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Laughter Therapy and Coping Strategies for Dementia Patient Caregivers

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Walden University

College of Social and Behavioral Sciences

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Edith N. Ugwu

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Walden University
2020

Abstract

Laughter Therapy and Coping Strategies for Dementia Patient Caregivers

by

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MS, State University of New York, 2002

BA, University of Nigeria, 1993

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Clinical Psychology

Walden University

May, 2020

Abstract

The purpose of this research was to address a gap in the literature concerning the experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. Dementia caregiving involves high levels of stress, depression, and anxiety, which can cause both psychological and physical health problems for caregivers. It is, therefore, critical to identify effective coping strategies to mitigate caregiving stress. Laughter therapy is an inexpensive and readily available coping strategy that can help manage this stress. The study used a phenomenological qualitative approach to address the research question. The transactional model of stress and coping by Lazarus and Folkman was used as a guide. Seven caregivers participated in the semistructured face-to-face interviews and provided in-depth responses that revealed their experiences and insights regarding caregiving stress and laughter therapy. Coding analysis of the data collected generated 4 major themes: specific stressful caregiving experiences, learning opportunities from caregiving, laughter therapy benefits, and other coping strategies used. All the caregivers reported benefits in the use of laughter therapy in managing their caregiving stress. Stress management has consistently been a force for positive social change by addressing effective coping strategies that improve health and contribute to a good quality of life. Dementia caregivers could use the findings from this study to decide whether laughter therapy would be an effective, appropriate coping strategy for them.

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Dedication

I dedicate this dissertation to my three sons, Chibuzor Jr., Chidera, and Yadili, who were always patient and very understanding about my commitment to complete my Ph.D program. Your steadfast love and support made it all possible for me. I would also like to dedicate my work to my loving parents who kept me hopeful and motivated to reach the finish line.

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Chapter 1: Introduction to the Study

Dementia is a broad category of brain disease that often results in impaired reasoning, memory disorders, and personality changes (Langa & Levine, 2014). Smith (2016) postulated that dementia is associated with an enormous loss of brain tissues that, along with memories and other cognitive functions, is almost impossible to replace. As a result, this ongoing degenerative process has significant effects on the family caregivers of those diagnosed with dementia (Van den Block, 2014). Many caregivers experience caregiving stress and burden as a result of providing care to loved ones with dementia, which affects their emotional health (Sutcliffe, Roe, Jasper, Jolley, & Challis, 2015). According to Contador, Fernandez-Calvo, Palenzuela, Migueis, & Ramos (2012), there is a high prevalence of depressive symptoms and anxiety among informal caregivers of dementia patients. Major factors, such as incapacity, despair, weariness, loneliness, depression, patient neuropsychiatric symptoms, and a lack of knowledge about dementia can negatively affect dementia caregivers (Koca, Taskapilioglu, & Bakar, 2017).

For the dementia patients themselves, common symptoms include linguistic, emotional, and motivational problems (Loy, Schofield, Turner, & Kwok, 2014). According to Galvin and Sadowsky (2012), Alzheimer's disease (AD) is the most common type of dementia, which makes up 50%–70% of cases (Miklossy, 2015). Other types of dementia include vascular dementia, lewy body, frontotemporal, normal pressure hydrocephalus, and Parkinson's disease (Miklossy, 2015).

In 2015, approximately 46 million people were affected by dementia (Loy et al., 2014). Dementia is associated with aging; however, about 10% of the population develop

dementia at other points in their lives (Larson, Yaffe, & Langa, 2013; Loy et al., 2014).

In other words, dementia can affect individuals in many different age groups.

Nonetheless, dementia has a strong association with old age, affecting 3%–11% of people aged 65 and above. It also affects 25%–47% of people who are 85 and older (Galvin & Sadowsky, 2012). It is estimated that there could be up to 7 million people age 85 years and older with AD and other dementias by 2050 (Loy et al., 2014).

Dementia was reclassified as a neurocognitive disorder in the *Diagnostic and Statistical Manual*, fifth edition (DSM-5; American Psychiatric Association [APA], 2013). Dementia is diagnosed when there is a change from an individual's usual mental functioning with a persistent decline not associated with the normal aging process (APA, 2013). Medical imaging, cognitive and blood tests, as well as histories of illnesses are used to diagnose dementia (Loy et al., 2014).

One of the major challenges for families of those diagnosed with dementia is that there is no cure for the disease. Nevertheless, individuals with dementia can benefit immensely from cognitive and behavioral interventions (Sanabria-Castro, Alvarado-Echeverría, & Monge-Bonilla, 2017). Because drug therapy currently lacks the capability to prevent the occurrence or progression of dementia, therapeutic strategies can help in the management of the condition (Sanabria-Castro et al., 2017). Additionally, there are growing efforts to alleviate the risk factors of dementia, such as diabetes, smoking, obesity, and high blood pressure (Daly et al., 2018).

With such a complex disease, it should not come as a surprise that dementia caregivers suffer burnout due to the daily demands of caregiving, as well as

psychological distress caused by taking on different responsibilities in caring for loved ones with dementia (Koca et al., 2017). According to Van der Lee et al. (2017), dementia patients display two major symptoms: neuropsychiatric symptoms and cognitive impairment. Caregivers experience a heavier burden (the perceived enormous responsibility and the perceived amount of caring) and emotional distress when dementia patients' neuropsychiatric symptoms are severe as compared to cognitive impairment (Van der Lee et al., 2017). Van der Lee et al.'s (2014) review showed that the severity of dementia patients' neuropsychiatric symptoms are the determinants of caregivers' general burden and emotional distress.

Furthermore, both the caregiver's coping strategy and the patient's behavioral problems are strong determinants of caregiver burden (Van der Lee et al., 2014). Caregivers' increased burden may lead to decreased quality of life. However, according to Gallagher et al. (2011), symptoms of burden and depression among Alzheimer caregivers can be mitigated by caregivers' high self-efficacy. Caregivers with optimism and high levels of self-efficacy are less vulnerable to overburden (Contador et al., 2012). Also, a caregiver's coping strategies and the perceived challenges of caregiving determine how they ascribe meaning to their caregiving role (Cross, Garip, & Sheffield, 2018).

Furthermore, caregivers have expressed the need for consistent and flexible respite care with good quality of care for loved ones with dementia (Sutcliffe et al., 2015). A literature review on the influence of daycare centers for people with dementia on family caregivers found that dementia caregivers view the adult daycare center as a

haven for respite and as a source of support services where they can leave their loved ones with dementia and find some relief for a period of time during the day (Tretteteig, 2016). As a result, the caregivers experience improved competence in providing care to loved ones and also stay motivated to continue caring for them. Another review by Cross et al. (2018) showed that caregivers recognize support groups as a beneficial source of connection with other individuals in a similar situation that could contribute to improved quality of life for both the caregivers and the dementia patients. The most psychologically resilient caregivers are those who understand that they are not only in control and responsible for their loved ones with dementia but also that they too need help from time to time and are willing to use respite care for relief and self-care (Cross et al., 2018). The review also showed that some caregivers prefer practical support from friends and family over emotional support, while others prefer emotional support from other caregivers who are in similar situations.

It has also been found that keeping a full-time job while providing care for loved ones with dementia is extremely difficult. According to Wang et al. (2012), combining caregiving roles with formal employment increases caregiver burnout. Consequently, the affected employment also disrupts family and global economics. According to Koca et al. (2017), medical costs, homecare expenses, loss of wages, and the global economic burden of dementia is calculated to be approximately \$604 billion annually.

As the population of individuals with dementia increases, it is critical to understand the impact that this has and will have on society as more family members will be providing care to their loved ones. Considering the welfare of the caregivers with

regards to creating an awareness of effective coping strategies is one of the implications for positive social change for this study. This will foster the physiological and psychological health of caregivers and put them in a better position to provide better care. Using effective coping strategies will also reduce the unnecessary costs of those healthcare-related services associated with the mental health problems caused by dysfunctional coping strategies.

Problem Statement

The problem this research addressed is a gap in the literature concerning the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. According to Papastavrou et al. (2011), dementia family caregivers employ different types of coping strategies, which are not always effective for coping with the demands of caregiving. As a result, it is critical to identify effective coping strategies that may help to sustain caregivers and alleviate the effects of stress. With regards to this problem, the current study explored the effect of laughter therapy as a coping strategy among dementia caregivers.

Laughter therapy is a self-management technique founded by M. Kataria in 1995 (Prakash, 2013; Stream, 2009). According to Prakash (2013), laughter therapy is using laughter as an emotional workout that “Immediately places individuals in a new frame of mind—away from all forms of negativity” (p. 205). It can be in the form of mirthful laughter (real laughter), which is the focus of this current study, or in the form of laughter yoga (simulated laughter), or laughing without necessarily relying on humor or comedy, during which laughter is feigned as a group exercise (Shahidi et al., 2011). Shahidi et al.

(2011) went further to add that fake and real laughter affects the body in the same way. Laughter therapy has been found to improve immune function, increase pain tolerance, and decrease stress response (MacDonald, 2004).

Approximately 36 million people are affected by dementia worldwide, and about 10% of people will develop dementia at some point in their lives (Larson et al., 2013). Consequently, the demand for caregivers of dementia patients is quickly increasing. In some instances, dementia can be accompanied by serious medical problems and can even lead to death. The act of directly caring for a person with dementia is usually accompanied by increased personal burden, depression, stress, burnout, and related disorders (Ozcakar, Kartal, Dirik, Tekin, & Guldal, 2012). Furthermore, people caring for dementia patients find that their relationship with patients changes as time passes. Caregivers may experience feelings of grief and bereavement during the entirety of the illness, not only at the time of death (Larson et al., 2013). Due to many emotional challenges related to the patients' changes, dementia patient caregivers find it difficult to cope with stress.

Caregiving can be motivated by obligation or sense of commitment (Aggar, 2016; Hirst, 2005). Caregiving involves providing paid or unpaid care and support to a family member, friend, or client with a disability (Aggar, 2016). Caregiving is essential for both the family members and the patients, but the impact that caregiving has on caregivers' physical and mental health is also significant (Aggar, 2016). Evidence of the stress associated with caregiving reveals the need for the provision of appropriate support for caregivers (Brodaty & Donkin, 2009). Due to the stress associated with dementia

caregiving, this study explored the extent to which laughter therapy can help caregivers cope with caregiving stress.

Laughter therapy and humor have been found to be effective strategies for coping with stress regardless of what causes the stress (Snelling, 2012). Humor has been shown to help people deal with illnesses, death, suffering from disability, and caring for family members (Snelling, 2012). Humor therapy has been used in marriage counseling to help couples who have struggled with the burdens of marriage (Hoyt & Andreas, 2015). Hoyt and Andreas (2015) concluded that humor can be restorative; it can also be the medium and the message, as well as an anecdote and an antidote.

Purpose Statement

The purpose of this research was to address a gap in the literature concerning the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. Certain coping interventions, such as respite care, communication technology, case management, psychosocial intervention, and physical exercise have already been used and researched for dealing with the increased stress and depression experienced by dementia caregivers (Chen, Huang, Yeh, Huang, & Chen, 2015; Lee, 2015; Schoenmakers, Buntinx, & Delepeleire, 2010). However, there is little evidence that these interventions substantially improve the functioning of dementia caregivers (Schoenmakers et al., 2010). Schoenmakers et al. (2010) went further to recommend that future research focus on how to match interventions with the needs and wishes of family caregivers. Papastavrou et al. (2011) stated that dementia family caregivers have utilized different types of dysfunctional coping strategies in managing

their caregiving stress and recommended a longitudinal study on successful coping mechanisms to mitigate chronic stress of caregiving. Identifying truly effective coping strategies will alleviate the caregiving stress experienced by dementia caregivers. Therefore, the purpose of this study was to address the use of laughter therapy as a coping strategy to manage caregiving stress among dementia caregivers.

Dementia caregivers have also used dysfunctional emotion-focused coping strategies, such as wishful thinking, self-blame, and avoidance behavior (Huang et al., 2015; Roche et al., 2015; Snyder et al., 2015). Very little research has been conducted on the impact of self-management coping strategies on the family caregivers of dementia patients. Many researchers have investigated the impact of social support groups as a coping strategy essential for caregiver stress (Egdell, 2012; Lee, 2015; Golden & Lund, 2009; Link, 2015). Lee (2015) found that technology-based social support had a positive impact on the reduction of caregiving burden among dementia caregivers as well as an improved support network. Caregivers' development of support networks is determined by the different resources they can access and the expectations of their role within the support network of caregivers (Egdell, 2012). Social support group leaders can guide the direction of group meetings by suggesting and encouraging members to identify and discuss different options available in their situations, discuss the advantages and disadvantages of ways of assessing and managing situations, invite members to share their experiences in managing similar situations within the group, and invite discussions on individuality regarding beliefs, attitudes, and perspectives.

Those caring for dementia patients are becoming increasingly aware of the existence and benefits of using social support groups as a coping strategy (Link, 2015). Peer support groups can provide caregivers many benefits, such as practical assistance, guidance to community resources, identification of personal concerns, and the development of effective problem-solving techniques (Wang, Chien, & Lee, 2012). However, despite all the benefits of support groups, attending them can pose a challenge to caregivers. Lee (2015) stated that transportation was sometimes a major challenge. Lack of respite care for the care recipient while the caregiver attends the support group is also a hindrance (Lee, 2015). Caregivers' skepticism about sharing experiences with the group for fear of being judged can also prevent them from attending support groups (Golden & Lund, 2009). Cultures and lifestyles that do not favor accepting help from outsiders are another contributing factor to caregivers' limitations in utilizing support groups (Golden & Lund, 2009).

In the absence of support groups, self-management techniques such as laughter therapy are another option for managing caregiving stress. Mora-Ripoll (2010) revealed that laughter can help people physiologically, psychologically, socially, and spiritually. Laughter can also improve the overall quality of life (Mora-Ripoll, 2010). Laughter therapy has proven to be a useful, cost-effective, and easily accessible intervention with positive effects on depression, insomnia, and stress (Ko & Youn, 2011).

Laughter therapy is a new approach compared to other forms of coping, such as prayer/faith, exercising, medications, and so forth. (Snelling, 2012). Specifically, in this study I attempted to identify the benefits of laughter therapy directly from caregivers who

have used/experienced it in the past or from caregivers currently using it as a form of coping with their caregiving stress.

Significance of the Study

As Baby Boomers age, the number of dementia and AD diagnoses increases (Panegyres & Gray, 2010). As this trend continues, the need for appropriate care for this population is also peaking (Panegyres & Gray, 2010). Baby Boomers (born between 1946–1965) are particularly at risk of developing AD or dementia. Out of the 78 million Baby Boomers in the United States, about 10 million are predicted to develop dementia in their lifetime (Panegyres & Gray, 2010).

Caring for individuals who are physically or mentally disabled is a challenging task, let alone for those with a severe cognitive impairment, such as dementia. The focus of research in this area has tended to emphasize the care and treatment of dementia patients, which has resulted in little attention being paid to the coping challenges faced by caregivers in their inevitably difficult daily routines (Scott et al., 2016). Scott et al. (2016) demonstrated that technology-based cognitive behavioral therapy is potentially effective in reducing dementia caregivers' depression and recommended the development of methodologically sound trials aimed at assessing the efficacy of technologically delivered self-help interventions for dementia caregivers.

In the current study I recognized some published works on the benefits of support group programs for dementia caregivers. However, these programs are not conveniently attainable whenever needed because of their obvious limitations, such as proximity or lack of respite care for the patient (Lee, 2015). In such instances, the need for stress relief

could be achieved with a self-management technique that, by definition, is always available. Furthermore, Prakash (2013) detailed how laughter is a readily available, inexpensive tool for destressing.

This is particularly important, as dementia patient caregivers are developing medical and psychological illnesses because of the accumulated stress (Papastavrou et al., 2011). Caregiver depression has been associated with depressive symptoms and functional deterioration in care recipients, which spikes the institution of the care recipient (Scott et al., 2016). Stress management has consistently been a force for positive social change by addressing effective coping strategies that improve health and maintain a good quality of life. The current study will provide information about dementia caregivers' experiences in using laughter therapy to manage their caregiving stress, and the information provided may be useful for other dementia caregivers in deciding whether it is an appropriate coping strategy for them. There is a critical need for effective coping strategies that will help caregivers mitigate their caregiving stress and avoid physiological- and psychological-related illnesses (Papastavrou et al., 2011).

Background of the Problem

Dementia can be progressive and affect an individual's ability to perform everyday activities (Sanabria-Castro et al., 2017). As a clinical syndrome, it is broadly defined by three criteria: multiple deficits in cognitive skills, a notable decline from previous skill levels, and a significant disruption of daily routines and common activities (Sanabria-Castro et al., 2017). Based on these three general criteria, it is estimated that 5.2 million Americans have AD, with the expectation that someone will develop AD

every 67 seconds, which will speed up to every 33 seconds by 2050 (Alzheimer's Association, 2014). In 2014, approximately 2 million individuals aged 85 and older were identified as having AD (Reitz, Brayne, & Mayeux, 2011). Of those people over the age of 65, 10% have significant intellectual decline, and more than 50% of these cases are believed to be dementia (Cohen-Mansfield, 2015). It is also estimated that by 2030, 20% of the U.S. population will be over 65 years old (Cohen-Mansfield, 2015), and by 2050, there could be as many as 7 million people age 85 and older with AD (Sheung-Tak, 2017).

The majority of people with dementia are being cared for by family members (Sheung-Tak, 2017). A meta-analysis revealed that family dementia caregivers significantly experience greater levels of stress compared to non-dementia family caregivers (Bloudek, Spackman, Blankenburg, & Sullivan, 2011; Brodaty & Arasaratnam, 2012), making dementia caregivers heavily burdened and overwhelmed (Sheung-Tak, 2017). Caregiver depressive symptoms are strongly correlated with not just stress but increased healthcare costs over an average 2-year period in the United States (Sheung-Tak, 2017).

Dementia caregiving does not only involve dealing with the individual's intellectual deficits but also their long-term physical, emotional, behavioral, mental, and developmental problems (National Alliance for Caregiving [NAC], 2017). Therefore, dementia caregivers assist loved ones with dementia in performing activities of daily life (Sheung-Tak, 2017). Nearly 24% of dementia caregivers reported helping family members with dementia in such a capacity (NAC, 2017). Dementia caregivers also help

provide transportation, coordinate health services, prepare meals, and administer medications (NAC, 2017).

According to the NAC (2017), dementia caregivers are nearly twice as likely to report increased deterioration of health because of their caregiving responsibilities. They also experience more physical strain and emotional stress compared to non-dementia caregivers (NAC, 2017). Furthermore, an estimated 17.7 billion hours of unpaid care were provided by approximately 15.5 million family members and other unpaid caregivers of people with AD and other dementias in 2013 (Livingston et al., 2017).

Dementia caregivers experience high levels of stress when caregiving is intense and they perceive that there is only limited support available to them (Sörensen & Conwell, 2011). Although research indicates limited intervention effects, psychoeducational interventions are proven to alleviate caregiving burden and stress (Sörensen & Conwell, 2011). Cognitive-behavioral therapy and support groups can help improve caregiver burden, stress, depression, and anxiety (Sörensen & Conwell, 2011).

Humor can also be a stress-coping technique (Roaldsen, Sørli, & Lorem, 2015). Humor can help decrease anxiety and burden, enhance problem-solving ability, safeguard important relationships, communicate difficult topics, regain identity, and help significant others to cope (Roaldsen et al., 2015). Although laughter therapy may not cure diseases, it has been shown to relieve the suffering and stress associated with them (Bennett et al., 2014). Laughter therapy has been effective in decreasing pain, anxiety, stress, depression, and fatigue, as well as improving immunity, quality of life, happiness, sleep quality, and resilience (Bennett et al., 2014).

Conceptual Framework

The conceptual framework for this study was Lazarus and Folkman's (1984) transactional model of stress and coping. Because this model addresses the imbalance between an individual's demands and resources in a stressful event, it was deemed appropriate for the foundation that informed this present study. The fundamental view of this model is that a potentially stressful event will activate the primary appraisal process, during which an individual does an assessment of the degree to which a stimulus represents a threat in relation to their wellbeing (Goh, Sawang, & Oei, 2010). Perception of a threat that prompts the secondary appraisal process provides a holistic assessment of the individual's ability to cope and manage the threat or challenge. In order to develop an effective stress management program, it is important to identify the factors causing the stress. In this study, the caregiving of dementia patients is the potential stressor. Knowing the causes of the stress help shape the intervention methods, which will effectively target these causes (Kirschner, Young, & Fanjoy, 2014).

Furthermore, Lazarus and Folkman's (1984) interpretation of stress focuses on the transaction between individuals and their external environment, known as the transactional model. The model purports that stress may not result from a stressor if the individual does not perceive the stressor as a threat (Lazarus & Folkman, 1984). What one person perceives as stressful maybe seen as positive or even challenging to someone else. In addition, an individual may possess better coping skills than someone else. Nonetheless, stress is still real and can take a toll on any human being (Kirschner et al., 2014).

Nature of the Study

The nature of this study was qualitative. I used the phenomenological approach to understand the experiences of dementia caregivers who have used laughter therapy as a coping method for caregiving stress. According to Byrne (2009), phenomenology is a type of qualitative research that examines the lived experiences of humans in order to gain an understanding of the essential truths of life experiences. A researcher who uses this approach should explore a phenomenon free of bias (Creswell, 2013). In addition, to fully explore laughter therapy as a coping method, Lazarus and Folkman's (1984) transactional model of stress and coping was utilized (Goh et al., 2010).

Research Questions

RQ: What are the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress?

Corollary Questions

CQ1: How do dementia caregivers cope with caregiving stress?

CQ2: How do dementia caregivers describe stress associated with their caregiving role?

CQ3: How do dementia caregivers describe their experience in using laughter to cope with their caregiving stress?

Possible Types and Sources of Information or Data

I was the instrument for data collection, and I used bracketing to mitigate researcher bias and maintain objectivity (see Leedy & Ormrod, 2012). I conducted the study alone. The qualitative researcher is the key instrument in collecting data from

multiple sources through examination, observation, and interviews. Such research collects data in a natural setting and through inductive data analysis to establish themes (Creswell, 2013).

In this study, I used purposive sampling to gather the opinions and attitudes of a group of people. In purposive sampling, the researcher selects the units (people, cases, organization, and events) to be studied (Leedy & Ormrod, 2012). I chose participants solely for their experience with laughter therapy, and all of them were informal caregivers of dementia patients from a community support group. Seven participants were selected in the order of first come first served. In qualitative interviews, the researcher conducts face-to-face interviews with six to eight participants (Creswell, 2009). I obtained information from these participants utilizing semistructured, face-to-face interviews.

I conducted this study at a public library facility. I requested that the study site provide a private study room with a closed door for face-to-face interviews. From the in-depth interviews, I collected data, which I transcribed, coded, analyzed, and condensed into themes (see Creswell, 2013). I used data analysis software to help with text organization and coding (Creswell, 2013).

Definition of Terms

In this study, I provided operational definitions of the terms and the context in which they were used.

Caregivers: In this study, the term caregivers addressed individuals taking care of people with dementia. These individuals may include immediate family members, but

they could also be other relatives, friends, or professional workers (Alzheimer's Association, 2014).

Caregiving stress: According to Sun (2014), caregiving stress is the caregivers' appraised difficulties that could cause feelings of frustration, anxiety, or uneasiness.

Coping strategies: Loyd et al. (2019) defined coping strategy as the means by which people manage stress. Coping strategies have a mediating role in the impact of caregiving-related stress (Loyd et al., 2019).

Dementia: Dementia is a syndrome consisting of disturbances in distinct intellectual functions. The main notable symptom of dementia is memory loss, but many other functions can also be affected (Cohen-Mansfield, 2015).

Laughter therapy: Laughter therapy can be defined as the use of laughter as an emotional workout, which immediately places individuals in a new frame of mind away from all forms of negativity (Prakash, 2013).

Stress: Lazarus and Folkman's (1984) interpretation of stress focuses on the transaction between individuals and their external environment, known as the transactional model.

Assumptions and Limitations

In the study I assumed that the participants would be truthful in their responses. Another assumption was that the research environment would not hinder participants from responding to interview questions. Additionally, I assumed that the research findings would reveal how laughter therapy helps in the management of caregiving stress.

As a phenomenological study, a limitation of this study was that the words of the participants were the only source of data, meaning the Hawthorne effect could have played a major role. The Hawthorne effect happens when participants change their behaviors because they are aware of their participation in a research study (Leedy & Ormrod, 2005).

Summary

Dementia is caused by damage to neurons, the nerve cells in the brain (Galvin & Sadowsky, 2012). It is a syndrome consisting of disturbances in distinct intellectual functions (Galvin & Sadowsky, 2012). The main notable symptom of dementia is memory loss, but many other functions can also be affected (Cohen-Mansfield, 2015). Individuals affected by this disease will, at some point, depend on caregivers to assist them with daily activities (Aggar, 2016). Van der Lee et al. (2017) stated that the majority of individuals with dementia are cared for by their relatives (mainly spouses or adult children). As a result of dementia's complex problems, providing care to patients is associated with emotional and physical health problems among caregivers (Van der Lee et al., 2017). Most of the grievances among caregivers are related to the behavioral problems of the dementia patients (Van der Lee et al., 2017), and increased patient dependency on caregivers elevates the stress experienced by dementia caregivers (Aggar, 2016). Laughter therapy has been shown to help in alleviating the stress associated with caregiving (Brodaty & Donkin, 2017). I used Lazarus and Folkman's (1984) transactional model of stress and coping to explore the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress.

In Chapter 2, I examine peer-reviewed journal literature related to the study topic.

The first section introduces the study purpose and then addresses the following significant sections in depth: conceptual framework, laughter therapy, dementia as a disease, dementia caregivers, and caregiving stress. Chapter 2 also provides information on a gap in the literature regarding the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress.

Chapter 2: Literature Review

Introduction

The purpose of this literature review was to assess the relevant research and theory pertaining to the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. Schoenmakers et al. (2010) found that certain coping interventions, such as respite care, communication technology, case management, psychosocial intervention, and physical exercise have been used to deal with the increased stress and depression of caregivers. However, there is little evidence that these interventions substantially improve the functioning of caregivers (Schoenmakers et al., 2010).

Those caring for dementia patients are becoming increasingly aware of the existence and benefits of laughter therapy as a coping strategy (Link, 2015), which can have a beneficial role in preventing stress (Kong, Shin, Lee, & Yun, 2014). Mora-Ripoll (2010) found that laughter can help people physiologically, psychologically, socially, and spiritually, as well as improve the overall quality-of-life. In addition, laughter therapy has proven to be a useful, cost-effective, and easily accessible intervention that has positive effects on depression, insomnia, and stress (Ko & Youn, 2011). The major sections of this literature review include the literature search strategy, laughter therapy, dementia as a disease, dementia caregivers, and caregiving stress.

Literature Search Strategy

The literature search strategy I used for the present study included the following terms/combinations of terms: *dementia*, *dementia patients*, *Alzheimer's disease*,

Alzheimer's patients, caregivers, caregiving, stress, depression, caregivers' burnout, elderly, older adults, seniors, coping, coping behaviors, coping methods, coping techniques, coping styles, coping skills, coping strategy, coping mechanisms, laughter, laughter therapy, humor, humor therapy, humor coping, social support, laughter yoga, relaxation, life satisfaction, happiness, cheerfulness, psychological wellbeing, prayer, and spirituality.

I performed a comprehensive, systematic search of the literature on dementia caregiving and laughter therapy from 1984–2018. The literature search strategy involved the use of several academic databases, including PsycARTICLES, PsycINFO, PsycEXTRA, SocINDEX with Full Text, PsycBOOKS, Academic Search Complete, CINAHL Plus with Full Text, Education Source, ERIC, MEDLINE with Full Text, Research Starters–Education, Google Scholar, and Google Books. This literature search generated over a thousand articles, but only about 150 articles were selected as germane to this study.

Conceptual Framework

This section of the research focuses on Lazarus and Folkman's (1984) transactional model of stress and coping. The model suggests that interactions between a person and their environment can lead to an imbalance between demands and resources; as a result, stress arises. In other words, people encounter stress when internal or external pressure engulfs their ability to cope with and mediate the existing pressure. When experiencing these interactions, individuals face both primary and secondary appraisals. During primary appraisal, individuals evaluate whether the interaction has (no)

significance to them or if the interaction is harmful and threatening (i.e., stressful). If the primary appraisal deems the interaction as stressful, individuals will start the secondary appraisal. During secondary appraisal, individuals decide how they can best remedy their situation and change undesirable conditions. This appraisal is done by evaluating internal (e.g., will power, inner strength) and external (e.g., peers, professionals) coping options in order to produce a more positive environment. An individual's ability or inability to cope with the stressful interaction leads to positive and negative stress, respectively.

Lazarus and Folkman's (1984) transactional model of stress and coping adequately describes the stressors and coping strategies of caregivers. Family caregivers of elderly patients with AD and related disorders have been known to experience high levels of stress, yet they vary in their ability to successfully cope with that stress (Haley et al., 1987). Haley et al. (1987) completed a study that focused on identifying factors related to good and bad adaptational outcomes among dementia caregivers. The sample of caregivers used in this study had significantly higher levels of depression and lower levels of social and life satisfaction than an age-matched control group. When analyzing the results, the following outcome was discovered: caregiver appraisals of patients' behavioral problems and disability as highly stressful and appraisals of themselves as lacking in self-efficacy in managing these problems were significantly related to higher levels of caregiver depression (Haley et al., 1987). This particular outcome suggests that if the depression levels of this group of caregivers could be remedied, then the caregivers might not appraise themselves as unable to manage their problems, as they often do.

Subsequent research has been carried out in order to develop and revise Lazarus and Folkman's (1984) transactional model of stress and coping. Goh et al. (2010) stated that one of the key ideas of the transactional model is that primary appraisal, secondary appraisal, and coping strategies mediate the relationship between stress and an individual's response regarding the stress. They gathered 49 male and 80 female participants who were full-time employed (i.e., nurses, administration employees) and measured their primary and secondary appraisal, ways of coping, and occupational stress levels. Their research incorporated empirical findings that demonstrated the dynamic and mutable nature of psychophysiological stress experience and the primary and secondary appraisal processes.

In association with Lazarus and Folkman's (1984) transactional model of stress and coping, Gräbel and Adabbo (2011) developed a model that conceptualizes positive and negative consequences of homecare. Their model focuses on perceived burden (i.e., relationship with care receiver), subjective burden (the rating processes of perceived burden), and objective burden (i.e., average time spent in caregiving activities). Employed caregivers are subject to both burden and relief; the burden may come in the form of not having sufficient time for their children and partner and the relief may come in the form of experiencing personal appreciation in one's profession (Gräbel & Adabbo, 2011).

The transactional model of stress and coping has also been applied to analyzing stress generation in romantic relationships. Eberhart and Hammen (2010) examined a transactional, interpersonal model of depression in which stress generation mediates the

association between interpersonal style and depressive symptoms. Eberhart and Hammen (2010) sampled college women over a 4-week period on a day-to-day basis. Some of the measurements of the study included Beck Depression Inventory–2nd Edition, Experiences in Close Relationships, and the Excessive Reassurance Seeking Scale. The study showed “strong indication for a transactional, mediation model in which interpersonal style predicted romantic conflict stress, and in turn depressive symptoms” (Eberhart & Hammen, 2010, p. 23). The results of Eberhart and Hammen’s (2010) study supported the transactional model and showed the following: romantic conflict stress mediated the effects of anxious attachment and reassurance seeking on depressive symptoms, and daily conflict stress mediated the effects of anxious attachment, avoidant attachment, reassurance seeking, and love dependency behaviors on daily depressive symptoms. Eberhart and Hammen’s (2010) study also provided evidence that the transactional model helps explain prospective changes in symptoms and daily mood, and that the transactional model is applicable to romantic stressors. The study highlighted the flexibility of the transactional model, making it apparent that the model can describe how interpersonal style influences depressive symptoms with its control on stress generation in romantic relationships.

The transactional model of stress and coping has also been implemented to expound upon the psychological adjustment of nonchronically ill African-American siblings of children with sickle cell disease. Gold et al. (2007) carried out a study involving 97 siblings from 65 families who care for a child with sickle cell disease. The results of this study showed that families who practiced high levels of family coping,

support, and expressiveness, along with low levels of conflict, were associated with positive sibling adjustment. Gold et al. (2007) also studied the inclusion of sibling adaptational processes, including measures of coping, self-efficacy, and perceived social support. Overall, this study supported the use of family interventions for siblings of children with sickle cell disease who may be battling psychological adjustment.

Kinney et al. (2003) used Lazarus and Folkman's (1984) transactional model of stress and coping to examine the general and religious coping strategies used by 64 caregivers to spouses with dementia in dealing with caregiving stress. The following independent variables were used as measurements during the study: most significant caregiving hassle, appraised controllability of the hassle, general coping, religious coping, and depressive symptomatology. This study showed that caregivers who used greater levels of emotion-focused coping to deal with an uncontrollable hassle in caregiving reported higher levels of depressive symptoms (Kinney et al., 2003).

I believed the transactional model was the right model to use to explore the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. The demands of dementia caregiving can be higher than the resources available to meet those demands, thereby creating stress during the process of managing caregiving-related activities. The caregiving demand could rob the caregivers of rest, the ability to engage in social activities, and other opportunities. These lost opportunities could trigger stress. The lack of skills in managing caregiving stress and employing dysfunctional coping strategies could negatively impact the physiological and psychological health of the caregivers rather than helping to alleviate it.

Laughter Therapy

Laughter is a universal component of the human experience that happens in all cultures across the world (Allen, 2014). Laughter starts early in life, and human children engage in laughter as early as four months of age (Vrticka, Black, & Reiss, 2013).

Laughter appears not only in human culture but also in some primate species. Laughter is a universal way human beings communicate and build relationships (Gilbert, 2014).

Humor is a vital part of the human socio-affective and cognitive functioning (Vrticka et al., 2013), serving as a mechanism for the physiological release of tension. Thus, people tend to engage in laughter to help alleviate stress (Vrticka et al., 2013). Humor even releases inhibitions and free individuals to express their true feelings (Danielsen, 2013).

Although the scientific study of humor is relatively new, the philosophy of humor is ancient (Bast & Berry, 2014). More recent research has supported the view that humor and laughter are therapeutic for relieving tension and anxiety (Bast & Berry, 2014).

Humor is a popular topic that has captured people's interest because it is believed to be a fundamental part of human nature (Ford, Platt, Richardson, & Tucker, 2016).

There is also a strong correlation between humor and improved mental and physical health (Ford et al., 2016). Laughter therapy, then, can be a cost-effective way of enhancing social interaction, physical health, and mental health (Gilbert, 2014).

Collicutt and Gray (2012) used a qualitative study to explore the relationship between humor, religion, and wellbeing. Humor can be viewed as a positive psychological state with the capacity to enhance physical and psychological wellbeing (Collicutt & Gray, 2012). The study revealed that laughter itself has a direct, positive

physical effect on wellbeing (Collicutt & Gray, 2012), and the findings strongly aligned with its title that a merry heart doeth good like medicine.

Laughter is social and infectious (Collicutt & Gray, 2012) but is often a response to challenges or adversity (Freud, 1905). Stengel (2014) supported the notion that humans laugh often but not always because something is funny. People laugh in the face of joy and adversity, and laughter's primary function is to rouse positive and/or negative emotions (Stengel, 2014). Nevertheless, people use laughter to cope with stress and anxiety (Stengel, 2014).

Roaldsen and colleagues (2015) used a socio-narrative approach to explore the role of humor as part of stress-coping technique used by people experiencing a life-threatening illness, such as cancer. Fourteen participants aged 23–83 with a cancer diagnosis were interviewed in the study, which revealed that humor worked as a stress-coping technique for the participants (Roaldsen et al., 2015). It helps alleviate the anxiety and burden, enhance problem-solving ability, safeguard important relationships, communicate difficult topics, regain identity, and help significant others to cope (Roaldsen et al., 2015).

A single-blind prospective pilot study also revealed that laughter therapy can have beneficial effects on the stresses associated with breast cancer (Kong et al., 2014). Laughter remains a social ritual for all human societies when faced with any type of serious illness (Lucas, 2014). Something as distressing and disruptive as a positive cancer diagnosis can leave patients and family members in a stressful situation (Kong et al.,

2014). Universally, laughter has proven beneficial for coping with the stress associated with serious illnesses (Lucas, 2014).

Among psychological coping strategies, humor also has promise. Research has validated the effectiveness of laughter and humor to cope with stress and anxiety (Abril, Szczypka, & Emery, 2017). Researchers have found out that laughter therapy is equally effective as a group exercise in the improvement of depression, stress, and overall wellbeing (Gilbert, 2014).

Nyatanga (2014) explored the benefits of humor in palliative care. Palliative care is often associated with sadness, fear, and anxiety because of the uncertainties that patients experience as they approach the end of their life. The author revealed that one important aspect of humor was that it offered patients and their family the courage to accept negative news, find ways to adjust, and resolve and cope with serious issues with minimal stress or pain (Nyatanga, 2014).

Evidence from other studies has suggested that laughter therapy is effective for other groups, such as children, the elderly, and persons with mental health, cancer, and other chronic conditions (Bennett et al., 2014). Laughter and humor therapy have been used to treat various mental health disorders, especially depression; it can stimulate sensitive cerebral regions and recalibrate the hypothalamic pituitary adrenocortical system, thereby improving depression and mood (Bennett et al., 2014). Bennett et al. (2014) attempted to apply laughter therapy to dialysis patients and was shown to be appropriate for the dialysis context. Laughter helped to decrease anxiety, especially during patients' first day of dialysis. Laughter helped improve immunity, fatigue, sleep

quality, respiratory function, and blood glucose regulation (Bennett et al., 2014). Given the similarities of other healthcare environments, such as residential care, common rooms, and chemotherapy day units, it is no surprise that laughter therapy was applicable to the dialysis units (Bennett et al., 2014).

Although laughter therapy may not cure diseases, it relieves the suffering and stress associated with disease and illnesses (Bennett et al., 2014). Furthermore, Berk (2015) suggested that humor can be used as a coping technique for doctors and nurses dealing with horrific injuries. Positive humor can help caregivers cope with stressors, reduce interpersonal tensions, and improve social relationships (Berk, 2015). Scott et al. (2015) believed that humor plays an integral role in the development of a positive therapeutic alliance between the caregiver and the client. The addition of humor is an effective method of improving therapeutic relationships. In addition to strengthening the positive therapist–client relationship, humor has been proven to decrease depressive symptoms and stress (Scott et al., 2015). The combination of medication and humor therapy also improved mood, quality of life, and mental and physical functioning (Scott et al., 2015).

Furthermore, a quantitative study was used to examine the effect of laughter therapy on cancer patients (Kim, Kim, & Kim, 2015). Using a randomized controlled trial, 31 breast cancer patients received 4 sessions of therapeutic laughter. Positive effects were attained after the first therapeutic laughter session. In the end, the scores from the study concluded that laughter therapy was effective in significantly reducing anxiety, depression, and stress in breast cancer patients (Kim, Kim, & Kim, 2015).

Rieger and McGrail (2013) utilized a quantitative study to investigate whether coping humor predicted certain measures of family functioning in parents of children with disabilities. To quantitatively examine the concept of coping humor, 72 parents of children with autism spectrum disorders and multiple disabilities completed the Coping Humor Scale (CHS) and Family Adaptability and Cohesion Evaluation Scales (Rieger & McGrail, 2013). Coping humor was hypothesized to predict balanced cohesion as well as flexibility (Rieger & McGrail, 2013). The data were analyzed using single, hierarchical linear regression. Findings indicated that coping humor significantly predicts positive family functioning (Rieger & McGrail, 2013). The study recommended that educators and clinicians consider the use of humor as an effective coping strategy when working with families that include a child with a disability (Rieger & McGrail, 2013). The results revealed the benefits of coping humor, and, if applied correctly in the real world, it could lead to more effective services and support for the identified families (Rieger & McGrail, 2013).

Frisby, Horan, and Booth-Butterfield (2016) investigated the role of humor during the post-divorce process. The study indicated that sharing laughter with a source of social support following divorce can be a great way for an individual to receive social and emotional support (Frisby et al., 2016). Consistent with the understanding that humor is a productive coping mechanism, the use of humor by individuals experiencing stress associated with divorce may allow them to cope and enhance their resilience (Frisby et al., 2016). Humor can alleviate all the symptoms of divorce, such as loss of trust,

damaged self-esteem, anxiety, increased worry about being hurt, lower confidence, depression, negative emotions, etc.

Another quantitative study was conducted as a one-group clinical trial (before and after intervention) with 26 female and 14 male participants (Ghafouri, 2015). Laughter therapy was delivered through playing CDs containing comedy shows to patients for sixteen 30-minute sessions (Ghafouri1, 2015). The findings showed that laughter therapy has positive effects on the blood pressure of patients undergoing hemodialysis (Ghafouri1, 2015). In other words, humor was effective in decreasing the blood pressure of the studied patients (Ghafouri1, 2015).

Bains et al. (2015) utilized a randomized, controlled trial to examine the effect of watching a humorous video on short-term memory in older adults. The research findings supported rehabilitative benefits for humor that can be applied to whole-person wellness programs for older adults (Bains et al., 2015).

An experimental design was also used to investigate the efficacy of a standardized humor therapy group in a clinical context specifically for older depressed patients (Konradt et al., 2013). In a semi-randomized design, a control group (50 patients) was compared with an experimental group with treatment (49 patients). A set of questionnaires (Geriatric Depression Scale, Short Form Health Survey, State-Trait-Cheerfulness Inventory, and Satisfaction with Life Scale) were administered before and after treatment (Konradt et al., 2013). Results revealed that both groups showed improvement in their depression, suicidal tendency, and stated cheerfulness. However, only participants in the humor group showed changes of stated seriousness and

satisfaction with life. In other words, humor provided additional benefits for older depressed patients in this quantitative study (Konradt et al., 2013).

Incorporating more humor and play into our daily relationships can improve the overall recovery of patients, quality of caregiving, as well as the connections with family members and friends (Danielsen, 2013). Laughter and humor therapy have been found to be effective in coping with stress regardless of its cause. It has also been effective for people dealing with illnesses, death, disabilities, or caring for family members (Danielsen, 2013), as well as in marriage counseling to help couples who struggle with the burdens of marriage (Hoyt & Andreas, 2015).

Allen (2014) reiterated that laughter can be the best medicine. He disagreed with the notion that humor and professionalism are mutually exclusive and depicted how humor can be the key to unlocking a positive therapeutic relationship between patients and caregivers (Allen, 2014). Laughter is also a great tool in building confidence and self-esteem, as well as coping with stress (Allen, 2014).

However, some patients may not find humor beneficial in certain situations. An ethnographic design was used to study participants in a drug treatment facility. The use of humor by participants, despite good intentions, may be problematic or offensive to clients (Anderson, 2015). For example, the vulnerable young people who turn to rehabilitation centers for help may not find it amusing when professionals use humor. Anderson (2015) concluded that professionals should use humor with care, rather than viewing it as a benign, risk-free addition to treatment.

Nevertheless, laughter therapy has many different practical medical and social applications. According to Collicutt and Gray (2012), laughter and humor have a positive effect on wellbeing. Allen (2014) and Bast and Berry (2014) both stated that laughter possesses a great healing capacity and can be used to treat conditions and symptoms, such as tension, anxiety, and depression. Laughter's greatest application may be in palliative care, where treatment is based solely on making patients feel as comfortable as possible with their terminal conditions; laughter can be used as a coping mechanism that helps patients and families overcome situations involving terminal illness (Nyatanga, 2014). Laughter should be implemented in patient care, but this should be done carefully. Even though clinicians should make use of humor as a coping mechanism, there are many instances where such an approach is not optimal or appropriate. Because of this, cultural competency training may be required to instruct clinicians on how to make proper use of humor in patient settings.

Dementia as a Disease

Dementia is classified as a form of memory disorder. Memory disorders are generally a result of damage to neuroanatomical structures that hinders the storage, retention, and recollection of memories (*Kopelman, 2002*). Memory disorders can also be progressive; evidence of this can be found in AD, various types of dementia, and disorders resulting from traumatic head injuries (*Kopelman, 2002; Stein, 2013*).

Western views of mental illness have revolved around dangerousness, incompetence, responsibility, and stigmatization (Miklossy, 2015). This has led to many memory-impaired individuals being denied employment, housing, and the tendency to

face false criminal charges (Miklossy, 2015). Additionally, there are limited services available to individuals with memory impairment (Anderson, 2015). Some individuals with memory disorders are unable to acquire or retain new information, making it difficult or impossible for them to meet social, family, or work-related obligations (Modak, Sarkar, & Sagar, 2016). Consequently, there is a large responsibility placed on caregivers (usually family members) to manage their economic and emotional challenges (Dunkin, 2009).

In collectivist cultures like Asia and Africa, focus lies on the village to not only raise a child but provide for the elderly as well (Karasz, 2005). Each person in the community has a certain role to fulfill, and it is deemed socially acceptable to uphold these roles (Karasz, 2005; Kopelman, 2002). In Asian cultures, there is a focus on the balance of body, mind, and spirit. Consequently, mental illness is believed to be the result of an imbalance between body, mind, and spirit (Karasz, 2005). Due to this reason, treatment methods vary compared to Western treatment (Karasz, 2005). In addition, the costs of mental health treatment/services are not as expensive as in Western cultures (Sanabria-Castro et al., 2017).

As mentioned previously, dementia as a clinical syndrome is broadly defined by three criteria: multiple deficits in cognitive skills, a notable decline from previous skill levels, and a significant disruption of daily routines and common activities (Sanabria-Castro et al., 2017). It is also often defined based on the criteria given in the Diagnostic and Statistical Manual of Mental Disorders (DSM). In 2013, the APA's fifth edition of the DSM (DSM-5) included dementia in the diagnostic categories of major and mild

neurocognitive disorders. Therefore, in order to meet DSM-5 criteria for major neurocognitive disorder, an individual must have evidence of significant cognitive decline (APA, 2013).

Dementia is caused by damage to the neurons, or nerve cells in the brain (Galvin & Sadowsky, 2012). When this occurs, the neurons can no longer function normally and may possibly die, which could, in turn, lead to changes in one's memory, behavior, and ability to think clearly (Lichtenberg et al., 2015). Recent research reported that 10–73% of individuals with dementia suffer from delusions (Cohen-Mansfield, 2015), and approximately 15–75% of individuals with dementia have delusions, delusional misidentifications, and usually visual hallucinations (Cohen-Mansfield, Golander, Heinik, 2013; Reese, Thiel, & Cocker, 2016).

Intellectual deterioration, such as in dementia, often comes with significant emotional disturbances, such as depression, anxiety, irritability, agitation, loss of interest, withdrawal, and somatic complaints (Cohen-Mansfield et al., 2015). A qualitative study found that depression and anxiety appeared consistently among the symptom group of dementia studied (van der Linde et al., 2014). In other words, dementia is an overall term for conditions characterized by a decline in memory or other thinking skills that affects an individual's ability to perform everyday activities (Lichtenberg et al., 2015).

Apart from memory, humans also have feelings, will power, etc.; therefore, it is important to take a holistic view when looking at dementia (Volicer, 2013). When a person shows signs and symptoms of dementia, a physician must conduct tests to identify the underlying brain disease or other conditions that are causing symptoms (Reitz et al.,

2011). Different types of dementia are associated with distinct symptom patterns and brain abnormalities (Reitz et al., 2011). Observational and autopsy studies have provided evidence that many people with dementia, especially those in older age groups, have brain abnormalities associated with more than one type of dementia (Bekris, Yu, Bird, & Tsuang, 2010). It is important to note, though, that some conditions may result in symptoms that mimic dementia but, unlike dementia, may be reversible with treatment while AD and other dementias cannot be cured with current treatments (Reitz et al., 2011).

In 2014, approximately 2 million individuals aged 85 years and older had AD (Alzheimer's Association, 2014; Reitz et al., 2011). The prediction is that by 2050, there could be as many as 7 million people 85 and older with AD (Sheung-Tak, 2017).

Dementia Caregivers

Due to global aging, there is an increasing number of people suffering from dementia, and the majority of them are being cared for by family members (Sheung-Tak, 2017). A meta-analysis revealed that dementia caregivers experience significant levels of stress compared to non-dementia caregivers (Bloudek et al., 2011; Brodaty & Arasaratnam, 2012). Dementia caregivers are heavily burdened and overwhelmed (Sheung-Tak, 2017).

Epstein-Lubow et al. (2012) revealed that distress remains unchanged or even increases after a relative is admitted to a residential care facility. Several sources have also examined the demographic background of family caregivers of people with AD and other dementias and found that 65% of caregivers were women (Gibbons et al., 2014).

Wives and daughters are more likely to report persistent burden up to 12 months following placement, while husbands are more likely than other family caregivers to indicate persistent depression up to a year following a relative's admission to a residential care facility (Epstein-Lubow et al., 2012).

According to NAC (2017), over 47% of dementia caregivers report that their loved ones with dementia live in their own homes, and 1 in 3 individuals with dementia live in their caregivers' household. About 1 in 7 dementia caregivers live in a long-term care or assisted living facility with their loved ones (NAC, 2017).

Dementia caregivers experience their own deterioration of health because of their caregiving responsibilities (Koca et al., 2017). Dementia caregivers also experience more physical strain and emotional stress compared to non-dementia caregivers (Koca et al., 2017). Additionally, dementia caregiving has been associated with higher levels of depression and anxiety, compromised immune function, and increased mortality (Calvo-Perxas et al., 2018; NAC, 2017). Physical and mental health issues, in turn, compromise the caregivers' ability to care for loved ones with dementia (Tretteteig, 2016).

Most dementia caregivers are unpaid (Livingston et al., 2017), as they are usually immediate family members, but they may also be other relatives and friends (Reitz et al., 2011). An estimated 17.7 billion hours of unpaid care were provided by approximately 15.5 million family members and other unpaid caregivers of people with AD and other dementia in 2013 (Alzheimer's Association, 2014; Livingston et al., 2017). Family caregivers of people with dementia are more likely than caregivers of other older adults to assist with any activities of daily living (Sheung-Tak, 2017). When an individual with

dementia moves to an assisted living or nursing home, the help provided by their family caregiver may change, but that person continues to provide emotional support and advocate for appropriate care. Some family caregivers continue to help with bathing, dressing, and other activities of daily life (Sheung-Tak, 2017).

Caregivers for individuals with dementia, on average, provide care for a longer time than those of older adults with other conditions do: 42% of dementia caregivers provide care for 1–4 years compared to 33% of caregivers of people without dementia (NAC, 2017). Family members also suffer lost wages and depleted income and finances due to disruptions in employment (Egge, 2017).

The costs of healthcare, long-term care, and hospice for individuals with dementia are substantial (Yang, Zhang, Lin, Clevenger, & Atherly, 2012). In 2014, Medicaid covered 70%, up to \$150 billion, of the total health- and long-term care payments for people with AD and other dementias, while out-of-pocket spending was approximately \$36 billion (Yang et al., 2012). Patients with dementias incur higher out-of-pocket costs, and the average out-of-pocket payments per person were highest for individuals living in nursing homes or assisted living facilities (Yang et al., 2012).

People with dementia make up a large proportion of older adults who receive non-medical homecare, adult day services, and nursing home care (Nolo, 2018). However, almost all of them are on a fixed income. Consequently, they are faced with limited income to take care of themselves, and some family members lose income in helping to take care of their loved ones (Nolo, 2018). Recent research demonstrates that individuals

with dementia frequently move between nursing facilities, hospitals, and homes; this is largely due to economic problems (Yang et al., 2012).

Dementia usually involves a progressive decline in memory, language skills, judgment, and personality (NOLO, 2018). Although many medical conditions can cause dementia, the most common conditions are AD, head injuries, and strokes (NOLO, 2018). Like any other progressive disability, dementia can cause some economic hardship. Most older adults are retired from work, but some are still employed (NOLO, 2018). If the symptoms of dementia prevent an individual from working for 12 months or more, then that individual may qualify for Social Security Disability (SSD/SSDI) or Supplemental Security Income (SSI) benefits (NOLO, 2018). If an individual is not currently receiving retirement benefits, SSDI benefits could be a good option in such a situation. If the same individual reaches full retirement age, then the SSDI benefits automatically change to retirement benefits (NOLO, 2018).

Nevertheless, SSI, SSDI, retirement benefits, and veterans' pensions are all fixed income. Daily living expenses, added to high cost of healthcare services, can put most individuals with dementia in a financial bind (Egge, 2017). Although Medicare and Medicaid cover some part of the cost, out-of-pocket spending is still very high (Alzheimer's Association, 2014; Yang et al., 2012). Compared to other beneficiaries without dementia, the cost of average payments for healthcare services per person for individuals with dementia are higher. Therefore, dementia poses a financial burden, not just to those suffering with the disease but also on family members caring for them

(Egge, 2017). Caring for relatives living with this debilitating condition could be rewarding; unfortunately, it comes with a great financial burden (Egge, 2017).

There are, however, some intervention strategies that can help support family caregivers of individuals with dementia. They aim to ameliorate negative aspects of caregiving with the goal of improving the health and wellbeing of dementia caregivers (Moon & Dilworth-Anderson, 2015; Sörensen & Conwell, 2011). These effective intervention strategies include enhanced social support and providing relief respite from daily care demands (Moon & Dilworth-Anderson, 2015). Education about current dementia symptoms can also be beneficial to family and caregivers. They must be educated and reminded that the negative behaviors associated with dementia are normal and unintentional (Reese et al., 2016).

Caregiving Stress

Caregiving stress is traditionally a broad term used to represent a negative concept that affects the health, financial situation, social life, and self-esteem of a caregiver (Aggar, 2016). Caring for individuals with dementia poses special challenges (Aggar, 2016) and has been associated with caregiver distress (Rosdinom, Zarina, Zanariah, Marhani, & Suzaily, 2013). Loss of judgment, orientation, and the ability to understand and communicate effectively can be a substantial problem for family members (Rosdinom et al., 2013). Individuals with dementia may also require increasing levels of supervision and personal care as the disease progresses (Rosdinom et al., 2013). As symptoms worsen, the burden imposed on family members can result in increased emotional stress, depression, impaired immune system response, health impairments, lost

wages due to disruptions in employment, and depleted income and finances (NAC, 2017).

Dementia caregivers experience high levels of stress when caregiving intensity is high and they perceive that there is limited support available to them (Sörensen & Conwell, 2011). Although research indicates limited intervention effects, psychoeducational interventions have been shown to improve caregiving burden and stress (Sörensen & Conwell, 2011). Cognitive-behavioral therapy and support groups can also help improve caregiver burden, stress, depression, and anxiety (Sörensen & Conwell, 2011).

Cultural background may influence a dementia caregiver's coping style (Moon & Dilworth-Anderson, 2015; Sörensen & Conwell, 2011). Asian-Americans do not differ from Caucasians in reported stress, but African-Americans and Hispanics find caregiving to be more rewarding than Caucasians (Sörensen & Conwell, 2011). Nevertheless, ethnic minority dementia caregivers often report more physical health problems than Caucasian caregivers (Sörensen & Conwell, 2011). According to Sörensen and Conwell (2011), lower socioeconomic status can also be a risk factor for greater distress, especially among minority groups. Women handle caregiving stress better and show more improvements in depression than men (Sörensen & Conwell, 2011). Spouses also benefit more from intervention compared to other caregivers who are family members (Sörensen & Conwell, 2011).

Utilizing a meta-review method, Gilhooly et al. (2016) addressed stress, coping, and interventions for people with dementia and their caregivers. They found that out of

the 31 systematic reviews, 22 focused on dementia caregivers and that positive outcomes were associated with acceptance and socioemotional support. Wishful thinking, avoidance, and denial were associated with poor outcomes (Gilhooly et al., 2016).

According to Family Caregiver Alliance (2003), there is a great deal of stress associated with dementia caregiving. Stress, irritation, and extreme frustration may negatively impact physical health or lead to physical or verbal aggression towards loved ones (Family Caregiver Alliance, 2003). When frustrated or stressed, it is important to explore coping techniques; it is also important to distinguish between what is and what is not within a caregiver's control to change (Family Caregiver Alliance, 2003), as caregiving stress often arises from circumstances that a caregiver cannot control. When caring for a loved one with dementia, the caregiver may face many uncontrollable situations; however, caregivers should be able to control how they respond to the circumstances (Family Caregiver Alliance, 2003).

Along with their negative feelings about caregiving, caregivers also report their positive feelings about it, including family togetherness and the satisfaction of helping others. However, they also report high levels of stress over the course of providing care (Gibbons et al., 2014). Reports show that 59% of family caregivers of individuals with dementia rated the stress associated with caregiving as high or very high (Alzheimer's Association, 2014; Gibbons et al., 2014). According to the NAC (2017), the demands of caregiving may even cause a decline in both physical and mental health for some caregivers. Other studies have reported many and varied implications of caregiving and

how caregiving has been associated with negative impacts on the caregiver's physical and mental health (Aggar, 2016).

The most psychologically resilient caregivers understand that even though they are in control and responsible for their loved ones with dementia, they still occasionally need help (Cross et al., 2018). More dementia caregivers could potentially benefit from a number of resources and various kinds of support (Calvo-Perxas et al., 2018). Healthcare professionals can be a great source of support for dementia caregivers (Calvo-Perxas et al., 2018). About 24% of dementia caregivers reported that no one in the treatment team of their loved ones asked about their own self-care needs (Calvo-Perxas et al., 2018).

In addition, dementia caregivers can also benefit from individual and family counseling, caregiver support groups, and other available community assistance for dementia caregivers (Calvo-Perxas et al., 2018). Because each caregiver is different, it is important to identify specific stressors and deal with them individually (Reese et al., 2016). Caregivers should be encouraged to have a daily plan, reach out to support systems when necessary, seek help, eat and exercise, stay informed, and find alone time (Calvo-Perxas et al., 2018).

Gaps in the Literature

Approximately 36 million people are affected by dementia worldwide; in addition, about 10% of people will develop dementia at some point in their lives (Larson et al., 2013). As a result, there is an increasing need for dementia caregiving. The majority of individuals with dementia are cared for by their relatives, mainly spouses or adult children (Van der Lee, 2017). Family caregivers for persons with dementia

experience increased personal burden, depression, stress, burnout, and related disorders (Ozcakar et. al, 2012). Due to several emotional challenges related to the patients' complex problems, caregivers for dementia patients find it difficult to cope with caregiving stress. It is, therefore, critical to identify effective coping strategies, especially self-management techniques that may help to sustain caregivers and alleviate the effects of stressors (Papastavrou et al., 2011).

Despite all the benefits of coping strategies, such as support groups for caregivers, attending support groups can pose challenges to caregivers who may, for example, need transportation but lack access to it (Lee, 2015). Lack of respite care for the dementia patient while the caregiver attends the support groups is also a hindering factor (Lee, 2015). Furthermore, caregivers who experience cultural barriers with regards to sharing personal information might not fully benefit from support groups (Golden & Lund, 2009). Therefore, to address this, self-management techniques, such as laughter therapy, are another option for managing caregiving stress.

Mora-Ripoll (2010) revealed that laughter can help people physiologically, psychologically, socially, and spiritually. Laughter can also improve the overall quality of life (Mora-Ripoll, 2010). Laughter therapy, then, is a useful, cost-effective, and easily accessible intervention with positive effects on depression, insomnia, and stress (Ko & Youn, 2011). However, no study has been carried out on the lived experiences of dementia patient caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. Therefore, this research addresses a gap in the literature concerning the

lived experiences of dementia patient caregivers who use laughter therapy as a coping strategy to manage their caregiving stress.

Methodology and Research Design

A qualitative study can be presented in the form of narrative, case study, ethnographic, or phenomenological inquiry (Leedy & Ormrod, 2005). Any of these study designs could have worked for this study. However, the phenomenological inquiry is the most rewarding to explore and study the lived experiences of those individuals caring for people with dementia (Leedy & Ormrod, 2005). The rationale is that a phenomenological study is the best way to learn and fully understand people's perceptions, feelings, and understanding of a particular phenomenon (Leedy & Ormrod, 2005).

Summary

The articles used in this literature review utilized both qualitative and quantitative methods in order to form a better understanding of the study topic. One qualitative study explored the relationship between humor, religion, and wellbeing (Collicutt & Gray, 2012). Empirically, humor can be viewed as a positive psychological state with the capacity to enhance physical and psychological wellbeing (Collicutt & Gray, 2012). The study revealed that laughter itself has a direct and positive physical effect on wellbeing (Collicutta & Gray, 2012).

Laughter is highly social and infectious (Collicutt & Gray, 2012) but is often a response to challenges or adversity (Freud, 1905). One study supports the notion that humans laugh often but not always as a result of something being funny (Stengel, 2014). People laugh in the face of joy and adversity. Laughter's primary function is to stir

positive or negative emotions (Stengel, 2014). Regardless, people use laughter to cope with stress and anxiety.

A quantitative study was conducted as a one-group clinical trial (before and after intervention) with 26 female and 14 male participants (Ghafouri1, 2015). Laughter therapy was delivered by playing CDs that contained comedy shows to patients for sixteen 30-minute sessions (Ghafouri1, 2015). Findings revealed that laughter therapy had positive effects on the blood pressure of patients undergoing hemodialysis (Ghafouri1, 2015). In other words, humor was effective for decreasing the blood pressure of the studied patients (Ghafouri1, 2015).

Finally, Bains et al. (2015) utilized a randomized, controlled trial to examine the effect of watching a humorous video on short-term memory in older adults. The research findings supported the rehabilitative benefits of humor, which can be applied to wellness programs for older adults (Bains et al., 2015). The research purpose was to explore how laughter therapy helps in the management of stress associated with caring for people with dementia (Bains et al., 2015).

Similar to all the studies reviewed, data collection steps will include setting the boundaries for the study. Information will be collected through unstructured observations and interviews, documents, and visual materials, as well as plans on how to record study information (Creswell, 2007, 2009). The phenomenological design has been shown to be the best for studying the lived experiences of human beings (Creswell, 2009). Therefore, the phenomenological approach was the best way to uncover the truth about the experience of dementia caregivers. I also used the transactional model to demonstrate that

people can be taught to adequately manage their stress and cope with their stressors (Barralabc, Rodríguez-Cintasb, Martínez-Lunaabc, & Bachillerabc, 2014). Chapter 3 outlines the methodology for the current study regarding the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress.

Chapter 3: Research Method

Introduction

The purpose of this research was to address a gap in the literature concerning the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. The primary research question was:

RQ: What are the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress?

This research question was addressed using Lazarus and Folkman's (1984) transactional model of stress and coping. In this chapter I discuss research methodology and guidelines for the study.

I considered different qualitative research designs (case study, narrative, ethnographic, phenomenology, grounded study) for this research. However, the phenomenological approach was the best way to fully understand people's perceptions and perspectives about their lived experiences (Leedy & Ormrod, 2012; Moustakas, 1994). I obtained information about lived experiences of dementia caregivers from participants via semistructured, face-to-face interviews. Participant responses were recorded, transcribed, analyzed, coded, and reduced into themes (Creswell, 2013). Findings from this study can be utilized by more dementia caregivers to apply laughter therapy to their lives, thereby helping to minimize the stress associated with such caregiving. This chapter also outlines how the study was conducted and the expected findings, ethical issues, and limitations.

Research Questions

This research explored the lived experiences and perceptions of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. The primary research question was:

RQ: What are the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress?

Corollary Questions

CQ1: How do dementia caregivers cope with caregiving stress?

CQ2: How do dementia caregivers describe stress associated with their caregiving role?

CQ3: How do dementia caregivers describe their experience in using laughter to cope with their caregiving stress?

Research Methodology

The study was qualitative and was conducted at the public library in a study room with a closed door for face-to-face interviews. The caregivers who participated in the study were scheduled individually at different times. From the in-depth interviews, data was collected, transcribed, analyzed, coded, and condensed into themes (see Creswell, 2013). I was the key data collection instrument; I collected data and utilized data analysis software to help with text organization and coding (see Creswell, 2013).

I visited the community support group center to recruit caregivers who were interested in volunteering as participants in the study. The participants were selected based on the length of time that they had been providing care to individuals with

dementia and were expected to have worked as caregivers for at least 90 days. The participants were expected to read and comprehend informed consent forms in order to participate in the study. Following Creswell's (2007) model, I obtained data from multiple sources, including interviewing and observing dementia caregivers. The issue of credibility may have emerged in the form of reactivity, whereby some participants may have changed their behavior because they were aware that they were being studied (Leedy & Ormrod, 2012). As the themes emerged, I provided a report to establish accuracy and ensure validity (see Creswell, 2008).

Research Design Strategy

The different types of qualitative designs are ethnography, grounded study, content analysis, case study, and phenomenological study (Leedy & Ormrod, 2012). I examined several of these designs but found them not to align with the current study. I did not choose a case study or narrative approach because it often looks at a single participant or case, making it difficult to generalize findings for other situations (Leedy & Ormrod, 2012). In this research I studied few people from varying backgrounds.

While examining different research designs, I found Moustakas's (1994) type of phenomenological research design to be the most appropriate for this study, as it looks at the lived experiences of people (Byrne, 2009). Therefore, to fully comprehend and provide meaning to the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress, I chose the phenomenological approach to help to explore the day-to-day experiences of the participants caring for loved ones with dementia.

Moustakas (1994) showed how phenomenology can be applied to a research study in natural, everyday living. Phenomenology is a holistic approach that considers the whole picture in a research study and uses the research question to guide the research to uncover truths about the phenomenon being studied (Moustakas, 1994). This approach allowed me to use purposive sampling to study caregivers for particular purposes (see Leedy & Ormrod, 2005, 2012).

I explored the lived experiences of seven individuals who were caregivers of dementia patients. The participants were selected only if they had been actively caring for a dementia patient for more than 90 days. I intentionally selected individuals who reported stress as a result of caring for dementia patients. I used interviews, observational protocols, and a storage system for organized retrieval information (see Creswell, 2007, 2013). Similar to other research designs, phenomenology requires the ethical responsibility of making research goals clear, as well as ensuring the safety of the participants involved in the study (Creswell, 2013). There was a possibility that caregivers may become emotional while discussing their experiences of caregiving during the interview. In order to adequately prepare for such situations, I provided the participants with choice to speak to a counselor over the phone by calling 24-Hour Alzheimer's Caregiver help (crisis) line at (855-476-7600) to receive emotional support.

Target Population and Selection of Participants

Sampling Procedures

In purposive sampling, participants are specifically selected in order to obtain opinions, attitudes, prior experiences, and other necessary information (Leedy & Ormrod,

2012). In this study, the dementia caregivers were the participants. Seven voluntary participants from a large metropolitan area in the Southwestern United States were selected from among the caregivers whose loved ones have dementia on a first-come-first-served basis. I conducted semistructured, face-to-face interviews to obtain information from these participants. Individuals from various demographics were encouraged to participate in the study. I used some exclusionary criteria to eliminate individuals who did not qualify.

Setting

I utilized the public library as the venue for data collection. I conducted the face-to-face interviews in a study room with a closed door. The environment was conducive to comfortable sharing of information and provided the caregivers adequate privacy. The caregivers who participated in the study were scheduled individually at different times.

Interview Questions

In a qualitative study, the researcher is the research instrument (Creswell, 2013); therefore, I explored the lived experiences of dementia caregivers using some open-ended questions. I grouped the caregivers' answers together to create meaningful themes (Leedy & Ormrod, 2012). As these anticipated themes emerged, a clearer picture of laughter therapy as a coping strategy for caregiving stress appeared.

Validity and Reliability

Reliability necessitates the consistency of the measuring instrument (in this case, the researcher) while validity is based on checking for the accuracy of the findings (Creswell, 2009; Leedy & Ormrod, 2012). In this study, researcher bias was a threat to

validity because I am an advocate for older adults. I used member checking to evaluate the validity of this study. Member checking is a practice where the researcher provides the reports of emerging themes to the participants to review and confirm accuracy of the report (Creswell, 2008).

Data Collection Procedures

I sought approval from a senior services facility to briefly present the purpose of the study to a dementia support group for recruitment purposes. After receiving approval, I then sought the Walden University's Institutional Review Board approval to present to the support group and to conduct this study at the public library. Once final approval was received from Walden University Institutional Review Board (approval number 09-16-19-0161474), I scheduled to meet with the support group at the senior services facility to inform them of the study and provide them with the recruitment handout, which included my contact information. Interested individuals were encouraged to contact me to volunteer to participate in the study. I contacted qualified participants later, and semistructured face-to-face interviews were scheduled at the public library facility. I used the interview guide to ask questions and record the participants' answers with the use of an audio recorder. I interviewed a total of seven participants in order to understand the perspectives of dementia caregivers.

Sommers-Flanagan and Sommers-Flanagan (2007) asserted that trust is the cornerstone in any professional relationship. Therefore, I built a rapport with the participants and assured them of confidentiality and the importance of their information being safeguarded (see Creswell, 2013). When trust is established, participants will likely

be more open with the researcher without fear of the researcher divulging confidential information (Sommers-Flanagan & Sommers-Flanagan, 2007).

Researcher's Role and Participation

I was the only one who conducted this study. I used the interview guide to obtain information from the participants and remained objective in order to maintain the credibility and validity of the study.

Limitations of the Research Design

One of the limitations of this study, similar to any other qualitative study, is that some of the participants may have changed their behaviors due to the Hawthorne effect (Leedy & Ormrod, 2005, 2012). The phenomenological approach vitally depends on the responses of the participants. Another limitation is that with the phenomenological method, the words of the participants were the only source of data, and I was also the sole instrument of collecting data. Therefore, analysis of data and results interpretation rested on my objectivity and credibility as the researcher (see Creswell, 2008). However, I used bracketing to avoid researcher bias and tainting of the validity of the study (Moustakas, 1994).

Data Analysis Procedures

Using the process of coding, collected data in a qualitative study are reduced into themes (Creswell, 2007, 2013). Data are usually represented in tables, discussions, and figures (Creswell, 2007). After data collection, I proceeded to transcribe the collected data into text. I also utilized ATLAS.ti Qualitative Data Analysis Software, a Windows-

based program to help in-text organization, coding, and emerging themes (Atlas.ti, GmbH Berlin, 2010).

Ethical Issues and Considerations

The researcher should avoid placing any pressure or imposing personal beliefs on the participants (Creswell, 2007). The researcher's belief system, worldview, desires, or expectations should always be detached from a scientific study (Creswell, 2013). An informed consent form was discussed in detail and signed before the participants could participate in the study (Creswell, 2009). The participants were made aware of their right to withdraw at any time and assured that their information will remain confidential (Herlihy & Corey, 2006).

Data Management and Storage

I planned to protect all data received from this study in a secure, locked cabinet. Only I have access to this box. Five years after the publication of this study, I will destroy all of the information that was obtained from the study to ensure confidentiality. I planned to keep a reflective journal to manually document events that happened throughout the study. In any event of technical failure or malfunction, I could have used the journal as a backup for important details from the study.

Summary

The purpose of this research was to address a gap in the literature concerning the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. Lazarus and Folkman's (1984) transactional model of stress and coping was used to inform this study. Laughter therapy is a universal

component of human experience and can serve as a very important coping strategy (Vrticka et al., 2013). Laughter also serves as a mechanism for physiological release of tension which, in turn, helps reduce stress (Vrticka et al., 2013). Bast and Berry (2014) also supported the view that humor and laughter are therapeutic for relieving tension and anxiety; therefore, laughter therapy is an appropriate technique to cope with caregiving stress.

It is very important to identify specific aspects of laughter therapy or other techniques that can be used in conjunction with laughter therapy to address caregiving stress. It is also critical to address gaps in the knowledge by upholding aspects of laughter therapy that are helpful while addressing any unhelpful aspects, if any.

Chapter 4: Results

Introduction

The purpose of this qualitative phenomenological research was to address the gap in the literature concerning the experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. The outcome of this study will give voice to the participants, offer a rich description of their day-to-day caregiving experiences, provide insight into their use of mirthful laughter to manage caregiving stress, and reveal other coping strategies they have used to manage their caregiving stress. The primary research question was:

What are the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress?

The corollary research questions were:

CQ1: How do dementia caregivers cope with caregiving stress?

CQ2: How do dementia caregivers describe stress associated with their caregiving role?

CQ3: How do dementia caregivers describe their experiences in using laughter to cope with their caregiving stress?

In this chapter I discuss the research study setting, participant demographics and characteristics, data collection methods, qualitative data analysis, evidence of trustworthiness, and study results, and provide a chapter summary.

Study Setting

I selected the participants in this study from a support group center in a large metropolitan area in the southwestern United States. Upon request, I was granted a 10-minute presentation to the support group at the end of their meeting. I introduced myself and talked about the purpose of my study. Attendance was voluntary. At the end of my presentation, I left flyers, which had my contact information, so that individuals who were interested could contact me later. I selected seven participants for the study out of eleven participants who contacted me afterward.

All interviews were conducted at the local public library, and participants chose an interview time that was convenient for them. Every participant was comfortable with the setting and drove themselves to the library. The interviews were all conducted in a quiet closed-door room at the library to provide privacy, and none of the interview sessions exceeded one hour.

Demographic Characteristics of Participants

I used the following participants' demographic characteristics to interpret the research findings: age, gender, ethnicity, educational level, relationship to dementia patient, and reported stress level. The phenomenon of caregiving might be different for spouses and adult children of dementia patients. Therefore, the participants' inclusion criteria were narrowed down to include spouses of dementia patients and adult children (age 21 and older) of dementia patients who had been caregivers for over 90 days. Out of three levels of stress (low, moderate, and severe), the participants reported moderate or

severe stress in caregiving. Also, participants used laughter therapy in managing caregiving stress.

I selected seven participants who met the inclusion criteria for this study. They included two men and five women. Four were White, two were Black, and one was Hispanic. Four were daughters, two were husbands, and one was a wife. Six of them had either a bachelor's degree, master's degree, or doctoral degree. The seventh person had an associate degree. One person was 48 years old, and the others ranged in age from 66 to 79.

All participants reported their caregiving stress experiences to be moderate or severe. All reported using laughter therapy for coping with their caregiving stress, and all had been dementia caregivers for more than 90 days. I used pseudonyms to protect the identities of participants and to ensure the confidentiality of data collected. Prior to the interview sessions, each participant completed the initial demographic questionnaire (Appendix A). The demographic information collected for each caregiver is presented in Table 1.

Table 1

Participants' Demographic Information

Participant pseudonyms	Age	Gender	Race/ethnicity	Educational level	Relationship To care recipient	Length of time as caregiver	Stress level
CG1	48 Years	Female	White	Bachelor's degree	Daughter	7 Years	Severe
CG2	73 Years	Female	Black	Associate degree	Daughter	4 1/2 Years	Severe
CG3	75 Years	Female	White	Master's degree	Wife	3 Years	Severe
CG4	79 Years	Male	White	Bachelor's degree	Husband	12 Years	Moderate
CG5	66 Years	Female	Black	Master's degree	Daughter	2 Years	Moderate
CG6	78 Years	Male	White	Bachelor's degree	Husband	3 Years	Moderate

Data Collection

After the presentation of my study at the support group meeting, individuals who were interested in participating in the study contacted me by phone. The selection of participants was based on a first-come-first-served basis. Though only 6 to 8 participants were required, 11 were recruited. Telephone conferences with participants included a description of the study and the nature of confidentiality. I explained that participation

was totally voluntary and that participants also had the right to end their participation in the study at any time. I also used this opportunity to go over the inclusion criteria with each participant.

I selected seven participants for the study out of eleven participants who were recruited. I recruited additional participants to prepare for replacements in case any of the selected participants withdrew from the study. All participants met the inclusion criteria: a spouse or child of the individual with dementia; provided care to the individual with dementia for more than 90 days; age 21 years and above, and reported moderate or severe stress in their caregiving experiences. There was no incentive agreed upon or given to the participants. Participation was strictly voluntary.

In a meeting with the participants, I went over the purpose of my study again and reviewed the informed consent forms with the participants. I gave each participant ample time to understand the information on the informed consent form and to ask questions. After they signed the informed consent form, I collected their demographic information with the demographic form (Appendix A). I started with the six open-ended interview questions with prompts (Appendix B). I recorded the interviews with iPhone voice memos.

The only variation in data collection from the original plan presented in Chapter 3 was that the library, instead of the senior services facility, was used as the study site to conduct the interviews with the participants. The senior services facility was not available at the time needed. I updated the Walden University Institutional Review Board about this change in plan and waited for their approval before proceeding.

Data Analysis Procedures

In this study, researcher bias was a slight risk to validity because I, the researcher, am an advocate for older adults. Being the key instrument for collecting and analyzing the data in this qualitative phenomenological study, it was imperative that I conduct the research free of bias to understand the lived experiences of dementia caregivers who have used laughter therapy as a coping strategy to manage their caregiving stress. A researcher who utilizes a phenomenological approach should explore a phenomenon free of bias (Creswell, 2013). I was careful to remain conscious of any interference with my personal assumptions and dispositions that could interfere and become a threat to the objectivity of the study. Objectivity and data saturation was achieved. I used member checking to check for accuracy of the emerging themes from the participants' reports. Member checking is a practice where the researcher provides the reports of emerging themes to the participants to review and confirm the accuracy of the report (Creswell, 2008). I contacted participants by phone to check for the accuracy of their reports.

ATLAS.ti, the primary data analysis tool used in this research, is a workbench that allows users to organize and arrange qualitative data for thorough analysis. I transcribed the audio files recorded from the interviews. I then subcategorized excerpts from each interview transcription in Microsoft Excel based on participants' demographic information (i.e., age, gender) and specific interview questions. Afterward, I imported the Excel spreadsheet into ATLAS.ti where potential themes between participants were coded, or tagged (i.e., similar responses among participants). The process of coding potential themes is highly dependent on the researcher's understanding of the

phenomenon. In this case, it helped that I was also the interviewer; themes or trends that I caught during the interviews were coded for during the ATLAS.ti data analysis.

The following major themes along with their subthemes and additional subthemes emerged from the participants' responses:

1. The specific stressful caregiving experiences theme emerged with the following subthemes:
 - a. Hygiene problems
 - b. Always on edge/alert
 - c. Wishful death
 - d. Following me around
 - e. Fear and resentment
 - f. Subtheme personality changes emerged with the following two additional subthemes:
 - i. Forgetfulness
 - ii. Bedwetting
2. The learning opportunities theme emerged with the following subthemes:
 - a. Taking care of yourself
 - b. Counting your blessings
 - c. Not arguing
 - d. Sacrificing
3. The laughter therapy benefits theme emerged with the following subthemes:
 - a. Reducing stress and releasing tension

- b. Relaxing and unwinding
 - c. Helping to forget and get away
 - d. Benefiting us both
4. The other coping strategies theme emerged with the following subthemes:
- a. The respite care subtheme emerged with the following two additional subthemes:
 - i. Accepting help from others
 - ii. Daycare centers benefits
 - b. Support groups
 - c. Cognitive therapy

Evidence of Trustworthiness

Credibility

In order to establish truth in the findings of this study, I utilized clarifications of researcher bias, member checks, and prolonged contacts in checking the accuracy of these findings (Creswell, 2009; Leedy & Ormrod, 2012). In this study, researcher bias was a threat to credibility because I am an advocate for older adults. I carefully maintained an empathetic neutrality to the collected data and ensured that emerging themes were objectively supported by quotes from the participants' responses. Member checking was used to evaluate the credibility of this study. I contacted the participants after the interviews in order to clarify the meaning of their responses as the themes were emerging. Member checking is a practice where the researcher provides the reports of

emerging themes to the participants to review and confirm the accuracy of the report (Creswell, 2008).

Transferability

Because of the small participant size, interpretations of the study results are not generalizable to the caregiver population; therefore, transferability is inapplicable. Particularity rather than generalizability is the trademark of qualitative research (Greene & Caracelli, 1997). The phenomenological approach explored the lived experiences of the participants' use of laughter therapy as a coping strategy to manage their caregiving stress. The findings represented the participants, their settings, and their experiences. The findings, as reported by participants in this study, could offer rich insights to other caregivers in different settings.

Dependability

Dependability necessitates the consistency of the measuring instrument, in this case, the researcher (Leedy & Ormrod, 2012). In order to strengthen the dependability of this research, I ensured that I documented the procedures and steps of the procedures in detail as suggested by Yin (2003). Using professional transcription services was one way for me to ensure accuracy in transcribing the data collected. I also reread the transcripts four times while I listened to the audio recordings to ensure transcription accuracy.

Confirmability

Maintaining a bias-free attitude during the research process was imperative for this study. As stated in chapter 3, my background as an advocate for older adults could threaten the objectivity of the research findings. Therefore, I was careful to maintain

empathic neutrality (Patton, 1990) during the whole process. My own experiences helped me to word the interview questions in a manner that enabled the interview process to take a clearer direction to effectively elicit responses from the participants. Nevertheless, the themes and subthemes emerged totally from the participants' responses.

Study Results

The data collected from the participants' responses were organized into four major themes with their subthemes, which will be presented in this section along with the supporting quotes. The four major themes are: 1) specific stressful caregiving experiences, 2) learning opportunities, 3) laughter therapy benefits, and 4) other coping strategies. Pseudonyms were used to protect the identities of the study participants and ensure the confidentiality of their information.

Specific Stressful Caregiving Experiences

Each of the caregivers gave a rich description of his or her specific stressful experiences associated with providing care to a loved one with dementia. Six subthemes emerged from their responses. The subthemes share commonalities among the caregivers. The following are the subthemes: hygiene problems, always on edge/alert, wishful death, following me around, fear and resentment, and personality changes.

Hygiene Problems

Caregivers said that efforts to maintain good hygiene for their loved ones with dementia was very frustrating. Three of the caregivers reported that giving their loved ones baths and dressing them was very stressful. The following quotes are from their reports. CG1 said:

I think the one, of course, that probably was the worst was trying to give her a bath. She was refusing her bath, and she would fight with me and hit me and refuse to go into bath. And so, a couple of times I had to actually physically pick her up and put her into the bathtub, even though she's fully ambulatory, and she would settle down after a minute or so. I would try to be as quick as possible, but we would both end up in tears by the end of it. I would try to give her a bath twice a week. Once a week was a miracle, if I could get it done once a week. But I think that the most stressful was the fighting over the bath and trying just to give her normal hygiene.

CG6 said, "Well, one was getting her to bathe. Well, probably the biggest one that I mentioned was the bathing and changing clothes." CG3 added:

You'd say, 'Now we're going to put your shoes on, okay? Hand me your foot.'

You'd get him all dressed, and then you'd go to put your clothes on, and you turn around and he'd be all undressed again. You'd have to start all over.

The caregivers' responses indicated that their loved ones' noncompliance with hygiene upkeep has caused them anxiety and physical pain when it comes to bathing and dressing. The violent experience by one of the caregivers during these hygiene activities could have caused fear and anxiety for the caregiver. CG3 stated:

Then one of the turning factors was, it was so physically painful for me to take care of him that . . . because I have a bad back and stuff. I'm in agony, which makes me gripe. Really had a thing where he got kind of violent. He changed so

much. One day I had a husband, and the next day I had a child. There was a lot of grief when I'm trying to put on his shoes and socks, and he's not cooperating.

Always on Edge/Alert

CG1 said:

But there were other stressful things that were more psychological, I guess, in that an Alzheimer's or dementia patient wakes up every day not knowing where they are or what their purpose is or what they're supposed to be doing. So, every day was stressful just to meet first time in the morning to see what would happen, what would she need, what would she want, what kind of pain would she be in. Not physical pain, but just mentally. So, you were always on edge. There was never just a relaxing time. It was always wondering what would the next stressor be. A lot of times she woke up looking for me and worried that something happened to her daughter, and I'm standing right in front of her, and I would try to tell her that I'm here, I'm ok. And she's like, no, I think something happened.

The inability of dementia patients to recognize their children was described by CG1 as very stressful. CG1 said that her mother will continue to emphasize that her daughter is missing and believes that something must have happened to her, while her daughter is standing right in front of her. The mother does not recognize her. The daughter would ask her brother to talk to their mother on the phone and explain to her that she went to the store and will soon be back. At this point she will leave and go into the garage and come right back in and say, "Hi, Mom, here I am. I am back." This will immediately make her mom believe everything again and calm down. CG7 said:

I call it being on high alert 24/7. There's no other way to describe it. I still kept her here, and she just wouldn't get better, and I would be so scared because I didn't know what to do with her, and we didn't have medical insurance. So how I was going to take care of this disease without having the resources? I was overwhelmed, and I was working at that time. Incontinent, both ways. I used to help to change her diapers and all that, and I was working. I had to bathe her. It's hard on yourself and your family. It's been very hard on my husband because I have left him alone here for a long time.

Wishful Death

Among three caregivers, their responses indicated feelings of both love and hopelessness toward their loved ones to the extent of having some wishful death thoughts toward themselves and their loved ones with dementia. CG1 said:

But with dementia . . . you don't always want them to live longer. It's miserable. It's embarrassing for them, and she doesn't have a whole lot of joy on a daily basis. Like I said, she's afraid all the time. So, what kind of joy are you getting out of life? I look back now and how much she suffered in those seven years, and I almost regret taking her. I wish I would've let her die faster. And I know that sounds terrible. But I almost look back sometimes and regret swooping in and saving her for seven years. When how much joy did she really get out of those seven years? And it was because it was tough on my family too, to adapt. My husband, he was so good and accepting to have her in our home for seven years, but it was straining on all of our relationships. Right. And so, I look back and I

think, was it really worth it? Maybe she would have been better off to just be let go quicker, to progress quicker. I loved her, and I didn't want her to die, so I took her because I knew I could make her live longer, you know? But with dementia...you don't always want them to live longer.

CG3 said:

Toward the end I thought, you know . . . I wasn't suicidal or anything, but I thought, 'I wouldn't care if I didn't live any longer. Might be a good plan.' Just wanted a break. I got where I wasn't taking care of myself. Anyway, it's been kind of rough.

CG7 said:

Another source of stress is the conflictive feelings that you have, right? Because sometimes you're so tired and you say, 'I can't go on like this. Please take her.' And on the other hand, you say, 'How, can I ask God to take away my mother?' But when you see that is not even my mother anymore, she's there. She's a person, a little person, an old person that is very sick. In my caretaking experience there was a point when I wanted to die. I felt I don't want to live anymore.

CG7 described this thought with intense emotions reflecting the severity of her stress and burnout associated with her caregiving role. She had indicated at the initial stage of the interview that the level of her caregiving stress is severe.

Following Me Around

Two of the caregivers said that the urge of their loved ones with dementia to follow them around is disturbing. CG5 reported, "She's beginning wanting to be around

me, wanting to spend all her time with me. She's up more at night. So, she's up more nights and wanting to talk to me." She went further to explain that the consequence of this behavior, staying up at night and wanting to be with her and talk to her is that she will not get enough sleep at night, and therefore will be more argumentative in the morning, become noncompliant, and refuse to take her medications. CG6 stated: "She would follow me, and when we were out, she follows me into the bathroom. Didn't know to wait." From observation of CG6's body language, it was obvious that he felt embarrassed by this behavior—his wife following him into the male public restroom.

Fear and Resentment

The fear and resentment theme disclosed emotions of ambiguity. CG2 reported during the interview that she loves her mom and yet harbors feelings of resentment and anger toward her. Some of her responses also raise the issue of how much awareness or knowledge caregivers have prior to stepping into the caregiving role.

CG2 said:

I felt anger. I felt resentment, because that was not a part of my plan for retirement. I was angry about that. she was so rude and so mean and nasty.

Nothing I did was good enough. She complained all the time. It's hard to be pleasant and be a pleasant caregiver for somebody who you feel like don't appreciate your efforts.

The narratives from CG2 could indicate some lack of adequate knowledge about dementia disease and its expectations. Her report on how she felt about her mom not appreciating her caregiving sacrifice to her could mean that she needs more awareness on

dementia to better understand that the dementia patient is not cognizant of his or her actions and therefore, cannot take those behaviors personally. An impersonal attitude toward those behaviors could also assist the caregiver in coping better and having a better relationship with the dementia patient. This conclusion will be discovered in some of the caregivers' responses as I continue to discuss the themes from the interviews. Below are additional reports from responses on the fear and resentment theme. CG7 said:

And that day by day, just not even knowing is this the day when she's going to die or not. And the second one that is not as positive as that one is that it has created also a lot of fears in my life. And also the way I see my husband and knowing that my husband's dad died of Alzheimer's and knowing my mother's disease is hereditary. It changed my life for the worse. I live my life in fear.

At this point, CG7 was overwhelmed with emotions and tearful.

From the responses of CG7, it is obvious that the fear of the unknown in terms of inheriting dementia from the mother could be possible. As a caregiver who is taking care of your loved one with dementia on daily basis and observing all the negative consequences of this disease could be traumatizing. It will be interesting to further explore this fear among the caregivers to better understand how to address it among caregivers.

Personality Changes

Three of the caregivers reported how they observed their love ones with dementia change from the person they have always known and loved to a totally different person who has nothing in common with them anymore. CG3 reported "The other thing is, one

minute you have a husband, and then next you have...two- or three-year-old child. It's so hard not to get mad sometimes," CG6 reported, "and it was a new person. She was a new person. She wasn't the one I married. No longer the woman I married." CG#7 stated, "But when you see that is not even my mother anymore, she's there. She's a person, a little person, an old person that is very sick." All these responses indicate that the personality changes observed among in the dementia patients contribute to caregivers' stressful experiences.

Forgetfulness. The theme of forgetfulness discusses the major and common symptoms observed among dementia patients, which some of the caregivers reported as stressful. CG4 said:

It started with her doing things like, taking a dish towel and put it in the refrigerator, instead of the washer, closet, or put it back to the cabinet top. Little things like that, not being able to keep up with her rings when she would take them off, or her watch, little things. But, you would find maybe a spoon that she had used, in the pantry, or in a drawer that was for the pot holders. Always the denial. Well, it was very confining.

CG2 said:

She doesn't remember how she got to my house, the reason that she was there. She kept asking me why was she there. I would explain to her. She wouldn't believe what I told her about the fact that she was there.

CG1 reported:

A lot of times she woke up looking for me and worried that something happened to her daughter, and I'm standing right in front of her, and I would try to tell her that, that I'm here, I'm OK. And she's like, no.

CG1 said that her mother will not believe her or calm down until she puts up a stage such as calling her brother to speak to her on the phone and tell her in pretense that she went to the clinic because she has a cold and will soon return. At this point, CG1 will step away from her and appear again in pretense that she left the house to go to the clinic, and her mother will believe that CG1, her daughter, just came back. Most of the caregivers shared that it is unrealistic to argue with someone with dementia. CG3 reported her understanding about the forgetfulness associated with her husband's dementia by stating that "His brain's gone."

Bedwetting. The incontinence among dementia patients was one of the experiences some of the caregivers considered very stressful. CG3 stated, "But, just, things were stressful. Then we started losing control of his peeing on things." CG3 explained that things were already stressful, and then there was the additional stress of dealing with the incontinence. CG4 reported, "The incontinence. The cleanup was something that really put us here." CG4 reported that he was able to take care of his wife up to the point when she couldn't remember to use the restroom anymore but was wetting everywhere. He described how difficult the cleanup was and stated that because of that he had to relinquish care and placed her in the nursing home because he couldn't cope anymore with the demands of work involved with taking care of her. CG5 also indicated that her mom is incontinent by stating, "Sometimes, she may still wet on herself."

The specific experiences theme has helped to gain insight into some of the specific stressful experiences among informal caregivers of dementia patients. The next major theme will shed light on the learning experiences of the caregivers and how these experiences have affected their lives.

Table 2

Specific Stressful Caregiving Experiences Theme and Subthemes

Major theme (Level 1)	Subthemes (Level 2)	Subthemes (Level 3)
Specific stressful caregiving experiences	Hygiene problems	
	Always on edge/alert	
	Wishful death	
	Following me around	
	Fear and resentment	
	Personality changes	forgetfulness
		bedwetting

Caregiving Learning Opportunities

The responses of the caregivers on their caregiving learning experiences and how it affected their lives coalesced around four subthemes. The following themes emerged, and three of those themes were phrased with the caregivers' words as they described them.

Taking Care of Yourself

In this “taking care of yourself” theme, the responses of the caregivers produced words such as rest, patient, prayerful, et cetera to describe how they took care of themselves. CG5 said:

I’ve found that you have to be patient, you have to be very positive with her. You have to be rested. If you’re not rested, it’s just like you’re fighting against, you know, it’s not a winning situation. You have to be rested; you have to be patient. I have to be prayerful.

CG7 said:

I’m learning through support groups that I need to let go a little bit. And the other thing I learned too is that, you first have to take care of yourself before you can become a good caretaker. Things I learned, oh gosh. So much about how to communicate with a person with the dementia. There’s a special way; how to understand the patient with dementia because even at the beginning I used to feel like, ‘Why is she doing this to me?’ You think that they’re doing it on purpose. I have a doctoral degree. Why did that stupid thought come into my head? But it did.

Counting your Blessings

Count your blessings is the exact phrase CG3 used to describe how the caregiving experiences has affected her life. She responded: “Number one, the first thing is, you better count your blessings every day. I made it a point to count my blessings. it makes you feel so much better.” She went further to philosophically demonstrate by stating,

“There’s plenty you think of. I can still see. I can still hear. Like that. I did that every day when things were so bad. Just not to catastrophize. It’s easy to start catastrophizing.”

CG2 responded that she learned “how to be more gracious, more appreciative for caregiving, because it’s a very unrewarding job.”

Not Arguing

Many of the caregivers shared some commonalities in the “Not Arguing” theme. It seemed that the caregivers—prior to gaining knowledge about the dementia—were engaging in some form of arguments with their loved ones with dementia and experienced more stress from these arguments. However, when they gained the knowledge and some of the implications of this disease, their orientation surrounding the continuous and strange arguments that erupt between them and the patient ceased to exist. The following quotations are the responses of some of the caregivers. CG4 said:

It’s not worth making an argument over; you just learn to bypass it. You know? ‘Well, I don’t know either. I didn’t do it.’ Always the denial... ‘I don’t remember doing it.’ It’s no big thing, you let it go. Sometimes I’m introduced as her husband, which, that’s a good day. Sometimes I’m her son, but I don’t correct, because people know better. It’s not worth making an argument over; you just learn to bypass it. Now, if it was something detrimental to her well-being or something, then I would say, ‘No, we’re not going to do it that way.’ But for little things like that, let it go.

CG6 said:

I learned not to argue with her about things. Because, she didn't understand. It was just that you had to go with the flow. I was probably going to just go along with it. Don't try to talk her out of stuff because she didn't get it. And it was a new person.

CG2 said:

She would talk all day to herself or to somebody. Ask who she's talking to. She would tell me she was talking to the queen of England. She was talking to Madeline. She was talking to Ranger Walker. She told me that we were going to be rich, because she had found artesian oil under my house.

CG2 went further to say that she learned that her mother was delusional and decided not to argue with her anymore. She reported:

She was delusional; she was not...she didn't know real from unreal, and she would be upset when I wouldn't believe that stuff she was telling me. She would get mad when I said, "No, that's not true." She would get mad when I would tell her, "That didn't happen," so I just started saying, "OK. OK, then."

Sacrificing

The sacrificing subtheme discussed some new, unexpected experiences whereby the caregivers gave up some precious things in their lives, including jobs, lifestyles, or life goals. CG4 said:

Stress for me, is something that you take one day at a time, and you don't dwell on what happened yesterday, you look forward to tomorrow being better. You learn as you go. I sacrificed some things. It became a full-time job.

CG7 said:

I learned how to live with less, and I learned how to shop at the dollar store, and there's nothing wrong with that. When you have to provide and pay five salaries and doctors and medications and everything, all your money goes into that direction.

CG2 explained that taking care of her mom was not part of her plan for retirement. She stated: "I got my passport. I was headed to Jamaica first. I had planned for my time and didn't include my mom." Her response indicated that she had made a huge sacrifice by giving up her dreams in order to take care of her mom. Having shared the responses of the caregivers regarding their learning experiences and how caregiving has affected their lives, the next major theme will be discussing the laughter therapy experiences.

Table 3

Caregiving Learning Opportunities Theme

Major theme (Level 1)	Subthemes (Level 2)	Subthemes (Level 3)
Caregiving learning opportunities	Taking care of yourself	
	Counting your blessings	
	Not arguing	
	Sacrificing	

Laughter Therapy Opportunities

The theme “laughter therapy opportunities” is one of the major themes that elicited some interesting responses on how dementia caregivers use mirthful laughter as a coping strategy to manage the stress associated with caring for their loved ones. The interview questions had asked the caregivers to share their experiences with laughter therapy in relation to coping with caregiving stress. The following four subthemes in their own words emerged from their responses: “reduces stress and releases tension,” “relax and unwind,” “helps to forget and get away,” and “benefits us both.”

Reducing Stress and Releasing Tension

Some of the descriptions that the caregivers gave regarding how laughter therapy benefited them portrayed a deep sense of relief that it was almost difficult for them to perfectly word it. CG1 stated after her narratives that she doesn’t know how to word the feeling of relief after using laughter therapy. This could mean that the feeling is good enough to be beyond words in trying to explain it. The following are the CG1 responses along with the other caregivers’ responses. CG1 said:

I would say it’s therapeutic because it releases some of the pain of daily just seeing your mother like that. I think it releases some of that tension. At the end of the day, you can forget about how awful this disease is. Well, I think another thing about watching things like that or laughter therapy is that it helps empty your mind a little bit from all. Because your mind stays so full of everything that’s going on every day when you’re a caregiver. I think it relaxes your mind and just

pushes all those other things out of your mind, so you can just relax the brain. I don't know how to word that.

CG7 said:

Well, like they said, 'Laughter is the best medicine.' And it's true, you feel better after a while and sometimes you even laughed at your own misery. And I have a support group of friends, and they're very good about putting little jokes and things like that. And that always lightens my day.

According to CG7, her support group of friends purposefully put some "little jokes" together so that they can all share and laugh about it and improve their mental well-being. These little jokes also come in the form of 'short videos or a short cartoon.' She also explained that there are little jokes that other people outside her group of friends circulate that catch her interest, and she uses them all to laugh and cope with her caregiving stress. "Well, it's better than to be crying. Yeah, it helps, because in my caretaking experience, there was a point when I wanted to die. I felt I don't want to live anymore." She went further to add that these laughter therapies help her to "have a different perspective, different attitude." CG3 shared that laughter therapy "was just like you could breathe again. It was just better. Things were not so...you weren't so stressed and caught up in the caring moment. Anyway, that was my only option." CG3 declared that laughter therapy was actually her only meaningful option that she uses in coping with her caregiving stress. CG6 reported:

I think that laughing does remove stress or reduce stress. I think it reduces it. I think laughter is positive. I mean it's an observation. I think it's positive. So, a good laugh from my standpoint, it makes you feel good.

All the caregivers reported that they intentionally use laughter to cope with their caregiving stress. They were able to explain their usual state of mood before and after using laughter to cope with their stress. They were able to specifically describe how the use of laughter therapy has helped them in coping with caregiving stress. They also were able to describe different aspects of laughter that helped them to cope with the caregiving stress.

Relaxing and Unwinding

In this subtheme, the responses of the caregivers showed that their experiences with laughter therapy help them to unwind, relax, and get some good sleep. CG2 stated that it helps her to "relax and unwind." One of the responses is that laughter therapy helps to relax and continue with caregiving the next day. CG1 shared:

My husband would also make me sit and watch stand-up comedy specials on Netflix, because it would help me unwind at the end of the day. It would help me to get a good sleep because I could unwind and forget about the stress that happened that day. That aspect I think was beneficial. And that sleep would help me to be stronger for the next day, to tackle the next day, whatever was going to happen next. So, it assisted me in relaxing and being able to go onto the next day and start all over again.

CG5 and CG3 shared that laughter therapy helps them to relax. CG5 responded: “So you would say that laughter is relaxing for you. I also have laughter from the books that I’m reading.” CG3 stated that she just uses laughter therapy to relax.

Helping to Forget and Get Away

The caregivers’ narratives under this theme report that laughter therapy helps the caregivers to forget the caregiving-associated stresses and escape from the whole situation for a moment. Some of the responses show that the laughter therapy puts them in a relaxed mood, away from the stress they are under. CG6 said, “It lets you kind of forget about whatever the issues are at the moment. With dementia, there’s always an issue going on.” CG1 also shared in this manner: “It helps you forget. It helps you forget, I think. It helps you forget about that for a little while and just relax. Well, I think the ability to forget, like I said, watching TV shows that are funny.” The following are direct responses from another two caregivers. CG3 said:

It’s like a little vacation. It’s a vacation, that’s all. When he went to sleep, then I could sit, and I would watch something funny. I will find the thing on TV that was funny. I’d have it recorded, and stuff, so I could watch it. I just have a little round of watching stuff. Stand-up comedy or sitcom. I watched a couple of sitcoms that would make you laugh, and I watch a lot of standup comedy. It was a distraction. Just get away from the situation. Usually to get away from it. I could forget about the stress I was under.

CG2 said:

Mostly what I'm doing most of the time is watching these sitcoms, watching the comedy sitcoms on the television, I can get away from her and go into my room and watch my TV. Yes, laugh at the TV and stuff. Let's see. I like *Martin*.

Benefiting Us Both

CG1 said:

It gave us something to do together, my mom and I too, because she would benefit from it as well. Not only would I benefit from it, but she would too. And so, we would watch TV, *Golden Girls* or whatever together, and it would lighten the load. We would play with the dogs. I had two dogs at the time, and they would act goofy. My mom would laugh at that, or I would laugh at that, and it would lessen the pain. I think day to day it would take away from the seriousness. