. B., & Salkind, N. J. (2014). *Using SPSS for Windows and Macintosh analyzing and understanding data* (7th ed.). Upper Saddle River, NJ: Pearson Education.

Groves, R. M. (2011). Three eras of survey research. *Public Opinion Quarterly, 75,* 861–871. https://doi.org/10.1093/poq/nfr057

Hadfield, J. C. (2014). The health of grandparents raising grandchildren: A literature review. *Journal of Gerontological Nursing, 40*(4), 32–42. https://doi.org/10.3928/00989134-20140219-01

Haley, W. E., Levine, E., Brown, S. L., & Bartolucci, A. A. (1988). Stress, appraisal, coping, and social support as predictors of adaptational outcome among dementia caregivers. *Psychology and Aging, 2,* 323–330. https://doi.org/10.1037//0882-7974.2.4.323

Haley, W. E., Roth, D. L., Coleton, M. I., Ford, G. R., West, C. A., Collins, R. P., & Isobe, T. L. (1996). Appraisal, coping, and social support as mediators of well-being in Black and White family caregivers of patients with Alzheimer's disease. *Journal of Consulting and Clinical Psychology, 64,* 121–129. https://doi.org/10.1037/0022-006X.64.1.121

Harasankar, A. (2019). Role of grandparents as voluntary caregivers of their grandchildren: A comparative study. *Indian Journal of Gerontology*, 33(1), 74–90. https://eds-b-ebscohost-com.ezp.waldenulibrary.org/

Harper, W. J., & Hardesty, P. H. (2001). Differentiating characteristics and needs of minority grandparent caregivers. *Journal of Ethnic & Cultural Diversity in Social Work, 9,* 33–150. https://doi.org/10.1300/J051v09n03_07

Hayslip, B., Blumenthal, H., & Garner, A. (2014). Health and grandparent−grandchild well-being: One-year longitudinal findings for custodial grandfamilies. *Journal of Aging and Health, 26,* 559–582. https://doi.org/10.1177/0898264314525664

Hayslip, B., & Kaminski, P. L. (2005). Grandparents raising their grandchildren: A review of the literature and suggestions for practice. *Gerontologist, 45,* 262–269. https://doi.org/10.1093/geront/45.2.262

Henderson, J. (2005). Google scholar: A source of clinicians? *Canadian Medical Association Journal, 172,* 1549–1550. https://doi.org/10.1503/cmaj.050404

Holahan, C., & Moos, R. (1987). Personal and contextual determinants of coping strategies. *Journal of Personality and Social Psychology, 52,* 946–955. https://doi.org/10.1037/0022-3514.52.5.946

Hweta, S., Bandna, G., Mishra, P. C. (2021). Coping strategies and social support as moderators of occupational stress and mental health link among police. *Industrial Psychiatry Journal*, 30(1), 67-73. https://doi: 10.4103/ipj.ipj_207_20

Jackson, J. C., & Jutte, J. E. (2016). Rehabilitating a missed opportunity: Integration of rehabilitation psychology into the care of critically ill patients, survivors, and caregivers. *Rehabilitation Psychology, 61,* 115–119. https://doi.org/10.1037/rep0000091

Jr., Hayslip, B. & Smith G. C. (2012). Resilient grandparent caregivers: A strengths-based perspective. Hoboken: Routledge, eBook. d-scholarship.pitt.edu/38203/

Kanable, R. (2006). Protecting America's roadways: High-visibility DUI enforcement. *FBI Law Enforcement Bulletin.* https://www.thefreelibrary.com/Protecting+America%27s+roadways%3A+high-visibility+DUI+enforcement.-a0161271205

Koeske, G., & Koeske R. (1990). The buffering effect of social support on parental stress. *American Journal of Orthopsychiatrics, 60,* 440–452. https://doi.org/10.1037/h0079164

Koffer, R. E., Ram, N., Conroy, D. E., Pincus A. L., & Almeida, D. M. (2016). Stressor diversity: Introduction and empirical integration into the daily stress model. *Psychology and Aging, 31,* 301–320. https://doi.org/10.1037/pag0000095

Kondrat, D., Swanke, J. R., Littlewood, K., & Strozier, A. (2014). Measuring social support among kinship caregivers: Confirming the factor structure of the family support scale. *Child Welfare, 93,* 93–110.

Kresak, K. E., Gallagher, P. A., & Kelley, S. J. (2014). Grandmothers raising grandchildren with disabilities: Sources of support and family quality of life. *Journal of Early Intervention, 36,* 3–17. https://doi.org/10.1177/1053815114542506

Landry-Meyer, L., Gerard, J. M., & Guzell, J. R. (2008). Caregiver stress among grandparents raising grandchildren: The functional role of social support. *Marriage and Family Review, 9,* 171–190. https://doi.org/10.1300/J002v37n01_11

Lazarus, R. S. & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.

Leder, S., Grinstead, L. N., & Torres, E. (2007). Grandparents raising grandchildren: Stressors, social support, and health outcomes. *Journal of Family Nursing, 13,* 333–352. http://scholarworks.gvsu.edu/kcon_articles/9

Lee, E., Clarkson-Hendrix, M., & Lee, L. (2016). Parenting stress of grandparents and other kin as informal kinship caregivers: A mixed methods study. *Children and Youth Services Review*, 69, 29-38. https://doi.org/10.1016/j.childyouth.2016.07.013

Letiecq, B. L., Bailey, S. J., & Kurtz, M. A. (2008). Depression among rural Native American and European American grandparents rearing their grandchildren. *Journal of Family Issues, 29,* 334–356. https://doi.org/10.1177/0192513X07308393

Lilly, M. M., & Graham-Bermann, S. A. (2010). Intimate partner violence and PTSD: The moderating role of emotion-f focused coping. *Violence and Victims, 25,* 604–616. https://doi.org/10.1891/0886-6708.25.5.604

Liset, R., Grønli, J., Henriksen, R. E., Henriksen, T. E. G., Nilsen, R. M., & Pallesen, S. (2021). Sleep, evening light exposure and perceived stress in healthy nulliparous women in the third trimester of pregnancy. *PLoS ONE*, 16(6), 1-17. https://doi: 10.1371/journal.pone.0252285

