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Perceived Social Support and Anxiety Among Informal Caregivers of Individuals with Dementia

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This is to certify that the doctoral dissertation by

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has been found to be complete and satisfactory in all respects,
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Abstract

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MS, Walden University, 2017

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Dissertation Submitted in Partial Fulfillment

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Abstract

Many individuals who are diagnosed with some form of dementia are cared for by informal caregivers. Past research has indicated many of the caregivers have potential for encountering caregiver distress leading to physical and mental health deterioration. The purpose of this study was to examine the impact perceived social support may have on anxiety among the informal caregivers. Using the transactional model of stress and coping, this quantitative study examined the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. A correlational research design and the multiple linear regression analysis method was used in this study. Informal caregivers of individuals diagnosed with dementia were selected to participate in this study. Findings showed perceived emotional/informational social support [Beta=.026, t = .499, p = .619], and instrumental social support [Beta = .057, t = 1.224, p = .224], and gender [Beta = -.016, t = -.196, p = .845] were not significant predictors of anxiety. The Pearson correlation was assessed to examine the difference in anxiety between male and female informal caregivers. The gender of the informal caregiver was not found to be significantly related to anxiety, p = .515. The findings from this study can aid in the development of community-based resources and communication material that can beneficial for informal caregivers when they take on the role of providing full time care for someone diagnosed with dementia. This may help decrease the rise of caregiver burden and burnout from caregiving.

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Dedication

I dedicate this work to my husband, children, parents, brother, sister and friends who believed in me and supported me every step of this journey. I appreciate every encouraging word and every push that I received to complete this process. To my husband, Timothy Cofield, thank you for enduring every headache, stressful moment and the many tears and for always telling me "you got this." To my parents, Linda Coleman, Howard and Vivian McDonald, thank you for the "I am proud of you" moments. You do not know how that motivated me to continue on. To my children, Kianna, Amiah, Cameron, Keri, Imani and Timeka, this accomplishment has been about you all and the reason why I stayed focused and am able to cross this finish line. To my dear friends Tasha Vitales and Monique Gonzalez. The support and help that you both provided during this journey will always be cherished and remembered. I am appreciative for the many phone calls and texts guiding me to the end. And finally to be my big brother, Calvin McDonald, my favorite IT guy. You saved me when I was at my wits end and took care of your sister like always.

Acknowledgments

I would like to express a great appreciation and thank you to Dr. William Tetu, my committee chair who was very patient and supportive throughout this journey. Your feedback and guidance was greatly valued. I would also like to express a huge thank you to my committee methodologist, Dr. Olga Carranza. Your support and input was very insightful and helpful during this process.

Thank you to the participants who participated in this study and for being a strong voice for caring for someone diagnosed with dementia. Your strength throughout the caring process is admirable.

Table of Contents

List of Tables

Chapter 1: Introduction to the Study

Dementia has become a widespread problem across the United States (Matthews et al., 2019). According to the World Health Organization (2019), within the United States, approximately 5.7 million people are living with dementia. Dementia is the umbrella term for a variety of cognitive diseases that include Alzheimer's disease, Dementia with Lewy bodies, Vascular dementia, and Frontal temporal dementia. The individuals present with impairments to their cognitive functioning abilities making it difficult to think, remember, problem solve, or reason (Diagnostic and Statistical Manual of Mental Disorders [DSM5], 2013). It is estimated that the number of individuals diagnosed with dementia will reach 82 million by 2030 (World Health Organization, 2019). This estimation has caused for a high demand for caregivers to meet the needs of those diagnosed with some form of dementia. The impairments associated with dementia causes dependency among older people which commonly impacts the individual providing care (World Health Organization, 2019). Those providing care are typically informal caregivers or family caregivers.

Informal caregivers of individuals diagnosed with dementia have increased over the past few decades. According to Family Caregiver Alliance (2016), approximately 15.7 million informal caregivers provide immediate care to those diagnosed with some form of dementia. Informal caregivers are individuals who are not paid to meet the needs of the person they are caring for and typically provide care in their home or the individual's home. Many of the informal caregivers may experience psychological or physical impairments due to the demands of caregiving. Depending on the severity of the

disease, the informal caregiver's roles are subject to increase which can lead to the presentation of anxiety or depression. Additionally, informal caregivers are at risk for developing caregiver distress and poorer quality of life due to the demands of caregiving.

Effective coping skills and social support may decrease the negative impact of caregiving. Substantial research has been performed examining the relationship between social support and caregiver burden (Shiba et al., 2016). Informational, emotional, and instrumental are the different types of social support. Access to these social supports is essential with the reduction of caregiver burden, such as anxiety or depression (Shiba et al., 2016). Social support can be either received or perceived. Received social support is the actual support that is provided to the caregiver. Perceived social support is the caregivers' perception and personal appraisal of how effective the social support meets their needs (Roohafza et al., 2014). The present study sought to identify if perceived social support contributes to anxiety among informal caregivers of those diagnosed with dementia. In addition, information is necessary to understand if perceived information social support will minimize anxiety in those caring for individuals diagnosed with dementia.

In this chapter, the background of the study, and the problem and purpose of the study were identified. This chapter also introduced the research questions and hypotheses of the study. In addition, this chapter discussed the theoretical framework, nature of the study, important definitions, assumptions, limitations, and significance of the study.

Background

Approximately 15.7 million informal caregivers care for an individual diagnosed with Alzheimer's or another form of dementia (Family Caregiver Alliance, 2016). Consequently, the numbers will continue to rise as the aging population continues to rise. Because of this increase, the need for individuals caring for people diagnosed with dementia will also rise. Dementia is a cognitive impairment that causes changes in the individual's personality, memory, and impaired reasoning (Barca et al., 2011). Many individuals diagnosed with dementia are unable to meet their needs independently. A significant number of individuals diagnosed with dementia reside in the community and require a great deal of care (Farina et al., 2017). Informal caregivers often take on the role as the caregiver. Farina et al. (2017) mentioned approximately 76% of individuals diagnosed with dementia are cared for by informal caregivers. Informal caregivers spend a significant amount of time caring for an individual diagnosed with dementia. As the time increases for informal caregivers spend providing care, levels of anxiety may also increase. Sachs et al. (2004) mentioned many informal caregivers report a decline in their own physical and mental health which attributes to the quality of life of the elderly individual diagnosed with dementia. Shiba et al. (2016) indicated many informal caregivers are not clear of the effects of the mental and physical health symptoms of dementia, along with the process of dementia. In addition, the caregiver's gender may have an impact on their level of anxiety. Poysti et al. (2012) mentioned female caregivers often disclose an increase in anxiety when caring for an individual diagnosed with dementia than male caregivers.

The following articles relate to caregiver burden and the presentation of mental health issues associated with caregiving of an individual with dementia.

- Allen et al. (2012) conducted a study to examine the correlation between demographic information, social support, and remoteness of caregivers in urban and regional areas of Australia.
- American Psychological Association (n.d.) provided details of various measures used to measure social support.
- Brodaty and Donkin (2009) described the effects of caregiving to individuals with dementia and detailed intervention measures to decrease caregiver burden.
- Cherry et al. (2013) discussed the factors that affect the caregivers' resilience while impacting the quality of care of someone with dementia.
- Farina et al. (2017) conducted a systematic review of nine hundred and nine abstracts that examined factors that impact the quality of life of family caregivers.
- Gauler and Zarit (2003) utilized a 3-year longitudinal study design to provide data regarding the onset variables of the role of being a caregiver and how these onset variables impact the caregiving process.
- Shiba et al. (2016) conducted a mail-in survey to examine the connection of formal and informal social support to caregiver burden.
- Vasse et al. (2012) described how effective quality indicators of psychosocial interventions are in dementia care.

Problem Statement

Individuals diagnosed with dementia often require a great deal of support from others to assist with meeting their daily living needs. Those diagnosed with dementia may exhibit a decline in mental capacity and the ability to perform activities of daily living (Cherry et al., 2013). Because of the mental and physical health decline, the need for caregiver assistance may become warranted. The person who provides this support is known as the caregiver, which at times may be an informal caregiver. Informal caregivers are unpaid individuals, such as a family member, who provides care for an individual that is incapable of meeting their own needs (Shiba et al., 2016). In addition, informal caregivers may dedicate a significant amount of time providing care. This may lead to caregiver burnout, such as emotional and mental exhaustion. Lavarone et al. (2014) stated many informal caregivers experience some level of burden which may have an impact on their mental and physical health. For example, the informal caregiver may present with depression or anxiety as a result of the demands of caring for someone with dementia Findings from research conducted by Lavarone et al. (2014) indicated many challenges present with caring for a person diagnosed with dementia, which can result in increased risks of mental and physical health problems of the informal caregivers. Furthermore, this problem is justified because mental and physical health issues may impact the informal caregivers' ability to meet the needs of the individual diagnosed with dementia.

Research related to this topic has focused on the contributing factors between anxiety and informal caregiving. Liang et al. (2016) explored the relationship between the risk factors of anxiety and caregivers of individuals with cognitive impairment and

subjective cognitive decline. The authors detailed anxiety symptoms and how the symptoms increased the likelihood of more needed social support. Research by Kamiya et al., (2014) explored different factors linked to caregiver burden and identified characteristics, such as the caregiver's gender, as a need for continued research. In a mail-in survey study, Shiba et al. (2016) examined the association of informal or formal social support with caregiver burden, such as anxiety and depression. The results indicated informal social support is beneficial to reducing caregiver burden. Research findings indicated the effectiveness of social support; however, minimum research specified the type of social support caregivers perceived.

The problem this research addressed is the gap in literature concerning the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. What remains unknown is how perceived emotional/informational social support may contribute to anxiety and reduce risk factors, while improving quality of life of both the informal caregivers and the individual diagnosed with dementia.

Purpose of the Study

The purpose of this research was to address the gap in literature concerning the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. It was estimated approximately 5 million individuals are diagnosed with dementia in the United States (Alzheimer's Association, 2016).

Therefore, more informal caregivers are taking on the responsibilities of caring for said individuals. Many informal caregivers encounter anxiety as the needs of the individual increases (Verbakel et al., 2018). As the need for caregivers increases, the need for effective social support and intervention strategies are warranted. Social support such as emotional, informational, and instrumental social support, have been examined in several research studies. Krause (2001) explained emotional social support as concern and empathy provided to the caregiver, informational social support as specific information and suggestions that will be beneficial and useful to the caregiver, and instrumental social support as financial assistance and provided services to help meet the needs of the individual. Although research regarding the effectiveness of the different social support has been conducted, the relationship between perceived informational social support and anxiety have not been clear (Shiba et al., 2016). Informational social support is defined as information and guidance provided to caregivers that will assist with the care of the individual being cared for (Shiba et al., 2016). Social support plays a vital role for informal caregivers; therefore, identifying the difference in perceived informational social support may lead to a better understanding of the relationship between social support and anxiety among informal caregivers. Farina et al. (2017) examined how increased social support effected caregiver burden. The findings indicated informal caregivers' perception of social support may influence caregiver burden. Findings of this study may further contribute to results from previous research. Contributing to previous research may assist with reducing or eliminating anxiety among informal caregivers caring for individuals with dementia.

Research Questions and Hypotheses

This quantitative correlational research study addressed the following question:

Research Question 1 (RQ1): What is the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia?

Null Hypothesis ($H_0$1): There will be no significant correlation between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia.

Alternative Hypothesis (H_a1): There will be significant correlation between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia.

Research Question 2 (RQ2): Is there a significant difference in reported anxiety measured by the State-Trait Anxiety Inventory between male and female informal caregivers?

Null Hypothesis ($H_0$2): There will be no significant difference in reported anxiety among male and female informal caregivers.

Alternative Hypothesis (H_a2): There will be significant difference in reported anxiety among male and female informal caregivers.

Theoretical Framework

The theoretical framework utilized for this study was the transactional model of stress and coping theory developed by Richard Lazarus and Susan Folkman (1984). The approach was used as a framework for understanding the informal caregiver's coping and adjustments to caring for an individual diagnosed with dementia. The theory incorporates stress, appraisal, and coping strategies as it relates to how the individual responds to a stressful event or their environment. The transactional model of stress and coping theory indicated an individual reacts to stress when they encounter environmental situations that may exceed their coping resources (Lazarus & Folkman, 1984). If a threat is present, the individual will face primary and secondary appraisals of the proposed threat. Lazarus and Folkman indicated that individuals first perform a primary appraisal to determine if the stressor is threating or non-threatening and if the stressor warrants a response. During this step, the individual analyzes their stressful situation to make a decision regarding if the event will personally impact them. During the secondary appraisal, the individual decides on possible outcomes while evaluating if their coping resources will be sufficient enough to obtain their desired result and to manage the stressor. The individual evaluates their event to decide if they can handle perceived stressors while engaging in efforts to cope with the emotional or physical needs that supersede their coping resources abilities (Lazarus & Folkman, 1984).

Lazarus and Folkman (1984) stated that everyone encounters stress, which may impact his or her daily functioning abilities due to their lack of knowledge regarding the impact of stress. The process of coping may change over time and is the responses of

individuals when they are faced with stressors. Stress occurs differently among people and can have a significant impact on the individual's well-being. How individuals view and assess stress may regulate how they respond to the stressor. Coping occurs in the conscious state of mind and allows for measures to be established to problem solve using specific skills and techniques to handle the stressful event (Lazarus & Folkman, 1984). Appropriate problem solving defines the individual's ability to cope with stressors. Carver and Connor-Smith (2010) stated coping can be described as adaptive or maladaptive behaviors utilized to deal with stressors, which can either be reactive or proactive measures. Reactive coping abilities occur when individuals cope by using specific actions to respond to the stressor, as proactive coping are coping skills utilized to tolerate or minimize the encounter with a future stressor (Carver & Connor-Smith, 2010). The way individuals cope can either be emotion-focused or problem-focused. Lazarus and Folkman (1984) stated emotion-focused coping is when the individual attempts to lessen adverse emotional reactions that may occur from the stressful event; whereas problem-focused coping aims to pinpoint the actual causes of stress where the actual problem is targeted to reduce or alleviate stressors. The ability to cope differs; therefore, many individuals do not respond to stressful situations the same causing different reactions to stressors. A person engages in problem-focused coping when he/she can remove the stressor and apply useful problem-solving abilities to prevent the stressor from reoccurring. An individual utilizes emotion-focused coping when they are incapable of controlling the stressor

The application of the transactional model of stress and coping theory provided a framework for analyzing stress and burden among informal caregivers in past research. Research has linked informal caregiving with numerous stressful encounters (Cherry et al., 2013). This suggests the importance of the use of an intervention measure that incorporates an approach, such as the transactional model of stress and coping theory, which allows for the integration of stress and coping. This theory has been used as the framework by which anxiety among informal caregivers has been examined across diverse chronic conditions, such as dementia, cancer, and Parkinson's disease. Lévesque et al. (2002) conducted a study where the transactional model of stress and coping theory was used as the basis to evaluate caregivers of individuals with dementia and their ability to deal with stressors linked with the aspects of caring. A training program was implemented surrounding the basis of the transactional model of stress and coping theory to improve stress management abilities among the caregivers (Lévesque et al., 2002). The transactional model of stress and coping approach was utilized to examine the relationship between cognitive appraisals, coping strategies, and symptoms of depression among women diagnosed with advanced-stage breast cancer (Bigatti et al., 2012). Based on the transactional model of stress and coping theory, the results from this study indicated the participant's challenge appraisals were higher than the other appraisals examined. The results showed a relationship between the caregiver's coping abilities and decreased depression associated with individual's diagnosed with cancer (Bigatti et al., 2012).

Significant to my study, the transactional model of stress and coping theory provided a framework for understanding the informal caregiver's coping and adjustments to caring for an individual diagnosed with dementia. The method was a basis for the research and the development of the research questions as they relate to informal caregiving, perceived social support, and anxiety among informal caregivers of individuals with dementia. The theory has been utilized as a basis for determining and examining caregiver stress and burden and the process of coping. Thus, the approach highlights the relationship between the appraisals and the ability to deal with the stressful event. In the present study, the response to a stressor may impact the informal caregiver's quality of life and ability to meet the needs of the individual diagnosed with dementia.

Nature of the Study

The nature of this study was a quantitative correlational survey design. Informal caregivers completed self-reported surveys via Survey Monkey. I used a non-experimental survey design to research if a relationship exists between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. I also examined if there is a significant difference in reported anxiety between male and female informal caregivers.

Definitions

The following terms are defined for clarity, as they are common terms used throughout this study.

Perceived social support: An individual's self-appraisal of how supportive and adequate the social support is to meeting their needs (Roohafza et al., 2014).

Informational social support: Information that is provided, such as handouts, resources, and brochures, feedback, and suggestions, that details pertinent information to help meet the needs of the person (Krause, 2011).

Emotional social support: Physical comfort, love, active listening, and empathy shown towards the individual to make the person feel wanted, loved, and understood (Krause, 2001).

Instrumental social support: Financial assistance and provided services to help meet the needs of the individual (Krause, 2001).

Informal caregivers: Unpaid individuals, such as a family member, who provides care for an individual that is incapable of meeting their own needs (Shiba et al., 2016).

Gender: The reported sex of the survey respondent, male or female (Akpinar et al., 2011).

Dementia: A major neurocognitive disorder that impairs an individual's mental ability to think, remember, or reason (Diagnostic and Statistical Manual of Mental Disorders [DSM5]. Dementia is caused by disruption of brain nerve cells that impact a person's ability to function appropriately (Alzheimer's Association, 2014).

Anxiety: Intense, excessive, and persistent worry and fear about everyday situations (Diagnostic and Statistical Manual of Mental Disorders [DSM5].

Risk factors: Any attribute, characteristic or issues that can increases the likelihood of developing a disease or mental health disorder (Blanco et al., 2014).

Quality of life: The overall health and well-being of an individual (Shankar, 2014). The factors impacting quality of life include patient comfort, independence, overall health, ability to understand the diagnosis, and support from family (Bern-Klug, 2014).

Assumptions

I assumed all participants were able to understand the questions from the surveys and were honest with their responses on the State-Trait Anxiety Inventory, the Multidimensional Scale of Perceived Social Support, and the Medical Outcomes Study Social Support Survey during participation in the study. Another assumption was that the questions outlined in each survey and instrument were easy to understand. It was also assumed that there were no language barriers and that the primary language utilized for the questionnaire was the spoken language of each participant.

Scope and Delimitation

The study was for female and male informal caregivers caring for individuals diagnosed with some form of dementia. Only informal caregivers who provide full time care for the person diagnosed with dementia were asked to participate in this study. Individuals who are paid caregivers was not allowed to participate. The delimitation of the study was that the sample was only a small representation of the informal caregiving population. Participants were recruited via social media platforms.

Limitations of the Study

There were several limitations on the study. A limitation of this study was the sample size. Only a small portion of informal caregivers was utilized and does not

represent the general population as a whole. Another limitation was the use of a correlational research design. A correlational research design did allow for the examination of the relationship between perceived emotional/informational social support, instrumental social support and anxiety; however, it was not be able to prove if one variable causes a change in another variable (Warner, 2013). A longitudinal study may provide a stronger conclusion between the variables used in this study.

Significance of the Study

Findings from this research may contribute to the field of clinical health and psychology by supporting developed interventions and programs that assist with reducing anxiety in informal caregivers. The results of this research may provide information and statistical data to previous research that did not define the type of social support perceived by the informal caregiver. Verbakel et al. (2018) mentioned the association between anxiety and perceived informational social support has received less attention than depression in past literature. Contributing to this limitation may add to the body of knowledge on the influence of perceived social support to anxiety on informal caregivers. The results from this study may extend the literature about perceived social support, its affects upon psychological wellbeing of informal caregivers, and anxiety levels.

Summary

Although dementia and caregiver burden is a highly-researched topic, many opportunities exist for further research to be conducted and contributed to the many gaps in literature that exist. The purpose of this research was to address the gap in literature concerning the relationship perceived emotional/informational social support,

instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. The study used a quantitative correlational research design. Participants were recruited through social media avenues, such as Facebook and Instagram and consisted of 90 participants. Surveys were combined into a questionnaire that measured perceived social support and anxiety. This study contributes to positive social change by providing statistical data and information that may aid in the development of beneficial programs and support for informal caregivers. Additionally, results may aid in learning ways to reduce caregiver burden and the development of psychological problems, such as anxiety.

Chapter 2 includes a review of the search process for relevant literature; further discussed the theoretical framework and its application to the study, along with a thorough evaluation of literature related to the variables and focus of this study.

Chapter 2: Literature Review

The purpose of this research study was to explore the relationship perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. Lavarone et al. (2014) stated this is an essential topic as the numbers of individuals diagnosed with dementia continue to rise. With the increasing numbers of individuals diagnosed with dementia, the impact of informal caregiving continues to grow. Results from previous research about caring for individuals diagnosed with dementia has increased over the last decade due to the acceleration of the numbers of the aging population in the United States (Verbakel et al., 2018). The effects of being an informal caregiver vary. Caring for an individual with dementia may impact the psychological and physical health of the caregiver. Findings from research have indicated a possible relationship of informal caregiving to caregiver burden and anxiety (Huang et al., 2015). The availability of research on the relationship of perceived social support and anxiety among informal caregivers of individuals with dementia is limited, which warrants a need for further exploration of this relationship. One of the factors found in previous literature relevant to the mental health and well-being of caregivers was perceived social support. Roohafza et al. (2014) conducted research that identified the importance of coping strategies and social support to aid in the reduction of the excessive and pathologic effects of depression and anxiety. However, limited studies have focused on the impact of perceived social support on the anxiety of informal caregivers of individuals with dementia.

A targeted literature search was conducted to identify and support the significance of the study. Background information related to informal caregiving, anxiety, and effects of caring for an individual diagnosed with dementia is provided. A review of dementia, the effects of dementia, and a review of perceived social support is also included. Studies related to caregiver burden and the transactional model of stress and coping theory is also presented in the literature review section. An understanding of the relationship between perceived social support and anxiety will aid in gaining insight into informal caregiving of individuals diagnosed with dementia.

Research Strategy

Research literature on dementia, informal caregivers, anxiety, and perceived social support was obtained through the Walden University online library, Google Scholar, and the internet. Several electronic databases in the psychology, nursing, and aging subjects were utilized: PsycARTICLES, Academic Search Premier, PsycINFO, ProQuest, ESCOHOST, and academic journals *The Gerontologist, Aging & Mental Health, Psychology & Aging,* and *Alzheimer's & Dementia*. Peer-reviewed journal articles published between 2002 and 2018 were utilized, with a more specific focus on articles published from 2012 through 2018 and literature written by Richard Lazarus and Susan Folkman relating to the transactional model of stress and coping theory. Key search words used for the online research included *informal caregivers, dementia, perceived social support, anxiety, caregiver burden, social support, social support and anxiety, family caregivers, anxiety and informal caregiving, transactional model of stress, Lazarus and Folkman, caregiver stress*, and *dementia caregivers.* Studies and

articles research related to dementia, informal caregiver burden, anxiety, and the transactional model of stress and coping theory were relevant to this study's method and content. The purpose of the literature review was to summarize past and current information and research pertinent to perceived social support among informal caregivers who care for individuals diagnosed with dementia.

Theoretical Framework

The theoretical framework utilized for this study was the transactional model of stress and coping theory developed by Richard Lazarus and Susan Folkman (1984). The approach was used as a framework for understanding the informal caregiver's coping and adjustments to caring for an individual diagnosed with dementia. The theory incorporates stress, appraisal, and coping strategies as it relates to how the individual responds to a stressful event or their environment. The transactional model of stress and coping theory indicated an individual reacts to stress when they encounter environmental situations that may exceed their coping resources (Lazarus & Folkman, 1984). If a threat is present, the individual will face primary and secondary appraisals of the proposed threat. Lazarus and Folkman indicated that individuals first perform a primary assessment to determine if the stressor is threating or non-threatening and if the stressor warrants a response. During this step, the individual analyzes their stressful situation to decide if the event will personally impact them. During the secondary appraisal, the individual decides on possible outcomes while evaluating if their coping resources will be sufficient enough to obtain their desired result and to manage the stressor. The individual evaluates their event to decide if they can handle perceived stressors while engaging in efforts to cope with the

emotional or physical needs that supersede their coping resources abilities (Lazarus & Folkman, 1984).

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different reactions to stressors. A person engages in problem-focused coping when he/she can remove the stressor and apply useful problem-solving abilities to prevent the stressor from reoccurring. An individual utilizes emotion-focused coping when they are incapable of controlling the stressor

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Significant to my study, the transactional model of stress and coping theory provided a framework for understanding the informal caregiver's coping and adjustments to caring for an individual diagnosed with dementia. The method was a basis for the research and the development of the research questions as they relate to informal caregiving, perceived social support, and anxiety among informal caregivers of individuals with dementia. The theory has been utilized with determining and examining caregiver stress and burden and the process of coping. Thus, the approach highlights the relationship between the appraisals and the ability to deal with the stressful event. In the present study, the response to a stressor may impact the informal caregiver's quality of life and ability to meet the needs of the individual diagnosed with dementia.

Informal Caregivers

Informal caregivers are very critical to the care and needs of individuals diagnosed with dementia. Many are motivated to provide a significant amount of care for the older population. Shiba et al. (2016) described informal caregivers as an individual who provides care for someone who cannot provide adequate care for themselves. An informal caregiver can be a spouse, sibling, child, other family members, or a friend. According to the Family Caregiver Alliance (2016), results estimated that approximately 34.2 million adults provide unpaid care to an individual over the age of 50. The numbers will continue to rise as individuals are living longer. There is an expectation that the estimated number of those over the age of 65 will rise at least by 2.3% every year

between 2000 and 2030 (CDC and the Kimberly-Clark Corporation, 2008). Because of this rise, the need for caregiving continues to increase. A study conducted by Wolff et al. (2016) showed evidence of the many challenges informal caregivers experience when providing care for those diagnosed with dementia. As mentioned by Snyder et al. (2015), informal caregivers are essential resources to those diagnosed with dementia as they are fundamental to the United States healthcare system. Although there is a great need for caregiving, concerns of the strain informal caregiving causes continue to be problematic.

Role of Informal Caregivers

Individuals diagnosed with dementia may become dependent upon an informal caregiver to aid in meeting their daily needs. Such needs include assistance with performing normal activities of daily living, housekeeping, medication needs, care coordination, transportation, and financial needs (Verbakel et al., 2018). Informal caregivers provide a significant amount of care needed for persons diagnosed with dementia. Many take on a significant amount of duties and may provide a high number of hours daily to ensure they are meeting the daily needs of the individual. According to data from Family Caregiver Alliance (2016), a high percentage of informal caregivers provide a minimum of 21 hours per week providing care to those diagnosed with dementia. Many informal caregivers care for the individual in the home setting to prevent the individual from being institutionalized. This has aided in the increase of demands of the informal caregiver. A study completed by Brodaty and Donkin (2009) showed results that detailed an increase in demand of needs provided by informal caregivers to people with dementia based on their current level of care. The level of care of the person is

dependent on the needs and the roles of the informal caregiver. The needs of the individual diagnosed with dementia may cause levels of burden that many informal caregivers encounter which may impact their ability to provide adequate care.

Effects of Caregiving

Caring for someone diagnosed with dementia may lead to caregiver burden or high-stress levels. Many informal caregivers describe the effects of caregiving differently based on the stressors they encounter (Vasse et al., 2012). Those who provide a significant amount of care are more likely to experience higher levels of stress. The time spent and the high demands of meeting the needs of a person with dementia are associated with physical and mental deficiencies (Verbakel et al., 2018). Borsje et al. (2016) conducted an observational cohort study among 117 informal caregivers where 41% indicated having a mental health issue as a result of caregiving. The researchers were able to conclude a high risk of mental and physical health deterioration among informal caregiving based on the level of needs and amount of time spent with caring for the individual diagnosed with dementia. The National Alliance for Caregiving and AARP (2015) indicated the more time spent caring for someone diagnosed with dementia, the more likely the informal caregiver may disclose a decline in their physical or mental health.

Data from an observational cohort study conducted by Borsje et al. (2016) identified 41% of the informal caregivers who participated, were subject to developing a mental health problem, such as depression or anxiety. This same study showed spouses who are informal caregivers, presented with higher levels of psychological and emotional

distress. These results support data from previous studies that state informal caregivers are subject to encounter distress and poorer mental and physical health. Farina et al. (2017) stated that family caregivers of individuals diagnosed with dementia are more likely to exhibit higher levels of anxiety, and stress than non-family caregivers. Data from this same study reported that caring for someone diagnosed with dementia has more permanent adverse effects than caring for someone diagnosed with a different disorder.

A cross-sectional study conducted by Huang et al. (2015) showed the more symptoms exhibited by the individual with dementia, is in correlation to the more severe burden experienced by the informal caregiver. The study included 57 caregivers caring for someone diagnosed with dementia and most reported a difficulty coping with caring due to the severity of behavioral problems exhibited. Huang et al. (2015) found a significant number of the participants' utilized avoidance as a way to cope with caregiver burden and stress, which led to an increase in psychological and medical challenges. The demands of caregiving may cause challenges such as physical health disorders, anxiety, and even depression. A study completed by Lavarone et al. (2014) indicated comparable results stating the severity of symptoms of dementia influence the levels of burden and anxiety. The authors indicated that the seriousness of caregiver burden is a result of prolonged time spent caregiving for those diagnosed with dementia. Similar implications of caregiver burden were concluded in a study by Liang et al. (2016). The study results indicated 28.8% of caregivers caring for individuals with dementia reported symptoms of anxiety; 26.7% being a spouse caregiver, 24.8% being a child caregiver, and 23.8% were other family member caregiver. In this same study, the rate of anxiety symptoms was

higher than any other symptoms, such as depression. Results from past research conclude the correlation between informal caregiving, mental and physical health issues, time spent caregiving, and the demands of care. The correlation is evidence of the importance of support needed when caring for a person diagnosed with dementia.

Dementia

Dementia is a major neurocognitive disorder that impairs an individual's mental ability to think, remember, or reason (Diagnostic and Statistical Manual of Mental Disorders [DSM5], 2013). Dementia presents as a decline in an individual's mental capacity that may interfere with them being able to live independently. This decline may impact the individual's cognitive functioning abilities, which may limit their ability to meet their own needs, can extend over several years, and is irreversible. Cognitive abilities, such as memory, problem solving and judgment, are major components that may be impacted when a person presents with symptoms of dementia (Kamiya et al., 2014). An individual's ability to effectively communicate with others may also be a symptom of dementia. This disease may cause the individual to exhibit difficulty with performing usual daily living tasks, such as bathing, cooking, paying bills, and remembering to adhere to medication regiment. Symptoms of dementia may be linked to long term care provided by informal caregivers and have been recognized as one of the most impactful disorders today (Montgomery et al., 2018).

According to statistics from the Centers for Disease (2018), 47.5 million people are diagnosed with dementia, and the numbers are expected to rise over the next 10 years. Past research has indicated dementia has become a worldwide problem, resulting in

needed support for those assisting individuals diagnosed with dementia (Huang et al., 2015). The results yield that more individuals will be diagnosed with some form of dementia in the upcoming years, increasing the rate of those providing necessary care. Brodaty & Donkin (2009) mentioned at least 80% of individuals diagnosed with dementia receive a significant amount of needed care from informal caregivers, such as a spouse or a child. The progression of the disease determines the amount of care and time being provided to meet the needs of the person diagnosed with dementia. Informal caregivers are said to spend at least 24.4 hours weekly providing care (National Alliance for Caregiving and AARP, 2015). The results indicate depending on the role of the informal caregiver, the number of hours spent providing care may differ. Results from The National Alliance for Caregiving and AARP (2015) revealed a spouse or partner spends a minimum of 44.6 hours weekly and other family members spend at least 21.9 hours a week providing caregiving tasks.

Types of Dementia

Dementia is a broad term that describes several different conditions caused by disruption of brain nerve cells that impact a person's ability to function appropriately (Alzheimer's Association, 2014). Because dementia includes a series of symptoms, it is not known as being just a specific disease and is typically within the elderly population. There are four common types of dementia. Alzheimer's disease (AD) is known to cause a significant amount of deaths and is the most typical form of dementia in the United States (Alzheimer's Association, 2016). According to research, AD is the sixth most common cause of death in individuals over the age of 65 (Alzheimer's Association, 2016). AD

causes short memory loss, difficulty with reasoning, thinking abilities, judgment, presentation of mood swings, and some decrease in orientation to place and time (McKhanna et al., 2011). Typically, AD causes the individual to revert to their earlier years, experiencing difficulty recalling present or current events. According to McKhanna et al. (2011), once a person is diagnosed with AD, life expectancy is 4.5 years. Studies conducted indicate that prescribed medications are not beneficial with slowing down the progression of AD and the cognitive damages that occur, which results in significant deterioration of brain tissue (Alzheimer's Association, 2016).

Dementia with Lewy bodies is another form of dementia that causes a decline in thinking, reasoning and the individual being unable to perform independent activities caused by the buildup of abnormal proteins in the brain (Abe & Chiba, 2019). Lewy body dementia is usually misdiagnosed or undiagnosed as symptoms are similar to Parkinson's disease. Movement and posture difficulty, stiffness of the muscles, and body tremors are symptoms that resemble Parkinson's disease, making it difficult with determining the appropriate diagnosis. A person diagnosed with Lewy body dementia may also present with periods of visual hallucinations and depression (Abe & Chiba, 2019). Many individuals diagnosed with Lewy body dementia may present with inconsistent cognition. There may be times they can think clearly and recall events; however, they may also present with times where their cognitive abilities are impacted (Abe & Chiba, 2019).

Vascular dementia (VD) is a form of dementia that is normally caused by a stroke or other heart conditions. In addition, approximately 30% of individuals who suffer from a stroke develop dementia within three months of suffering from the stroke (Wang et al.,

2018). When an individual is diagnosed with VD, they have undergone significant trauma to the brain causing changes to their ability to reason and think (Wang et al., 2018). This form of dementia is said to be the second most common cause of dementia with symptoms that include confused state, trouble with short term memory, wandering off from familiar environments, and disorientation (Wang et al., 2018). According to Wang et al. (2018), VD impacts approximately 1.2 to 4.2% of individuals over the age of 65.

Frontal temporal dementia (FTD) causes the individual to present with difficulty with comprehension and unusual and bizarre behaviors. FTD is said to be the second most common dementia among individuals under the age of 65 (Maclin et al., 2019). FTD occurs when the human brain loses a significant amount of nerve cells in the frontal and temporal lobes which may lead to the deterioration in one's personality and cognitive abilities (Maclin et al., 2019). Individuals may also present with behavioral problems which confuse their symptoms with mental illness.

Perceived Social Support

Increased research has aided in the change of how individuals view social support and has brought on a greater understanding of the benefits of social support. Informal caregiving may be linked to some level of burden and social support may help decrease the level of burden experienced (Shiba et al., 2016). How effective social support may be, may rely on how the informal caregiver perceives social support. As mentioned by Roohafza et al. (2014), factors such as the individual's attitudes, actions of others, the type of support provided, and the person's physical environment, often influences the perception of social support. There are three known types of social support. Emotional

social support includes love, active listening, and empathy shown towards the caregiver. This support pertains to certain things individuals perform in order to make the caregiver feel wanted, loved, and understood (Krause, 2001). Informational social support is information that is provided to the caregiver, such as handouts, resources, and brochures that details pertinent information to help meet the needs of the person. Krause (2011) mentions feedback, suggestions, and other useful information are also forms of informational support. Instrumental social support includes financial assistance and provided services to help meet the needs of the individual. This form of support includes particular things that are provided by others to assist the informal caregiver with caregiving responsibilities (Krause, 2001). The benefits of the different types of social support may vary depending on the type of support available and is helpful with enhancing the informal caregivers' overall well-being.

The perception of social support is defined as an individual's self-appraisal of how supportive and adequate the social support is to meeting their needs (Roohafza et al., 2014). Informal caregivers may view the social support as negative or positive, depending on their experiences with the social support provided. Findings from research have concluded perceived social support has a stronger relationship with a person's physical and psychological health (Harandi et al., 2017). Informal caregiver's perception of the social support provided may be a factor in increased anxiety and other mental and physical health problems.

Anxiety

Many challenges informal caregivers encounter may exhibit a correlation to

physical and emotional burden, such as increased anxiety, due to the demands of caregiving responsibilities. Anxiety may come in different forms and symptoms may include excessive worrying, restlessness, irritability, fatigue, and sleep disturbances (Diagnostic and Statistical Manual of Mental Disorders [DSM5], 2013). Research findings on dementia have implicated the negative impact the increased anxiety levels have on the caregiver's psychological health (Romero-Moreno et al., 2016). Although there are no known causes of anxiety, many factors may be responsible for the development of anxiety, which can lead a diagnosis of an anxiety disorder. Blanco et al. (2014) reported anxiety might be caused by external factors that include environmental stress, emotional trauma, or ongoing stressful events.

Liang et al. (2016) stated approximately 10%-35% of caregivers' associate caregiving to anxiety. The more time spent and responsibilities of the caregiver may increase the level for anxiety, which may cause the need of increased social support. A phenomenological study was conducted by Kim et al. (2016) to detail the experiences of females caregiver of family members with dementia. One finding from the study indicated that approximately 50% of middle-aged adults described symptoms of anxiety regarding the development of dementia. The findings from this study also indicated more social support and attention to the caregivers will be beneficial with decreasing anxiety regarding dementia (Kim et al., 2016). Boltz et al. (2015) mentioned 30% of family caregivers that participated in their study, showed moderate to severe anxiety. The authors were able to conclude factors such as the severity of dementia and higher caregiver strain, were predictors of higher anxiety (Chippendale et al., 2015).

Romero-Moreno et al. (2016) studied the relationship between behavioral and psychological symptoms of dementia and anxiety of family caregivers. The study included a sample of family members caring for someone diagnosed with dementia within the community, stressors that influence anxiety among the caregivers, a mediation model of behavioral and psychological symptoms of dementia, and experiential avoidance and lower levels of leisure satisfaction (Romero-Moreno et al., 2016). The results indicated a relationship exists between defined stressors associated with caregiving and caregiver anxiety. Lavarone et al. (2014) examined the relationship between the characteristics of burden and anxiety and coping strategies used by a group of caregivers of individuals diagnosed with AD. The authors conducted interviews to obtain levels of burden and anxiety and to evaluate the coping strategy most effective for the caregiver. The results concluded the severity of the dementia played a role in the caregivers' levels of burden and anxiety and a significant number of participants chose task-focused coping strategies (Lavarone et al., 2014). Therefore, coping strategies that included taking direct actions aided in less burden and anxiety among the caregivers. Bekhet (2015) examined the relationship between perceived burden, depression, anxiety, resourcefulness, and psychological well-being among African American and Caucasian American dementia caregivers. In the study, the authors found the Caucasian Americans reported a higher level of caregiver burden and anxiety than the African American participants. The results of their study also indicated a correlation between positive cognitions and psychological well-being (Bekhet, 2015). A randomized trial study was conducted by Joling et al. (2011) to examine if preventive family meetings aided in

decreased depression and anxiety among the caregivers of individuals with dementia. One conclusion drawn from this study was that even with preventive interventions, caregivers presented with symptoms of depression and anxiety. According to Joling et al. (2011), approximately 40% of the caregivers developed criterion of depression or an anxiety disorder within twelve months after completion of the study.

Gender and Dementia

Individuals diagnosed with dementia are often cared for by informal caregivers which may include an adult child, spouse, or family friend. Within this culture, women are more likely to take on the role as an informal caregiver (Shiba et al., 2016). It is estimated 60% of AD and dementia caregivers are women and experience higher levels of impaired mental and physical health than male caregivers (Alzheimer's Association, n.d.). The quality of life for informal caregivers has been an ongoing concern. In addition, several studies have examined the relationship between gender and the challenges with caregiving.

In a study on gender differences in anxiety among caregivers of individuals with dementia, Verma and Anand (2012) indicated the female caregivers exhibited significantly higher scores on the depression and anxiety scales than the male caregivers. The study also indicated more male participants took on the role as caregivers than the female participants (Verma & Anand, 2012). Although the study indicated more male caregivers, the female caregivers were more likely willing to report caregiver distress and anxiety. Akpinar et al. (2011) conducted a comparative study to examine if gender differences impact caregiver burden among caregivers of individuals diagnosed with AD.

The authors concluded female caregivers scored significantly higher than the male caregivers for caregiver burden. Certain factors such as the employment status, education level, and daily caregiving tasks affected levels of caregiver burden.

Bartlett et al. (2018) conducted a systematic literature review search of studies that examined gender differences with dementia care. The search included numerous articles and studies that discussed how female and male caregivers viewed their role as caregivers and their experiences as caregivers. One conclusion drawn from one of the reviews was that a relationship existed between caregiver gender and psychological well-being, with male caregivers reporting higher levels of mental distress (Bartlett et al., 2018). Another study investigated the relationship between guilt and depression of dementia caregivers where it was found the daughter caregivers scored higher with levels of guilt than the son participants are were more sensitive to suffering from mental distress (Bartlett et al., 2018).

Stewart et al. (2016) conducted a study to examine family caregiver burden and the level of distress at the time the family member was diagnosed with dementia. The authors also looked at caregiver gender to examine if differences existed in reported caregiver burden and severity of distress. The study included female and male family caregivers residing at a clinic in a rural area. Females reported exhibiting more burden and higher severity of distress at the time of diagnosing (Stewart et al. 2016). Stewart et al. (2016) stated the time of diagnosing and the severity of the dementia can affect caregiver burden and distress.

Summary

Informal caregivers are prominent key factors with meeting the needs of individuals diagnosed with dementia. Many informal caregivers take on a significant amount of caregiving tasks, which may lead to caregiver burden such as anxiety and depression. Although I found a considerable amount of research and studies on informal caregiving, a gap existed regarding the type of perceived social support that was found to be beneficial to informal caregivers. There also lacks a significant amount of research that defines an understanding if a relationship exists between caregiver gender and anxiety. The review of literature has indicated the effectiveness of social support with improving quality of life for the informal caregivers. As previously stated, this study addressed the gap in literature concerning the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. The study sought to examine if there is a significant difference in reported anxiety between male and female caregivers. This study used a non-experimental survey design to research the gap previously noted.

Chapter 3 discusses the methodology of the current study, explanation of the research questions, along with the variables. The statistical methods and significance of the study is also be defined. Additionally, ethical considerations, data collection, and analysis of the data are included in the upcoming section.

Chapter 3: Research Method

The purpose of this research was to address the gap in literature concerning the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. I begin this chapter by providing details regarding the research design and the rationale behind its selection. This chapter provides an explanation of the research design and rationale for the design. The target population, sampling method, the study's variables and procedures is also discussed. This chapter also includes information on the data analysis, reliability, validity, and ethical procedures.

Research Design and Rationale

The independent variables in this study are perceived emotional/informational social support, instrumental social support, and gender of the informal caregiver. The dependent variable is anxiety. This quantitative study used a multiple linear regression design method. Quantitative research method was chosen as this method allows for the generation of numerical data for statistical analysis (Creswell, 2009). The use of a qualitative research design would not have allowed for a prediction of the outcome and is normally used for exploring research. The purpose of this research was to assess whether a significant relationship exists between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. A correlational research design was most appropriate because I observed the different variables to determine if a statistical relationship exited. The use of this research design did not require a significant amount of

time to complete and analyze and was considered to be less expensive than the use of other designs, such as an experimental design. The multiple linear regression design method was selected as it was the most appropriate method that explained the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. This type of research design is commonly used in research to examine relationships between a dependent variable and more than two independent variables (Hanley, 2016). The correlational research design for this research allowed for additional information to be collected on the impact of social supports for informal caregiving of individuals diagnosed with dementia.

Methodology

Population

The target population for this study was informal caregivers of individuals diagnosed with dementia. The target sampling size was ninety informal caregivers. Male and female informal caregivers who provide full time care for someone diagnosed with dementia were eligible to participate in the study. Sampling strategies and procedures are described in the following section.

Sampling and Sampling Procedures

A nonprobability sampling technique was used for this research. The convenience sampling strategy was most useful for this research as it was inexpensive and the subjects were readily available. This allowed for a specific sample size to be chosen that represented the population of informal caregivers. Creswell (2009) mentions that this

sampling technique is commonly used to allow researchers to easily recruit individuals to participate in their study by selecting a specific number of individuals from a selected group. Although the convenience sampling is a simpler technique, a researcher must be aware of sampling bias due to the sample not being a full representation of the entire population of informal caregivers. I created an online flyer and posted on social media. The flyer detailed the requirements in order to be eligible to participant in the study. A total of 90 participants was used to obtain data for this study.

To meet the inclusion for this study, participants were required to be informal caregivers of individuals diagnosed with some form of dementia. The informal caregiver must provide full time care for the individual and the individual diagnosed with dementia was required to reside in the community. Participants who did not provide full time care or if the person with dementia resided in a nursing home or any other facility were excluded from participation.

To predict accuracy and validity, the power analysis calculation was performed to help with determining the most appropriate sample size that will allow for the null hypothesis to be tested for this study. The G*Power 3.1.9.2. software program was developed by Buchner et al. in 1992 and is being used in a tremendous amount of research (Faul et al., 2007). The use of the G*Power 3.1.9.2. software program allowed for me to obtain the minimum sample size required to achieve power equal to .95% for a multiple linear regression with four predictors. The alpha level was set at .05, .95% for power, and the medium effect size, Cohen's $f_2 = .15$. Based on the settings, the G* Power tool indicated that at the minimum the sample size required was 74. Since the sample size

influences power, .95% was chosen to increase the power of the study. This study used an effect size of 90 participants. This effect size was increased to account for participants dropping out, missed information, or skipped questions.

Procedures for Recruitment, Participation, and Data Collection (Primary Data)

Participants for this research were informal caregivers of individuals caring for someone diagnosed with dementia recruited from social media posts, such as Facebook, Twitter, and Instagram via online invitations and flyers.

I explained to the participants the informed consent process by detailing the purpose and nature of the study, the possible risks and benefits of the research, the rights of the participants, and the expected time frame needed to complete the questionnaire. An introductory question regarding the participants' accessibility to technology and technology ability was included on the recruitment flyer. Participants were informed the reading ability is a sixth grade reading level in order to participate in the study. Participants are able to obtain a written copy of the informed consent which each participant was required to agree to consent before preceding to access the online surveys. I provided my contact information in case of questions that may arise and detailed the confidentiality of the participants and explained that their participation is voluntary and they were able to discontinue their participation at any time. The estimated time of the use of the inventories was three to ten minutes. Preceding to starting the survey, participants read and acknowledged an understanding of the estimated administration time for completion of the surveys. The participants were able to come back to complete the inventories if they were required to stop.

I ensured data collected from the study was anonymous by not asking the participants to include personal information such as their names, social security numbers or addresses. Participants were required to provide general demographic information such as age, gender, and the relationship to the person diagnosed with dementia. Surveys were coded with an identification number to protect sensitive information and the information and data received was entered and saved with a password access code needed in order to retrieve the data. The dissertation chair and I are the only one to have access to the data collected.

Once the participant was deemed an appropriate candidate, they were able to access the study's questionnaires electronically through the Survey Monkey website. The surveys included the State-Trait Anxiety Inventory, the Multidimensional Scale of Perceived Social Support, and the Medical Outcomes Study Social Support Survey. To decrease the amount of time spent completing the surveys, the surveys were combined under one link to prevent the participants being required to access several links. The survey remained active until at least 80 surveys were completed based on the estimation from the power analysis. The number of participants was slightly higher than estimated from the power analysis to take in consideration items that may need to be eliminated, such as missing information or skipped questions. The data was entered and calculated by the use of the statistical software program IBM SPSS which is also protected by a password entry. Once the survey was completed and submitted, the participant was able to exit the survey website. The participants were not required to follow-up once they completed and submitted the questionnaire.

Instrumentation and Operationalization of Constructs

To assess the four predictors for this study, the participants were asked to complete the State-Trait Anxiety Inventory (STAI), the Multidimensional Scale of Perceived Social Support (MSPSS), the Medical Outcomes Study Social Support Survey (MOS-SSS) and a demographics questionnaire to obtain the participants gender and relationship. A detailed description of the instruments used to measure these variables is presented in this section.

State-Trait Anxiety Inventory

This is a self-reported survey that aid in assessing caregiver distress and presentation of anxiety (American Psychological Association, n.d.). This instrument was designed by Charles D. Spielberger and is used in clinical settings to aid in diagnosing of anxiety. The specific goal of the use of the STAI is to provide objective measures for state and trait anxiety (American Psychological Association, n.d.). The inventory is constructed of two forms. Form Y focuses on anxiety and Form X focuses on depression. The participants completed Form Y to assess anxiety as depression was not a factor being considered for this study. Each item on the STAI is given a weighted score from 1 to 4, which 4 indicating high state of anxiety (Wiglusz et al., 2019). Scores can range from 20 to 80 as a total composite score for state anxiety and also for trait anxiety. Form Y contains twenty state anxiety (S-Anxiety) and twenty trait anxiety (T-Anxiety) items. The STAI can be administered to anyone who has at least a sixth-grade reading level (American Psychological Association, n.d.). High scores on the scales indicate higher levels of anxiety. Low scores indicate less levels of anxiety. There have been over 50,000

participants who have completed Form Y and a vast variety of studies have utilized the STAI to measure a distinction between state and trait anxiety (Wiglusz et al., 2019).

Reliability and validity of the STAI were analyzed on 96 outpatients diagnosed with epilepsy (Wiglusz et al., 2019). The STAI was utilized to assess the anxiety of the patients. The results from the study indicated the STAI-T was a valid and reliable instrument; however, the STAI was not valid or reliable. As mentioned by Julian (2011), the STAI test–retest reliability coefficients on initial development ranged from 0.31 to 0.86, with intervals ranging from 1 hour to 104 days and validity (p. 3). The STAI was originally tested with a large population of adults and adolescents and compared to other anxiety measures to obtain validity. The overall correlations between the STAI and the other instruments compared were 0.73 and 0.85 (Julian, 2011, p.3).

Multidimensional Scale of Perceived Social Support (MSPSS)

The MSPSS was created by Gregory Zimet, Nancy Dahlem, Sara Zimet, and Gordon Fraley in 1988 and consists of 12 items that will measure the participants' perception of social support from their family, friends or significant other (Roohafza et al., 2014). For this study, the MSPSS assessed the relationship between social support and anxiety. Many studies that have utilized the MSPSS indicated good internal and test-retest reliability and good validity (Zimet et al., 1988, p. 33). The use of the MSPSS was easy for the participant to understand and did not take a significant amount of time to complete. Scores obtained from the MSPSS can range from 12 to 84. Higher scores indicate higher levels of perceived social support (Zimet et al., 1988).

Reliability and validity of the MSPSS were analyzed on 4,067 participants diagnosed with comorbid chronic obstructive pulmonary disease and heart failure located in Southern and Midwest United States to assess their percieved social support. The authors indicated the MSPSS was valid and reliable as the internal consistency yielded a Cronbach $\alpha = 0.93$ for the total instrument, 0.95 for the Friend subscale, 0.92 for the Family subscale, and 0.92 for the Significant Other subscale (Bugajski et al., 2019, p. 195).

The MSPSS was shown to be a valid and reliable instrument for a study conducted on 223 Hispanic first year college students to assess the psychometric structure of the MSPSS (Ermis-Demirtas et al., 2018). The Cronbach's alpha was found to be .92, the coefficient alphas found for each of the subscale scores were .93 for the Family Support, .91 for the Support From Friends, and .94 for the Support From a Significant Other. The correlations indicated the MSPSS appeared to be a reliable instrument.

Medical Outcomes Study Social Support Survey

The Medical Outcomes Study Social Support Survey (MOS-SSS) is comprised of 19 items that will measure the participants' perception of their emotional, instrumental, and informational needs (Sherbourne & Stewart, 1991). The MOS-SSS was developed during a cross sectional two year study on chronically ill patients who participated in a Medical Outcomes Study in 1993 (Sherbourne & Stewart, 1991). The MOS-SSS has an abbreviated version that consists of 5 items; however, the use of the full version will allow for more detailed and significant data to be received in this research. The MOS-SSS is a simple tool that does not present with a high level of difficulty to complete and

is easy to understand. Sherbourne and Stewart (1991) reported the full length version of the MOS-SSS has an internal consistency, measured by the Cronbach's alpha of .97.

The use of the MOS-SSS proved to be valid and reliable in a study conducted on 3,241 women participants diagnosed with stage one to three breast cancer residing in different regions of the United States (Moser, Stuck, Silliman, Ganz, & Clough-Gorr, 2012). The researchers utilized the eight-item modified version of the MOS-SSS (mMOS-SS). Across all of the sample populations, the internal reliability of the mMOS-SS measure was very good and showed construct validity (Moser, et al., 2012, p. 6).

Reliability and validity of the scale were analyzed in a sample of 128 newly-diagnosed cancer patients (Priede et al., 2018). The researchers utilized several versions of the MOS-SSS to examine which version will be most useful and reliable among chronically ill patients. A six and eight item version was used which showed adequate internal consistency and convergent validity (Priede et al., 2018). The Cronbach's alpha of the abbreviated versions was $\alpha > 0.70$ which details a good internal consistency (Priede et al., 2018). Priede et al. (2018) mentioned the extended nineteen item version of the MOS-SSS will be the best fit to obtain a more comprehensive and detailed assessment of the different types of social support (p. 37).

Demographics Questionnaire

The demographics questionnaire was utilized to obtain demographic information such as age, sex, marital status, educational level, relationship to the individual diagnosed with dementia and employment status.

Data Analysis Plan

Data from this study was analyzed by the use of the Statistical Package for the Social Sciences (SPSS) statistical program. The results were checked for accuracy and validity by examining the responses and comparing the information entered in the SPSS program to the information obtained from the original survey to ensure that all the information was entered completely and accurately. A descriptive data analysis method was utilized to explain the sample means, standard deviations, probability values, and medians in order to identify skewness, search for outliers, and detect missing data. Multiple linear regression analysis was used to determine if there was a significant relationship between perceived emotional/informational social support, instrumental social support, and gender on anxiety of informal caregivers.

This study examined the following research questions and tested the following hypotheses:

Research Question 1 (RQ1): What is the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia?

Null Hypothesis ($H_0$1): There will be no significant correlation between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia.

Alternative Hypothesis (H_a1): There will be significant correlation between perceived emotional/informational social support, instrumental social support,

gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia.

Research Question 2 (RQ2): Is there a significant difference in reported anxiety measured by the State-Trait Anxiety Inventory between male and female informal caregivers?

Null Hypothesis ($H_0$2): There will be no significant difference in reported anxiety among male and female informal caregivers.

Alternative Hypothesis (H_a2): There will be significant difference in reported anxiety among male and female informal caregivers.

Threats to Validity

Validity is the extent to which a study accurately measures what it intends to measure and explores if the researcher's conclusion of obtained date is accurate and correct. Threats to internal and external validity may arise in research.

External Validity

External validity refers to if the data findings will be able to be utilized and applied to different settings, populations, and situations (Druckman et al., 2011). The external validity threats in the proposed research was the use of sample of convenience as the sample was not be a representation of the entire population and may produce a higher level of sampling error. The informal caregivers may not be as honest regarding their perception of social support due to fear of being judged. This threat was addressed by informing to all participants that their responses were anonymous, coded, and kept confidential.

Internal Validity

Internal validity determines whether the predictors cause a change to the dependent variable. One factor of internal threats to validity in the proposed study was mortality. Informal caregivers may present with obstacles that may have caused them to be required to drop out of the study, such as time constraints, or physical health problems that may have occurred during the time of completing the questionnaire. I chose a larger sample size than computed by the G*Power software, to account for participants dropping out.

Construct Validity

There were no proposed threats to construct or statistical conclusion validity when it comes to measuring the variables. The instruments that were used in this study have been used in previous research and have been found to be reliable and valid in past research.

Ethical Procedures

To ensure the proposed study adheres to ethical standards, the current study was submitted to Walden University's Institutional Review Board (IRB). Walden University's approval number for this study was 06-23-21-0614777. All participants were provided the informed consent online and I included my contact information for any questions to be asked prior to participating in the proposed study. The variables for the study did not include any identifying information and the data obtained will be kept confidential and only accessible by a password code. The committee members and I were the only personnel who had access to the password code. There were minimal risks to the

participants as the researcher explained the purpose and nature of the study and provided her contact information to provide needed support before or during the participation of the study. The ethical considerations for this researcher's position were to value the informal caregivers, their beliefs, and protect their confidentiality. The data collected from the study is properly secured and will be maintained for a period of 5 years before it is destroyed as per Walden University's policy.

Summary

The purpose of the quantitative correlational survey design study was to examine the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. If a significant difference exists in reported anxiety among male and female informal caregivers was also examined. The research design, research questions, sample population, and instruments used were detailed in this chapter. Additionally, the chapter discussed the data collection process, the potential threats to validity and the data analysis of the material retrieved. I utilized the SPSS software program to input and analyze the data. This quantitative study used a multiple linear regression design method with four predictors: emotional, instrumental, informational social support and gender.

Chapter 4 explain and detail the results of the current study. Quantitative and statistical analysis reports of the significant and non-significant findings, descriptive statistics illustrated in tables, and the effect sizes of the various predictor variables are also included in Chapter 4.

Chapter 4: Results

Individuals who are diagnosed with dementia often require care from others such as informal caregivers. Because of the decline in the mental health or physical capabilities of the person diagnosed with dementia, the provided care can become overwhelming for the informal caregiver resulting in a decline in their own physical or mental health. Provided social support has been known to aid in decreasing periods of anxiety and in the reduction of risk factors that are normally associated with physical or mental health problems.

The purpose of this study was to determine if a relationship existed between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. The required information was collected using an anonymous online questionnaire filled out by informal caregivers of individuals diagnosed with dementia, via a website built through Survey Monkey, which is an online company that assists in online survey development. An announcement was posted in various social support Facebook groups to obtain participants.

This research looked at three dependent variables that included the following: (a) perceived emotional/informational social support, (b) perceived instrumental social support, and (c) gender. The independent variable for this study was anxiety.
The research questions and hypotheses that guided this study were as follows:

Research Question 1 (RQ1): What is the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia?

Null Hypothesis ($H_0$1): There will be no significant correlation between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia.

Alternative Hypothesis (H_a1): There will be significant correlation between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia.

Research Question 2 (RQ2): Is there a significant difference in reported anxiety measured by the State-Trait Anxiety Inventory between male and female informal caregivers?

Null Hypothesis ($H_0$2): There will be no significant difference in reported anxiety among male and female informal caregivers.

Alternative Hypothesis (H_a2): There will be significant difference in reported anxiety among male and female informal caregivers.

In this chapter, the data collection procedures, demographics of the participants, and the results of the main analyses addressing the two research questions are summarized. This chapter begins with an overview of the quantitative data analysis procedures used to analyze data collected from 90 informal caregivers providing care to

individuals diagnosed with dementia. The overview and analysis will include the procedures within the analysis and a description of the demographic characteristics of the sample. This chapter reports the data of the multiple regression analysis that addressed the questions regarding possible relationship between the participants perceived social support, gender, and anxiety. The summary of the data findings as they relate to the research questions are concluded in Chapter 4.

Data Collection

I conducted a non-experimental, cross sectional study. In order to determine if a relationship existed between perceived emotional/informational social support, instrumental social support, and gender, with caregiver anxiety, a multiple linear regression model was used. This method is used to explore predictions and determine the strength of the relationship of the dependent variable and the predictor variables (Hanley, 2016). The two research questions identified earlier in this chapter were focused on the relationship between perceived emotional/informational social support, instrumental social support, and gender of the informal caregiver. To address these questions, data was collected with the STAI (Appendix A), MSPSS (Appendix B), and the MOS-SSS (Appendix C). A demographic questionnaire was also used to obtain demographic data (Appendix D).

Study Results

The target population for this study was informal caregivers of individuals diagnosed with dementia. Participants had to meet caregiver inclusion criteria and provide care to an individual diagnosed with dementia. A descriptive data analysis

method was utilized to explain the sample means, standard deviations, probability values, and medians in order to identify skewness, search for outliers, and detect missing data. Multiple linear regression analysis was used to determine if there is a significant relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety of informal caregivers.

Sample Demographics

There were 90 informal caregiver participants included in this sample; however 3 of the participants did not complete the entire surveys. Demographic information: age, gender, marital status, employment status, highest level of education, relationship to the person diagnosed with dementia and the length of time providing care were collected. The sample consisted of 69 females and 18 males. Three of the participants did not respond. The data showed significantly more female respondents, with females composing 76.7% of the study sample ($N = 87$). The mean age of the participants was 45 years of age. A total of 28 of participants reported marital status as married, 36 as single, 20 as divorced, 3 as widowed, 2 as separated, and 4 did not provide a response.

The report of employment status of the informal caregivers indicated that 14 (15.6%) completed high school, 4 (4.4%) reported some high school education; however, did not obtain a degree, 24 (26.7%) attended some college, 32 (35.6%) obtained a college degree, 1 (1.1%) reported attending trade school, 11 (12.2%) post graduate degree, and 1 (1.1%) reported no schooling completed. A total of 67 participants reported being employed, 10 as self-employed, 3 reported being retired, 5 of the participants reported being unemployed and 2 reported being unable to work.

Three participants reported they were spouses of the individual diagnosed with dementia, 23 reported being a child, 7 reported being the parent, 38 reported being another family member, 6 reported being a friend and 10 reported identifying being a nonfamily member.

Additional information was requested from the participants including how long they have provided care for the person diagnosed with dementia. The mean years of providing care was 4.5 with a range of 5 years of providing overall care for the individual diagnosed with dementia. Majority of the respondents however have been taking care of the person diagnosed with dementia for 0 to 3 years (58.9%). Ten participants did not respond. Table 1 illustrates the frequencies and percentages of the responses from the participants.

Table 1

Baseline Demographic Characteristics

Variables	*n*	%
Gender		
Female	69	76.7
Male	18	20.0
Age		
18-29	9	10.0
30-39	15	16.7
40-49	37	41.1
50-59	16	17.8
60-69	6	6.7
70-79	1	1.1
Above 80	2	2.2
Educational Level		
Less than High School	4	4.4
High School/GED	14	15.6
Some College	24	26.7
Trade School	1	1.1
College	32	35.6
Post College	11	12.2
Employment Status		
Employed	67	74.4
Self-Employed	10	11.1
Out of Work	5	5.6
Retired	3	3.3
Unable to Work	2	2.2
Relationship		
Spouse	3	3.3
Parent	7	7.8
Child	23	25.6
Other family member	38	42.2
Friend	6	6.7
No relationship	10	11
Years providing care		
0-1 year	28	31.1
2-3 years	25	27.8
4-5 years	13	14.4
5-10 years	8	8.9
11 or more years	6	6.7

Note: N = Number.

Instrument Reliability

The MOS-SSS was used to measure the different social supports. Self-reported MOS-SSS social support data from the informal caregivers was interpreted using the means, standard deviations, range and reliability coefficients and are presented in Table 2. Scores range from 0 to 5 with 5 being the highest score. The reliability of the MOS-SSS for this study was 0.923, and the mean was 3.574. The Cronbach alpha for each subscale was 0.929 for both emotional/ informational social support and instrumental support. Based on the data collected from the MOS-SSS, informal caregivers identified Instrumental Social Support (M = 3.564) as the most accessible social support related to emotional/informational social support.

Table 2

Means and Standard Deviations, Range, and Reliability Coefficients for the MOS-SSS

	M	*SD*	Range	Cronbach's Alpha
E/I Social Support	3.374	1.143	0.244	0.929
Instrumental Social Support	3.564	1.150	0.128	0.929

Note: E/I = Emotional/Informational, *SD* = standard deviation, *N* = number, *M* = Mean.

Multiple Regression Model

The multiple linear regression model was carried out to determine whether perceived emotional/informational and instrumental social support could significantly affect anxiety among informal caregivers.

RQ1: What is the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia?

A multiple linear regression was calculated to predict anxiety based on the informal caregivers' perception of emotional/informational social support and instrumental social support. Based on the results of the test for assumptions for RQ1, the significance values were greater than $p = 0.05$; therefore, the multiple linear regression model showed perceived emotional/informational social support and instrumental social support and gender were not significant predictors of anxiety. Emotional/ Informational Social support was not a significant predictor of anxiety, $\beta = .026$, $t = .499$, $p = .619$. Instrumental social support was not a significant predictor of anxiety, $\beta = .057$, $t = 1.224$, $p = .224$. Gender was not a significant predictor of anxiety, $\beta = -.016$, $t = -.196$, $p = .845$. Therefore, I failed to reject the null hypothesis. The findings favor the alternative hypothesis. Table 3 shows the results of the assumptions for RQ1.

Table 3

Multiple Linear Regression

	Unstandardized Coefficients		Standardized Coefficients		
	B	Std. Error	Beta	*t*	Sig.
(Constant)	1.986	.179		11.092	.000
Emotional/Informational Social Support	.026	.052	.082	.499	.619
Instrumental Social Support	.057	.047	.196	1.224	.224
Gender	-.016	.081	-.022	-.196	.845

Note. Dependent Variable: Anxiety

$F(3,80) = 2.056$, $R^2 = 0.072$.

RQ2: Is there a significant difference in reported anxiety measured by the State-Trait Anxiety Inventory between male and female informal caregivers?

To analyze the data for RQ2, the Pearson correlation was assessed to examine if there is a difference in anxiety between male and female informal caregivers. Statistical data for the gender of the informal caregivers are illustrated in Table 4. Based on the findings from the evidence of the sample population, there was not a significant difference between female and male informal caregivers and reported anxiety. The gender of the participants was not significantly and were negatively related to reported anxiety**.** An independent *t* test was run to assess if there was a difference in reported anxiety among female and male informal caregivers. I failed to reject the null hypothesis and there is no significant difference between the reported anxiety among female and male informal caregivers, $p = .515$.

Table 4

Anxiety Among Informal Caregivers

Variables	*N*	*M*	*SD*	*SE*	*p*
Anxiety					0.515
Male	18	2.219	0.251	0.059	
Female	66	2.271	0.307	0.038	

Summary

In this chapter, the data that was collected from informal caregivers was analyzed. The purpose of the data collection was to determine if a relationship was present between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. Based on the findings, the results of the multiple linear regression model illustrates that the three variables did not statistically significantly predict Anxiety, $F(3,80) = 2.056$, $p = .113$. Results indicated there was not a significant relationship between emotional/informational social support, instrumental social support, gender and anxiety. The correlation between independent variables and the dependent variable indicated that there was no difference in reported anxiety among the female and male informal caregivers. This suggests the assumptions of the null hypothesis for RQ2 failed to be rejected. Chapter 5 discusses the overview of the research study, summary of key findings, and interpretation. In addition, limitations identified in the study,

recommendations for further research, and implications for positive social change are discussed.

Chapter 5: Discussion, Conclusions, and Recommendations

Individuals diagnosed with dementia require a significant amount of care that is commonly provided by an informal caregiver (Farina et al., 2017). The burden associated with providing full time care to an individual diagnosed with dementia is often associated with negative effects on the mental and physical health of the informal caregiver. To better understand the impact of providing care to someone diagnosed with dementia, it is important to understand the factors associated with caregiving and how coping skills and social support can decrease the negative impact of caregiving.

The nature of the study was to find statically significance between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. There has been previous research conducted on informal caregivers and the many challenges that informal caregivers encounter when providing full time care for someone diagnosed with dementia, but little has been explored on the impact of the perception of social support provided to the informal caregiver and how perceived social support has an impact on caregiver distress, such as anxiety. A quantitative correlational approach was deemed the most appropriate approach to explore the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia.

Significant to my study, the transactional model of stress and coping theory provided a framework for assessing coping resources provided and the informal caregiver's ability to cope with having to provide full time care to someone diagnosed

with dementia. The resources defined in this study was the perceived emotional/informational social support, instrumental social support. Within the transactional model of stress and coping, this research attempted to examine how the informal caregiver perceived the social support provided and better explain the relationship between the appraisals and the ability to deal with the stressful event. This chapter will discuss the findings from the study, the limitations, along with further implications and recommendations.

Interpretation of Findings

The goal of this research was to seek the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety among informal caregivers caring for individuals diagnosed with dementia. The transactional model of stress and coping theory provided the theoretical framework for this study to understand the informal caregivers' perceptions regarding social support and the stressor of caregiving. The transactional model views stress as a process that involves continuous interactions and transactions between the individual and the environment they are in (Lazarus & Folkman, 1984). Based on this model, the informal caregiver appraisal of their anxiety implicated their response to the coping resources provided, such as the perceived social supports. The model provided a beneficial framework to look at the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety. The model explained that perceived social support may not be a contributing factor associated with anxiety after the informal caregiver was able to access the stressor of caregiving.

A sample of 90 informal caregivers who provided full time care for someone diagnosed with dementia were surveyed to examine the relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety. The hypotheses were tested with the multiple linear regression model to check if there were any statistically significant relationship between the independent and dependent variables. Based on the results from the data retrieved, there was not a relationship between perceived emotional/informational social support, instrumental social support, gender, and anxiety. This suggests that the perceived social support was not a predictor of anxiety. This is consistent with previous research findings that reported no significant relationship between social support and caregiver distress (Weisman De Manani et al., 2018).

This study hypothesized that perceived social support would act as a buffer against anxiety. Perceived social support was measured by MSPSS, an instrument that measures perception of social support from their family, friends or significant other (Roohafza et al., 2014) and the MOS-SSS which measures the informal caregivers' perception of their emotional/informational and instrumental needs (Sherbourne & Stewart, 1991). Based on the ratings by the informal caregivers on the MOS-SSS, informal caregivers identified instrumental social support as the social support that was most useful.

Findings from previous literature suggested that female caregivers were negatively affected by stress and caregiving than male caregivers (Poysti et al., 2012). Correlation was performed to find if there was a difference in reported anxiety between male and female

informal caregiver. The model did not show a statistically significant difference between male and female informal caregivers. The results did indicate that there were more female informal caregivers than male informal caregivers who participated in the study; however, the gender of the participants was not significantly related to reported anxiety**.**

Limitations of the Study

There are possible limitations to this study. As mentioned by Creswell (2009), research is subject to limitations relating to the sample size and methodology used. One limitation was the sample size of the population. There were only 87 participants who completed the online surveys which does not represent the population as a whole. Although the sample size may have been a small representation of the entire population, the number of participants was sufficient for the use of the multiple regression model. Another limitation was there was no evidence of prior mental or physical health strains among the informal caregivers which could have an overall impact on their responses as it relates to stressors and presentation of anxiety. It is possible that some participants were stressed and self-selected to not participate in the study. It may be helpful to screen informal caregivers for presentation of mental or physical health concerns in future studies. Another limitation was that the data was compiled based on self-reports and there was no way to validate responses from the informal caregivers. One other limitation to this study is that the comparison of males to females were limited in assessing as there was a small number of male participants to female participants.

Recommendations

There are few more questions that future research can explore to examine the impact of informal caregiving and what measures are beneficial for reducing caregiver burden and anxiety. Future research should consider looking at the impact of prior mental and/or physical health conditions prior to caregiving to determine if preexisting conditions have a significant impact on providing adequate care for someone diagnosed with dementia. It will also be beneficial to investigate if older informal caregivers experience higher levels of anxiety than younger informal caregivers.

Implications

The results of this study may assist health care professionals and mental health providers in providing more effective social support programs for those caring for someone diagnosed with dementia. Based on the findings, looking at the informal caregiver's perception of the social support provided may aid in improving their overall psychological wellbeing and anxiety levels that may be impacted when providing full time care for someone with dementia. Health care professionals may implement regular conversations with informal caregivers related to quality of life issues and how taking on the responsibility of providing full time care may impact their overall quality of life. This type of communication can help the informal caregiver understand the dynamics related to providing care and how their overall physical and mental health may be impacted. Understanding that their perception of social support may interfere with caregiving and coping with the burden of caregiving would allow informal caregivers to implement strategies and interventions that may lessen the negative effects of caregiving.

Overall, this study can be used for looking at which social support will be most beneficial for the informal caregiver to help with decreasing caregiver burden and implementing effective coping skills that can aid in reducing periods of anxiety while providing care. This research can also influence more community based interventions that can be provided to those who provide care for someone diagnosed with some form of dementia and ensuring more resources and social supports are available. Due to the findings from this research identifying more female caregivers than males, future research can also explore how mental health fields can look into the development of programs and services that may be supportive to females who are the main caregiver. Forms of assistance that fit women who may also be providing care for children who are still developing may also be beneficial to help decrease caregiver burden.

Conclusion

Past research has indicated that a significant number of informal caregivers provide care for someone diagnosed with dementia and many informal caregivers encounter caregiver burden. Farina et al. (2017) mentioned informal caregivers feel they need more social support than they are currently receiving, yet there is not significant amount of research that looks at how perceived social support may be a good predictor of anxiety among informal caregivers.

Previous research has often focused on the support needs of the informal caregiver or on caregiver burden, but little research exists that provides insight into the unmet support needs of informal caregiving (Montgomery et al., 2018).

The purpose of this study was to examine the relationship between perceived emotional/informational social support, instrumental social support, gender and anxiety among informal caregivers of individuals diagnosed with dementia. This study contributes to the literature on informal caregiving and understanding the caregiver's perception of social supports by examining the relationship between the perceived social supports and anxiety. Ninety informal caregivers completed an online survey and self-reported their perception of the social supports and anxiety. This study did not find a relationship between perceived emotional/informational social support, instrumental social support, gender and anxiety. Based on the findings, it appears perceived social support is not viewed as a contributing factor with reducing anxiety among informal caregivers and is not most needed by those providing care.

This study also sought to discover if there was a difference in anxiety between the female and male caregivers. The data analysis indicated there was not a significant difference in anxiety between female or male informal caregivers. There were more female informal caregivers than male informal caregivers who completed the surveys; however, the STAI inventory did not show a difference in anxiety between the male and female informal caregivers.

It is hoped that the results of this study will contribute to the field and help fill the current gap in literature related to caregiving and identifying the needs of informal caregivers to help reduce caregiver burden. Professionals can work together with dementia caregivers providing needed support and information that can help the caregivers better understand the needs of someone diagnosed with dementia and how to

balance caregiving and caring for themselves individually to aid in reduction of caregiver burden and anxiety.

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Appendix A: State Trait Anxiety Inventory

SELF-EVALUATION QUESTIONNAIRE STAI Form Y-1

Please provide the following information:

Name_____Date_____S_____

Age_____ Gender (*Circle*) **M F** T_____

DIRECTIONS:

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you feel *right* now, that is, *at this moment*. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe your present feelings best.

	NOT AT ALL	SOMEWHAT	MODERATELY SO	VERY MUCH SO
1. I feel calm	1	2	3	4
2. I feel secure	1	2	3	4
3. I am tense	1	2	3	4
4. I feel strained	1	2	3	4
5. I feel at ease	1	2	3	4
6. I feel upset	1	2	3	4
7. I am presently worrying over possible misfortunes	1	2	3	4
8. I feel satisfied	1	2	3	4
9. I feel frightened	1	2	3	4
10. I feel comfortable	1	2	3	4
11. I feel self-confident	1	2	3	4
12. I feel nervous	1	2	3	4
13. I am jittery	1	2	3	4
14. I feel indecisive	1	2	3	4
15. I am relaxed	1	2	3	4
16. I feel content	1	2	3	4
17. I am worried	1	2	3	4
18. I feel confused	1	2	3	4
19. I feel steady	1	2	3	4
20. I feel pleasant	1	2	3	4

STAIP-AD Test Form Y
www.mindgarden.com

SELF-EVALUATION QUESTIONNAIRE

STAI Form Y-2

Name_____Date_____

DIRECTIONS

A number of statements which people have used to describe themselves are given below. Read each statement and then circle the appropriate number to the right of the statement to indicate how you *generally* feel. There are no right or wrong answers. Do not spend too much time on any one statement but give the answer which seems to describe how you generally feel.

	ALMOST NEVER	SOMETIMES	OFTEN	ALMOST ALWAYS
21. I feel pleasant	1	2	3	4
22. I feel nervous and restless	1	2	3	4
23. I feel satisfied with myself	1	2	3	4
24. I wish I could be as happy as others seem to be	1	2	3	4
25. I feel like a failure	1	2	3	4
26. I feel rested	1	2	3	4
27. I am "calm, cool, and collected"	1	2	3	4
28. I feel that difficulties are piling up so that I cannot overcome them	1	2	3	4
29. I worry too much over something that really doesn't matter	1	2	3	4
30. I am happy	1	2	3	4
31. I have disturbing thoughts	1	2	3	4
32. I lack self-confidence	1	2	3	4
33. I feel secure	1	2	3	4
34. I make decisions easily	1	2	3	4
35. I feel inadequate	1	2	3	4
36. I am content	1	2	3	4
37. Some unimportant thought runs through my mind and bothers me	1	2	3	4
38. I take disappointments so keenly that I can't put them out of my mind	1	2	3	4
39. I am a steady person	1	2	3	4
40. I get in a state of tension or turmoil as I think over my recent concerns and interests	1	2	3	4

STAIP-AD Test Form Y
www.mindgarden.com

Appendix B: Multidimensional Scale of Perceived Social Support Survey

Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988)

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

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

11. My family is willing to help me make decisions. 1 2 3 4 5 6 7
Fam
12. I can talk about my problems with my friends. 1 2 3 4 5 6 7
Fri

The items tended to divide into factor groups relating to the source of the social support, namely family
(Fam), friends (Fri) or significant other (SO).

Appendix C: Medical Outcomes Study Social Support Survey

RAND HEALTH

RAND > RAND Health > Surveys > RAND Medical Outcomes Study > Social Support Survey >

Social Support Survey Instrument

People sometimes look to others for companionship, assistance, or other types of support. How often is each of the following kinds of support available to you if you need it? Choose one number from each line.

Emotional/informational support	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Someone you can count on to listen to you when you need to talk	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to give you information to help you understand a situation	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to give you good advice about a crisis	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to confide in or talk to about yourself or your problems	○ 1	○ 2	○ 3	○ 4	○ 5
Someone whose advice you really want	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to share your most private worries and fears with	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to turn to for suggestions about how to deal with a personal problem	○ 1	○ 2	○ 3	○ 4	○ 5
Someone who understands your problems	○ 1	○ 2	○ 3	○ 4	○ 5

Tangible support	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Someone to help you if you were confined to bed	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to take you to the doctor if you needed it	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to prepare your meals if you were unable to do it yourself	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to help with daily chores if you were sick	○ 1	○ 2	○ 3	○ 4	○ 5

Affectionate support	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Someone who shows you love and affection	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to love and make you feel wanted	○ 1	○ 2	○ 3	○ 4	○ 5
Someone who hugs you	○ 1	○ 2	○ 3	○ 4	○ 5

Positive social interaction	None of the time	A little of the time	Some of the time	Most of the time	All of the time
Someone to have a good time with	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to get together with for relaxation	○ 1	○ 2	○ 3	○ 4	○ 5
Someone to do something enjoyable with	○ 1	○ 2	○ 3	○ 4	○ 5

Appendix D: Demographic Survey Questions

Demographic Survey Questions

1. What is your age?
2. What is your gender?
3. What is your marital status?
    a. Single; never married
    b. Married or domestic partner
    c. Widowed
    d. Divorced
    e. Separated
4. What is your highest level of education?
    a. High school graduate/GED
    b. Some high school; no diploma
    c. Some college; no degree
    d. College degree
    e. Trade school
    f. Post Graduate degree
    g. No schooling completed
5. Are you currently….?
    a. Employed
    b. Self employed
    c. Out of work
    d. Retired
    e. Unable to work
6. What is your relationship to the person diagnosed with dementia:
7. How long have you been caring for the person diagnosed with dementia:

Appendix E: Purchased Access to the State-Trait Inventory

mind garden
Tools for positive transformation

Hi, Latonya Cofield

Thank you for shopping with Mind Garden!

ORDER DETAILS - PAYMENT COMPLETE

Order: LTKRUPQMF
Completed on: 06/03/2021 10:49:25
Payment: Credit Card

Product	**Unit price**	**Quantity**	**Total price**
State-Trait Anxiety Inventory for Adults™ - Remote Online Survey License - Translation : English (default)	$1.75	100	$175.00
Student Discount on licenses for Latonya Cofield			-$35.00
Shipping			$0.00
Total Tax			$0.00
Total			**$140.00**