Lo, M., & Liu, Y. (2009). Quality of life among older grandparent caregivers: A pilot study. *Journal of Advanced Nursing, 65,* 1475–1484. https://doi.org/10.1111/j.1365-2648.2009.05062.x

Lucasey, B. (2002). Quasi-experimental design. *Orthopedic Nursing, 21*(1), 56–57. https://www.nursingcenter.com/journalarticle?Article_ID=435147&Journal_ID=403341&Issue_ID=435120

Lundeen, C., Lim, J. R. Z., Scotland, K. B., Ardekani, R. S., Penniston, K. L., Streeper, N. M., Chi, T., Landman, J., Viprakasit, D. P., Chew, B. H. (2021). What is the relationship of stress to patients' kidney stone-related quality of life? *Canadian Urological Association Journal, 1*5(5), 1-11. https://doi: 10.5489/cuaj.6652

MacFarlane, L. & Montgomery, C. (2010). Influencing the mind through the body: A theoretical model for coping with student teacher stress through physical exercise. *Journal of Cognitive Education and Psychology, 9*(2), 183–197.

MacNair, R. R., & Elliott, T. R. (1992). Self-perceived problem-solving ability, stress appraisal, and coping over time. *Journal of Research in Personality, 26*, 150–164. https://doi.org/10.1016/0092-6566(92)90051-5

Manne, S., Mee, L., Bartell, A., Sands, S., & Kashy, D. A. (2016). A randomized clinical trial of a parent-focused social-cognitive processing intervention for caregivers of children undergoing hematopoietic stem cell transplantation. *Journal of Consulting and Clinical Psychology, 84,* 389–401. https://doi.org/10.1037/ccp0000087

Martin, A., Albrechtsons, D., MacDonald, N., Aumeerally, N., & Wong, T. (2020). Becoming parents again: Challenges affecting grandparent primary caregivers raising their grandchildren. *Paediatric Child Health*, 26(4), 166-171. https://doi: 10.1093/pch/pxaa052

Maroufizadeh, S., Foroudifard, F., Navid, B., Ezabadi, Z., Sobati, B., & Omani-Samani, R. (2018). The Perceived Stress Scale (PSS-10) in women experiencing infertility: A reliability and validity study. *Middle East Fertility Society Journal, 23,* 456–459. https://doi.org/10.1016/j.mefs.2018.02.003

McCallion, P., Janicki, M. P., Grant-Griffin, L., & Kolomer, S. (2000). Grandparent careers II: Service needs and service provision issues. *Journal of Gerontological Social Work, 33,* 57–84. https://doi.org/10.1300/J083v33n03_04

McCaslin, M. L., & Scott, K. W. (2003). The five-question method for framing a qualitative research study. *Qualitative Report, 8,* 447–461. https://nsuworks.nova.edu/cgi/viewcontent.cgi?article=1880&context=tqr

McGowen, M. R., Ladd, L., & Strom, R. D. (2006). On-line assessment of grandmother experience in raising grandchildren. *Educational Gerontology, 32,* 669–684. https://doi.org/10.1080/03601270500494048

Meara, K. (2014). What's in a name? Defining and granting a legal status to grandparents who are informal primary caregivers of their grandchildren. *Family Court Review, 52,* 128–141. https://doi.org/10.1111/fcre.12075

Mendoza, A. N., Fruhauf, C. A., & MacPhee D. (2020). *Grandparent Caregivers' Resilience: Stress, Support, and Coping Predict Life Satisfaction. International Journal of Aging & Human Development,* 91(1), 3-20. https://doi: 10.1177/0091415019843459

Miller, A. L., Perryman, J., Markovitz, L., Franzen, S., Cochran, S., & Brown S. (2013). Strengthening incarcerated families: Evaluating a pilot program for children of incarcerated parents and their caregivers. *Family Relations, 62,* 584–596. https://doi.org/10.1111/fare.12029

Miller, G. E., Cohen, S., & Ritchey, A. K. (2002). Chronic psychological stress and the regulation of pro-inflammatory cytokines: A glucocorticoid-resistant model. *Health Psychology, 21,* 531–541. https://doi.org/10.1037//0278-6133.21.6.531

Mohan, A. I. (2011). *What it means for grandparents to raise their grandchildren as primary caregivers* (Publication No. 3438586) [Doctoral dissertation, Walden University]. ProQuest Dissertations and Theses database.

Montoro-Rodriquez, J., Smith, G. C., & Palmieri, P. A. (2012). Use of community and school mental health services by custodial grandchildren. *Family Relations, 61,* 207–223. https://doi.org/10.1111/j.1741-3729.2011.00690.x

Morgan, E. S., Umberson, K., & Hertzog, C. (2014). Construct validation of self-reported stress scales. *Psychological Assessment, 26,* 90–99. https://doi.org/10.1037/a0034714

Morrow, J. (2014). *Analysis of variance (ANOVA).* Baltimore, MD: Laureate Education.

Moskowitz, D., Vittinghoff, E., & Schmidt, L. (2012). Reconsidering the effects of poverty and social support on health: A 5-year longitudinal test of the stress-buffering hypothesis. *Journal of Urban Health, 90,* 175–184. https://doi.org/10.1007/s11524-012-9757-8

Munoz, E., Sliwinski, M., & Scott, S. B., Hofer, S. (2015). Global perceived stress predicts cognitive change among older adults. *Psychology and Aging, 30,* 487–499. https://doi.org/10.1037/pag0000036

Musil, C. M. (1998). Health, stress, coping and social support in grandmother caregivers. *Health Care for Women International, 19,* 441–455. https://doi.org/10.1080/073993398246205

Musil, C., Warner, C., Zauszniewski, J., Wykle, M., & Standing, T. (Author Manuscript, 2010). Grandmother caregiving, family stress and strain, and depressive symptoms. *Western Journal of Nursing Research, 31(3)*, 389-408. https://doi.org/10.1177/0193945908328262

National Institute on Alcohol Abuse and Alcoholism. (2017). *Alcohol facts and statistics.* https://www.niaaa.nih.gov/alcohol-health/overview-alcohol-consumption/alcohol-facts-and-statistics

Neely-Barnes, S. L., Graff, J. C., & Washington, G. (2010). The health-related quality of life of custodial grandparents. *Health & Social Work, 35,* 87–97. https://doi.org/10.1093/hsw/35.2.87

Norman, G. (2010). Likert scales, levels of measurement and the ‘‘laws’’ of statistics. *Advance in Health Science Education: Theory and Practice, 15,* 625–632. https://doi.org/10.1007/s10459-010-9222-y

Patton, M. Q. (2002). *Qualitative Research & Evaluation: Evaluation methods* (3rd ed.). Thousand Oaks, CA: Sage.

Park, C. L., Finkelstein-Fox, L., Russell, B. S., Fendrich, M., Hutchison, M., & Becker, J. (2021). Americans' distress early in the COVID-19 pandemic: Protective resources and coping strategies. *Theory, Research, Practice, and Policy*, 13(4), 422-431. http://dx.doi.org.ezp.waldenulibrary.org/10.1037/tra0000931

Perrin, A., & Anderson, M. (2019). Share of U.S. Adults Using Social Media Including Facebook, is Mostly Unchanged Since 2018. FACTANC. https://www.pewresearch.org/fact-tank/2019/04/10/share-of-u-s-adults-using-social-media-including-facebook-is-mostly-unchanged-since-2018/

Radel, R., Pelletier, L., Sarrazin, P., & Milyavskaya, M. (2011). Restoration process of the need for autonomy: The early alarm stage. *Journal of Personality and Social Psychology, 101,* 919–934. https://doi.org/10.1037/a0025196

Rankin, S. G. (2002). Why they won't take the money: Black grandparents and the success of informal kinship care. *Elder Law Journal, 10*(1), 153. http://theelderlawjournal.com/wp-content/uploads/2015/02/GipsonRankin.pdf

Ross, M. E. T., Bryan, J. L., Thomas, K. L., Asghar-Ali, A. A., & Pickens, S. L. (2020). Stress and coping in African American grandparents who are raising their grandchildren. *Journal of Nursing Education*, 59(6), 331-335.

Roos, L. E., Afifi, T. O., Martin, C. G., Pietrzak, R. H., Tsai, J., & Sareen J. (2016). Linking typologies of childhood adversity to adult incarceration: Findings from a nationally representative sample. *American Journal of Orthopsychiatry, 86,* 584–593. https://doi.org/10.1037/ort0000144

Rueggeberg, R., Wrosch, C., & Miller, G. (2012). The different roles of perceived stress in the association between older adults' physical activity and physical health. *Health Psychology, 31,* 164–171. https://doi.org/10.1037/a0025242

Sampson & Hertlein (2015). The Experience of Grandparents Raising Grandchildren. Grandfamilies: *The Contemporary Journal of Research, Practice and Policy, 2(1)*. https://scholarworks.wmich.edu/grandfamilies/vol2/iss1/4

Sanders, M. R., & Kirby, J. N. (2014). A public□health approach to improving parenting and promoting children's well□being. *Child Development Perspectives, 8,* 250–257. https://doi.org/10.1111/cdep.12086

Sands, R. G., & Goldberg-Glen, R. S. (2000). Factors associated with stress among grandparents raising their grandchildren. *Family Relations, 49,* 97–105. https://doi.org/10.1111/j.1741-3729.2000.00097.x

Sands, R, G., Goldberg-Glen, R. S., & Shin, H. (2009). The voices of grandchildren of grandparent caregivers: A strengths-resilience perspective. *Child Welfare, 88,* 25–45. http://web.b.ebscohost.com/ehost/pdfviewer/pdfviewer?vid=0&sid=a598c4ab-9f55-4ed7-b58b-fb0ac8dbbea3%40sessionmgr101

Scott, L. W. (2015). *The lived experience of African American custodial grandparents who assume the role of parent* (Publication Number: 3715444) [Doctoral dissertation, Walden University]. ProQuest Dissertations and Theses database.

Scott, S., Sliwinski, M., & Blanchard-Fields, F. (2013). Age differences in emotional responses to daily stress: The role of timing, severity, and global perceived stress. *Psychology and Aging, 28,* 1076–1087. https://doi.org/10.1037/a0034000

Selye, H. (1946). The general adaptation syndrome and the diseases of adaptation. *Journal of Clinical Endocrinology, 6,* 117–230. https://doi.org/10.1210/jcem-6-2-117

Shields, G., Toussaint, L., & Slavich, G. (2016). Stress-related changes in personality: A longitudinal study of perceived stress and trait pessimism. *Journal of Research in Personality, 64,* 61–68. https://doi.org/10.1016/j.jrp.2016.07.008

Shovali, T. E., Emerson, K. G., & Augusta, G. M. (2020). School-aged children living in grandfamilies: Grandparent caregiver confidence in community resources matters. *Child Welfare*, 97, 2. https://doi.org/10.1016/j.childyouth.2020.105389

Skeem, J., Monahan, J., & Lowenkamp, C. (2016). Gender, risk assessment, and sanctioning: The cost of treating women like men. *Low and Human Behavior, 49,* 580–593. https://doi.org/10.1037/lhb0000206

Smith, G. C., Hayslip, B., Hancock, G. R., Strieder, F. H., & Montoro-Rodriguez, J. (2018). A randomized clinical trial of interventions for improving well-being in custodial grandfamilies. *Journal of Family Psychology*, *32(6)*, 816-827. https://web-a-ebscohost-com.ezp.waldenulibrary.org/ehost/pdfviewer/pdfviewer?vid=20&sid=40764e45-1c31-4f73-96d4-a76bb6a79d39%40sdc-v-sessmgr03

Soderstrom, M., Dolbier, C., Leiferman, J., & Steinhardt, M. (2000). The relationship of hardiness, coping strategies, and perceived stress to symptoms of illness. *Journal of Behavioral Medicine, 23,* 311–328. https://doi.org/10.1023/A:1005514310142

Sørensen, J. B., Lasgaard, M., Willert, M. V., Larsen, F. B. (2021). The relative importance of work-related and non-work-related stressors and perceived social support on global perceived stress in a cross-sectional population-based sample. *BMC Public Health,* 21(1), 1-14. https://doi: 10.1186/s12889-021-10594-2

Stowell, J. R., Kiecolt-Glaser, J. K., & Glaser, R. (2001). Perceived stress and cellular immunity: When coping counts. *Journal of Behavioral Medicine, 24,* 323–339. http://pni.osumc.edu/KG%20Publications%20(pdf)/143.pdf

Strom, R. D., & Strom S. K. (2000). Meeting the challenge of raising grandchildren. *International Journal of Aging & Human Development, 51,* 183–198. https://doi.org/10.1027//1015-5759.17.3.222

Tan, H. S., Agarthesh, T., Tan, C. W., Sultana, R., Chen, H. Y., Chua, T., & Sing, B. L (2021). Perceived stress during labor and its association with depressive symptomatology, anxiety, and pain catastrophizing. *Scientific Reports,* 11(1), 1-7. https://doi: 10.1038/s41598-021-96620-0

Taylor, J. M. (2015). Psychometric analysis of the ten-item perceived stress scale. *Psychological Assessment, 27,* 90–101. https://doi.org/10.1037/a0038100

Taylor, S., Klein, L., Lewis, B., Gruenewald, T., Gurung, R., & Updegraff, J. (2000). Biobehavioral responses to stress in females: Tend-and-befriend, not fight-or-flight. *Psychological Review, 107,* 411–429. https://doi:10.1037//0033-295X.107.3.411

Tekin, E., Bayraktar, M., Ozlu, I., Can, F. K. (2021). Perceived stress levels in patients in novel corona virus infection pandemic: Prospective single-center study. *Annals of Medical of Research*, 28(1), 67-72. https://doi: 10.5455/annalsmedres.2020.07.705

The Sentencing Project (2012). Parents in Prison. Washington DC. https://www.sentencingproject.org/wp-content/uploads/2016/01/Parents-in-Prison.pdf

Vitaliano, P. P., Young, H. M., Russo, J., & Maiuro, R. (1991). Predictors of burden in spouse caregivers. *Psychology and Aging, 6,* 392–402. https://doi.org/10.1037//0882-7974.6.3.39

Warfield, M. E., & Gulley, S. (2006). Unmet need and problems accessing specialty medical and related services among children with special health care needs. *Maternal and Child Health Journal, 10,* 201–216. https://doi.org/10.1007/s10995-005-0041-3

Whitley, D. M., Fuller-Thomson, E., & Brennenstuhl, S. (2015). Health characteristics of solo grandparent caregivers and single parents: A comparative profile using the behavior risk factor surveillance survey. *Current Gerontology and Geriatrics Research, 2015,* 1–10. https://doi.org/10.1155/2015/630717

Whitley, D. M., Kelley, S. J., & Sipe, T. A. (2001). Grandmothers raising grandchildren: Are they at increased risk of health problems? *Health & Social Work, 26,* 105. https://www.thefreelibrary.com/GRANDMOTHERS+RAISING+GRANDCHILDREN%3a+Are+They+at+Increased+Risk+of...-a075453649

Whitley, D. M., Lamis, D., & Kelley, S. J. (2016). Mental health stress, family resources and psychological distress: A longitudinal mediation analysis in African American grandmothers raising grandchildren. *Journal of Clinical Psychology, 72*, 563–579. https://doi.org/10.1002/jclp.22272

Wilson, S., Washington, L. A., Engel, J. M., Ciol, M. A., & Jensen, M. P. (2006). Perceived social support, psychological adjustment, and functional ability in youths with physical disabilities. *Rehabilitation Psychology, 51,* 322–330. https://doi.org/10.1037/0090-5550.51.4.322

Wu, M., & Chen, S. (2014). Graduate students appreciate Google Scholar, but still find use for libraries. *Electronic Library, 32(3)*, 375–389. https://doi.org/10.1108/EL-08-2012-0102

Ye, L., LaPierre, T. A., Hughes, M. E., & Waite, L. J. (2014). Grandparents Providing Care to Grandchildren: A Population-Based Study of Continuity and Change. *Journal of Family Issues, XX(X)*, 1-25. https://doi.org/10.1177/0192513X12438685

Yoon, S. M. (2005). The characteristics and needs of Asian-American grandparent caregivers: A study of Chinese-American and Korean-American grandparents in New York City. *Journal of Gerontological Social Work, 44,* 75–94. https://doi.org/10.1300/J083v44n03_06

Zhou, J., Mao, W., Lee, Y., & Chi, I. (2016). The impact of caring for grandchildren on grandparents' physical health outcomes: The role of intergenerational support. *Research on Aging, 39,* 612–634. https://doi.org/10.1177/0164027515623332

Zimet, G. D., Dahlem, N. W., Zimet, S. G., & Farley, G. K. (2010). The multidimensional scale of perceived social support. *Journal of Personality Assessment, 52,* 30–41. https://doi.org/10.1207/s15327752jpa5201_2

Appendix A: Perceived Stress Scale

COHEN PERCEIVED STRESS

The following questions ask about your feelings and thoughts during THE PAST MONTH. In each question, you will be asked HOW OFTEN you felt or thought a certain way. Although some of the questions are similar, there are small differences between them and you should treat each one as a separate question. The best approach is to answer fairly quickly. That is, don t try to count up the exact number of times you felt a particular way, but tell me the answer that in general seems the best.

For each statement, please tell me if you have had these thoughts or feelings: never, almost never, sometimes, fairly often, or very often. (Read all answer choices each time)

	Never	**Almost Never**	**Sometimes**	**Fairly Often**	**Very Often**
B.1. In the past month, how often have you been upset because of something that happened unexpectedly?	0	1	2	3	4
B.2. In the past month, how often have you felt unable to control the important things in your life?	0	1	2	3	4
B.3. In the past month, how often have you felt nervous or stressed?	0	1	2	3	4
B.4. In the past month, how often have you felt confident about your ability to handle personal problems?	0	1	2	3	4
B.5. In the past month, how often have you felt that things were going your way?	0	1	2	3	4
B.6. In the past month, how often have you found that you could not cope with all the things you had to do?	0	1	2	3	4
B.7. In the past month, how often have you been able to control irritations in your life?	0	1	2	3	4

B.8. In the past month, how often have you felt that you were on top of things?	0	1	2	3	4
B.9. In the past month, how often have you been angry because of things that happened that were outside of your control?	0	1	2	3	4
B.10. In the past month, how often have you felt that difficulties were piling up so high that you could not overcome them?	0	1	2	3	4

Perceived Stress Scale Scoring

Each item is rated on a 5-point scale ranging from never (0) to almost always (4). Positively worded items are reverse scored, and the ratings are summed, with higher scores indicating more perceived stress.

PSS-10 scores are obtained by reversing the scores on the four positive items: For example, 0=4, 1=3, 2=2, etc. and then summing across all 10 items. Items 4, 5, 7, and 8 are the positively stated items.

Your Perceived Stress Level was _____

Scores around 13 are considered average. In our own research, we have found that high stress groups usually have a stress score of around 20 points. Scores of 20 or higher are considered high stress, and if you are in this range, you might consider learning new stress reduction techniques as well as increasing your exercise to at least three times a week. High psychological stress is associated with high blood pressure, higher BMI, larger waist to hip ratio, shorter telomere length, higher cortisol levels, suppressed immune function, decreased sleep, and increased alcohol consumption. These are all important risk factors for cardiovascular disease.

Appendix B: Permission to Use Perceived Stress Scale

Dr. Cohen's Scales:

We welcome copies (e-mail is OK) of any in press or published papers using any of Dr. Cohen's scales that you are willing to share with us, and thank you in advance for your generosity. They will not be redistributed or linked without your permission.

Permissions: Permission for use of scales is not necessary when use is for nonprofit academic research or nonprofit educational purposes. For other uses, please contact Dr. Sheldon Cohen.

PERCEIVED STRESS SCALE (PSS)

PLEASE NOTE: The Perceived Stress Scale is not a diagnostic instrument; there are no score cut-offs. There are only comparisons within your own sample. For normative data from large US samples, see articles at right.

NOTE about extending the recall period: We have not collected psychometrics on other time periods. Our guess is that the longer the retrospective period becomes, the less accurate the measure will be. *Shorter* time periods (e.g., daily intervals) should not be a problem.

PSS (English; 10 Item; html version)
Word (.doc) version
Self-fillable, scorable online version of the PSS 10 (Used with permission by Dr. Fern Stockdale Winder) Please note: scoring is not updated with 2009 normative US data. Reliability and validity information for the PSS-10 can be found in papers (1) and (3), at right.

PSS (English; 4 Item; html version)
Word (.doc) version
The 4-item version was validated. See the JHSB article (at right)

PSS (English; 14 Item; html version)
Word (.doc) version

PSS Scoring

Additional scoring and other information

PSS on Wikipedia

PSS: FREQUENTLY- ASKED QUESTIONS (*.doc; updated Feb. 17, 2014*)
The FAQ includes a list of currently available **translations**

Brief Introduction to Measures of Psychological Stress

REFERENCES to studies that examine the relationship between the Perceived Stress Scale and Biological or Verified Disease Outcomes (source: MacArthur Research Network on SES & Health). **NOTE**: This is not a comprehensive list.

PSS TRANSLATIONS

How to Acquire Permissions for Translations: To acquire permission to use a translation in your project, please attempt to contact its translator directly: ***Non-English*** *translations are the sole intellectual property of the translator, and permissions requests should be sent to them, not Dr. Cohen*. If you are unsuccessful at contacting a translator, please cite their name and this website's URL in your publications. Thank you.

Spanish PSS (10 Item)
(European Spanish; Translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties.)

Spanish PSS (14 Item)
Updated version (2013)
Translation into European Spanish by Eduardo Remor, eduardo.remor@uam.es, and colleagues. Translation has not been pre-tested by our laboratory. For psychometrics, LINK to Drs. Remor's (2006) paper, "Psychometric Properties of a European Spanish Version of the Perceived Stress Scale (PSS)." (Thanks to Dr. Remor for granting us permission to post his work on our site.)
For more information about Dr. Remor's research:
www.uam.es/psico&salud
www.iberohemofilia.net

Portuguese PSS (Journal Article about the 10 Item scale)
Scale Only
We would like to thank Drs. Miguel Trigo, Noélia Canudo, Danilo Silva and Fernando Branco for this translation. This translation has not been pre-tested by our laboratory. Dr. Trigo may be emailed with questions at miguel.trigo70@gmail.com

Mexican Spanish PSS (10 Item)
Translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties.

Mex. Spanish PSS (10 Item)
(another version)
Translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties. Translation by (and thanks to) Ms. Carolina Oliva & Ms. Janet Nieves. Thanks also to Ms. Hilary Colbert (hilaryd@prodigy.net) for sending us the translation. All 3 women are with the Camden [NJ] Healthy

Start Project

Mex. Spanish PSS (10 Item)
(another version)
Translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties. Thanks to Céline Perriolat of the MAPI Research Institute (cperriolat@mapi.fr) for sending us the translation.

Mex. Spanish PSS (14 Item)
Translation by (and thanks to) Drs. Mónica Teresa González Ramírez and Rene Landero Hernandez. Their 2007 article contains psychometric information. Their 2008 article used the translation to study an explanatory model of stress and psychosomatic symptoms. Dra. González Ramírez may be contacted at: monygzz77@yahoo.com
Her website is http://www.monica-gonzalez.com/

South American (Chile) Spanish PSS (14 Item)
Translation by, and thanks to, Dr. Carlos Cruz Marin and colleagues. Their 2008 article (go to pages 116-117) provides validity and other data about the translation and its use with a sample of 117 adult students. Dr. Cruz Marin may be contacted at carloscruzmar@hotmail.com
This translation has not been pre-tested by our laboratory.
More information about Chilean Spanish translations:
Another version of the PSS-14 (South American [Chilean] Spanish)....SEE ALSO:
Article with validity and other data about Erik Marin's translation of the Chilean Spanish PSS-14;
Article with reliability data about Erik Marin's translation of the Chilean Spanish PSS-14;
Both articles collected data from 584 adults in the Santiago metropolitan area, and are courtesy of Dr. Erik Marin of the Universidad Santo Tomas. Reach him via email at erikmarincuevas@gmail.com

Spanish PSS (10 Item; translator from Puerto Rico)
Thanks to Dr. María del C. Fernández Rodríguez, who may be contacted at mfernandez@cayey.upr.edu
Translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties.

Spanish PSS (13 Item)
(Spanish; validated in sample of undergraduates in Peru; Translation has not been pre-tested by our laboratory)

Danish PSS (10 Item)
This is a consensus Danish translation, created by a collaboration of researchers: Drs. Anders Joergensen, Robert Zachariae, Lis Raabaek Olsen, Anita Eskildsen, Kent Nielsen, David Christiansen and Johan Hviid Andersen. We thank the collaborators for their efforts. Inquiries may be directed to Dr. Eskildsen at animorte@rm.dk
Translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties.

Norwegian PSS (10 Item)
Translation courtesy of (and thanks to) CheckWare AS, Norway. This translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties. Correspondence may be directed to: support@checkware.com

Norwegian PSS (14 Item)
Thank you to Hanne Alfheim, Oslo University Hospital – Ullevål, Norway, and colleagues for sharing this translation with us. Hanne may be emailed at halfheim@ous-hf.no
The translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties.

Swedish PSS (14 Item)

We thank Dr. Ingibjörg Jonsdottir and the translators for sharing this translation. The translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties. For more information contact Dr. Jonsdottir at ingibjorg.jonsdottir@vgregion.se or visit the Institutet för Stressmedicin website, http://www.vgregion.se/stressmedicin

To obtain another version of the Swedish PSS-14, see its source article: Eskin M, Parr D (1996). Introducing a Swedish version of an instrument measuring mental stress. Reports from the Department of Psychology, the University of Stockholm [Sweden], no. 813. Or you may request it from the translator by visiting Dr. Eskin's website.

Hebrew PSS (10 Item)

Translation by (and thanks to) Oren Lahak, Meir General Hospital, Kfar Saba, Israel (e-mail: Olahak@012.net.il). This translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties.

Greek PSS (14 item)

Translation courtesy of (and thanks to) Eleni Andreou, who may be contacted at eandeou@gmail.com
The scale was administered to 941 healthy Greek adults, and was culturally adapted during pre-testing. Cronbach alpha was estimated at 0.79, which was interpreted as good internal consistency. Based on Pearson correlation analysis, PSS strongly correlated with the subscales of DSS 21 for stress (0,644), depression (0,606), and anxiety (0,542), while the correlation was moderate with the scale of physical stress symptoms.

Greek PSS (14 item; another version)

Translation courtesy of (and thanks to) Drs. Alexia Katsarou and Demosthenes Panagiotakos, of (respectively) University of Thessaly and Harokopio University, Greece. Dr. Katsarou may be contacted at katsaroualexia@gmail.com
The scale was administered to 100 employed Greek adults. Very good internal consistency was confirmed for the overall sample (Cronbach alpha = 0.84).

Greek PSS (10 item)

Translation by (and thanks to) Dr. Marios Adonis, University of Nicosia, Cyprus. Dr. Adonis may be reached at adonis.m@unic.ac.cy
This translation has not been pre-tested by our laboratory.

Italian PSS (10 item)

Translation by (and thanks to) Andrea Fossati, Vita-Salute San Raffaele University of Milano, who may be contacted at fossati.andrea@hsr.it
This translation has not been pre-tested by our laboratory.

German PSS (10 item)

Translation courtesy of (and thanks to) Univ.-Prof. Dr. med. Arndt Büssing, Universität Witten/Herdecke, Germany, who may be contacted at Arndt.Buessing@uni-wh.de
Translation has not been pre-tested by our laboratory; nor are we aware of its psychometric properties.

German PSS (4 item)

Translation courtesy of (and thanks to) Jan Engling, GfK SE, Nuremberg, Germany, who may be contacted at jan.engling@gfk.com
This translation has not been pre-tested by our laboratory.

German PSS (4 item [Another version])

Translation courtesy of (and thanks to) Dr. Eva Schwarz, Marketing Heel Deutschland;
e-mail: eva.schwarz@heel.de, Germany
This translation has not been pre-tested by our laboratory.

Moroccan PSS (10 item)

Translation courtesy of (and thanks to) Dalal Ben Loubir, who may be contacted at dallouber@gmail.com.
This translation has not been pre-tested by our laboratory. Validation information can be obtained here (French).

Appendix C: Coping Orientation to Problem Experiences

Instrument Title:	COPE Inventory
Instrument Author:	Carver, C. S.
Cite instrument as:	Carver, C. S. . (2013) . COPE Inventory . Measurement Instrument Database for the Social Science. Retrieved from www.midss.ie

The items below are the "dispositional" version of the COPE Inventory, as we have administered it. The items are followed by instructions regarding which items are summed for each scale.

COPE

We are interested in how people respond when they confront difficult or stressful events in their lives. There are lots of ways to try to deal with stress. This questionnaire asks you to indicate what you generally do and feel, when you experience stressful events. Obviously, different events bring out somewhat different responses, but think about what you usually do when you are under a lot of stress.

Then respond to each of the following items by blackening one number on your answer sheet for each, using the response choices listed just below. Please try to respond to each item separately in your mind from each other item. Choose your answers thoughtfully, and make your answers as true FOR YOU as you can. Please answer every item. There are no "right" or "wrong" answers, so choose the most accurate answer for YOU--not what you think "most people" would say or do. Indicate what YOU usually do when YOU experience a stressful event.

1 = I usually don't do this at all
2 = I usually do this a little bit
3 = I usually do this a medium amount
4 = I usually do this a lot

1. I try to grow as a person as a result of the experience.
2. I turn to work or other substitute activities to take my mind off things.
3. I get upset and let my emotions out.
4. I try to get advice from someone about what to do.
5. I concentrate my efforts on doing something about it.
6. I say to myself "this isn't real."
7. I put my trust in God.
8. I laugh about the situation.
9. I admit to myself that I can't deal with it, and quit trying.
10. I restrain myself from doing anything too quickly.

11. I discuss my feelings with someone.
12. I use alcohol or drugs to make myself feel better.
13. I get used to the idea that it happened.
14. I talk to someone to find out more about the situation.
15. I keep myself from getting distracted by other thoughts or activities.
16. I daydream about things other than this.
17. I get upset, and am really aware of it.
18. I seek God's help.

19. I make a plan of action.
20. I make jokes about it.

21. I accept that this has happened and that it can't be changed.
22. I hold off doing anything about it until the situation permits.
23. I try to get emotional support from friends or relatives.
24. I just give up trying to reach my goal.
25. I take additional action to try to get rid of the problem.
26. I try to lose myself for a while by drinking alcohol or taking drugs.
27. I refuse to believe that it has happened.
28. I let my feelings out.
29. I try to see it in a different light, to make it seem more positive.
30. I talk to someone who could do something concrete about the problem.

31. I sleep more than usual.
32. I try to come up with a strategy about what to do.
33. I focus on dealing with this problem, and if necessary let other things slide a little.
34. I get sympathy and understanding from someone.
35. I drink alcohol or take drugs, in order to think about it less.
36. I kid around about it.
37. I give up the attempt to get what I want.
38. I look for something good in what is happening.
39. I think about how I might best handle the problem.
40. I pretend that it hasn't really happened.

41. I make sure not to make matters worse by acting too soon.
42. I try hard to prevent other things from interfering with my efforts at dealing with this.
43. I go to movies or watch TV, to think about it less.
44. I accept the reality of the fact that it happened.
45. I ask people who have had similar experiences what they did.
46. I feel a lot of emotional distress and I find myself expressing those feelings a lot.
47. I take direct action to get around the problem.
48. I try to find comfort in my religion.
49. I force myself to wait for the right time to do something.
50. I make fun of the situation.

51. I reduce the amount of effort I'm putting into solving the problem.
52. I talk to someone about how I feel.
53. I use alcohol or drugs to help me get through it.
54. I learn to live with it.
55. I put aside other activities in order to concentrate on this.
56. I think hard about what steps to take.

57. I act as though it hasn't even happened.
58. I do what has to be done, one step at a time.
59. I learn something from the experience.
60. I pray more than usual.

Scales (sum items listed, with no reversals of coding):

Positive reinterpretation and growth: 1, 29, 38, 59
Mental disengagement: 2, 16, 31, 43
Focus on and venting of emotions: 3, 17, 28, 46
Use of instrumental social support: 4, 14, 30, 45
Active coping: 5, 25, 47, 58
Denial: 6, 27, 40, 57
Religious coping: 7, 18, 48, 60
Humor: 8, 20, 36, 50
Behavioral disengagement: 9, 24, 37, 51
Restraint: 10, 22, 41, 49
Use of emotional social support: 11, 23, 34, 52
Substance use: 12, 26, 35, 53
Acceptance: 13, 21, 44, 54
Suppression of competing activities: 15, 33, 42, 55
Planning: 19, 32, 39, 56

I have had many questions about combining scales into "problem focused" and "emotion focused" aggregates, or into an "overall" coping index. I have never done that in my own use of the scales. There is no such thing as an "overall" score on this measure, and I recommend no particular way of generating a dominant coping style for a give person. Please do NOT write to me asking for instructions to for "adaptive" and "maladaptive" composites, because I do not have any such instructions. I generally look at each scale separately to see what its relation is to other variables. An alternative is to create second-order factors from among the scales (see the 1989 article) and using the factors as predictors. If you decide to do that, I recommend that you use your own data to determine the composition of the higher-order factors. Different samples exhibit different patterns of relations.

Appendix D: Permission to Use Coping Orientation to Problem Experiences

SEARCH

Self-Report Measures Available:

All of these scales are being made available here for use in research and teaching applications. All are available without charge and without any need for permission. Please do not write to me requesting a letter of permission, because this is all you will get. Download or print them from the linked pages.

Three Factor Impulsivity Index

LOT-R (a measure of optimism-pessimism)

COPE (the full version of our measure of coping)

Brief COPE (an abbreviated version of the COPE)

BIS/BAS scales (measures of the sensitivity of incentive and aversive motivational systems)

MAQ (a measure of adult attachment qualities)

MBA (a measure of investment in body image as a source of feelings of self-worth)

ATS (a measure of generalization, overly high standards, and self-criticism)

Benefit Finding (a measure of finding benefit in the experience of having breast cancer)

QLACS: Quality of Life in Adult Cancer Survivors (a new QOL measure for long-term survivors)

MOCS (a measure of targeted and nonspecific effects of an intervention)

SSSS (Sources of Social Support Scale)

WASSUP (Willingly Approach Set of Statistically Unlikely Pursuits)

POG (a measure of three aspects of positive generalization)

RITSS (measures of the sensitivity to incentives and threats in intimate relationships)

Charles S. Carver

Distinguished Professor

Appendix E: Multidimensional Scale of Perceived Social Support

Multidimensional Scale of Perceived Social Support

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the "1" if you **Very Strongly Disagree**
Circle the "2" if you **Strongly Disagree**
Circle the "3" if you **Mildly Disagree**
Circle the "4" if you are **Neutral**
Circle the "5" if you **Mildly Agree**
Circle the "6" if you **Strongly Agree**
Circle the "7" if you **Very Strongly Agree**

		Very Strongly Disagree	Strongly Disagree	Mildly Disagree	Neutral	Mildly Agree	Strongly Agree	Very Strongly Agree
1.	There is a special person who is around when I am in need.	1	2	3	4	5	6	7
2.	There is a special person with whom I can share joys and sorrows.	1	2	3	4	5	6	7
3.	My family really tries to help me.	1	2	3	4	5	6	7
4.	I get the emotional help & support I need from my family.	1	2	3	4	5	6	7
5.	I have a special person who is a real source of comfort to me.	1	2	3	4	5	6	7
6.	My friends really try to help me.	1	2	3	4	5	6	7
7.	I can count on my friends when things go wrong.	1	2	3	4	5	6	7
8.	I can talk about my problems with my family.	1	2	3	4	5	6	7
9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7

Scale Reference:

Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support. *Journal of Personality Assessment* 1988;52:30-41.

Scoring Information:

To calculate mean scores:

Significant Other Subscale: Sum across items 1, 2, 5, & 10, then divide by 4.

Family Subscale: Sum across items 3, 4, 8, & 11, then divide by 4.

Friends Subscale: Sum across items 6, 7, 9, & 12, then divide by 4.

Total Scale: Sum across all 12 items, then divide by 12.

More information at:

http://gzimet.wix.com/mspss

Other MSPSS Scoring Options:

There are no established population norms on the MSPSS. Also, norms would likely vary on the basis of culture and nationality, as well as age and gender. I have typically looked at how social support differs between groups (e.g., married compared to unmarried individuals) or is associated with other measures (e.g., depression or anxiety). With these approaches you can use the mean scale scores.

If you want to divide your respondents into groups on the basis of MSPSS scores there are at least two ways you can approach this process:

1. You can divide your respondents into 3 equal groups on the basis of their scores (trichotomize) and designate the lowest group as low perceived support, the middle group as medium support, and the high group as high support. This approach ensures that you have about the same number of respondents in each group. But, if the distribution of scores is skewed, your low support group, for example, may include respondents who report moderate or even relatively high levels of support.

2. Alternatively, you can use the scale response descriptors as a guide. In this approach any mean scale score ranging from 1 to 2.9 could be considered low support; a score of 3 to 5 could be considered moderate support; a score from 5.1 to 7 could be considered high support. This approach would seem to have more validity, but if you have very few respondents in any of the groups, it could be problematic.

Appendix F: Permission to Use Multidimensional Scale of Perceived Social Support

There are no established population norms on the MSPSS. Also, norms would likely vary on the basis of culture and nationality, as well as age and gender. I have typically looked at how social support differs between groups (e.g., married compared to unmarried individuals) or is associated with other measures (e.g., depression or anxiety). With these approaches you can use the mean scale scores.

If you want to divide your respondents into groups on the basis of MSPSS scores there are at least two ways you can approach this process:

1. You can divide your respondents into 3 equal groups on the basis of their scores (trichotomize) and designate the lowest group as low perceived support, the middle group as medium support, and the high group as high support. This approach ensures that you have about the same number of respondents in each group. But, if the distribution of scores is skewed, your low support group, for example, may include respondents who report moderate or even relatively high levels of support.

2. Alternatively, you can use the scale response descriptors as a guide. In this approach any mean scale score ranging from 1 to 2.9 could be considered low support; a score of 3 to 5 could be considered moderate support; a score from 5.1 to 7 could be considered high support. This approach would seem to have more validity, but if you have very few respondents in any of the groups, it could be problematic.

The Multidimensional Scale of Perceived Social Support (MSPSS) is a brief research tool designed to measure perceptions of support from 3 sources: Family, Friends, and a Significant Other. The scale is comprised of a total of 12 items, with 4 items for each subscale. My colleagues, Nancy Dahlem, Sara Zimet, Gordon Farley, and I (Gregory Zimet) first published on the MSPSS in the Journal of Personality Assessment in 1988.

Across many studies, the MSPSS has been shown to have good internal and test-retest reliability, good validity, and a fairly stable factorial structure. It has been translated into many languages, including (but not limited to) Urdu, Hebrew, Tamil, Danish, Farsi (Persian), French, Italian, Korean, Lithuanian, Hausa, Norwegian, Simplified Chinese, Traditional Chinese, Slovene, Malay, Slovak, Spanish, Swedish, Polish, Portuguese, Romanian, and Thai. For linguistically-validated translations, consider using TransPerfect.

The MSPSS is free to use. Please simply credit the following paper (and any others that are relevant), if you use the scale:

Zimet GD, Dahlem NW, Zimet SG, Farley GK. The Multidimensional Scale of Perceived Social Support. Journal of Personality Assessment 1988; 52:30-41.

Gregory D. Zimet, PhD

Indiana University School of Medicine

email: gzimet@iu.edu

Appendix G: Demographics

RESEARCH DEMOGRAPHICS

(Please Print)

Age group: ____ 33-49 ____ 50-66 ____ 67 and above

How many children do you have? _____ How many grandchildren lived with you while you provided parental responsibilities? ___ Length of time: __ 3 mos __ 6 mos __ 12 mos or more

With whom do you spend most of your free time? ___. (1-Family 2-Friends 3-Alone)

How many close friends do you have? _____.

Gender: ____ Male ____ Female ____ Other

Race: __White __ Black/African American
__ Hispanic __ Asian
__ Native American __ Other

Please check one:
Never married_____ Married_____ Living as Married_____ Divorced _____
Widowed _____ Separated _____

Religious Preference: ___ Protestant ___ Islamic
___ Catholic ___ Other
___ Jewish ___ None

Recreational/leisure History
_____

Education: Years completed _____ Attending School Now? Yes _____ No _____

Number living in household _____ Household annual income _____

Employment: Full time _____ Part time _____
Unemployed _____ Retired/Disabled _____
Present Employer _____

Your annual income: ____ $0 - $10,000
____ $10,001 - $20,000
____ $20,001 - $40,000
____ $40,001and above

Military Services: Never _____ Active _____ Reserves _____ Veteran _____
Retired_____
Dates of Service _____ to _____

Do you have a profession, trade or skill? ___YES ___NO, Specify _____

FOR OFFICIAL USE:

_____
_____
_____
_____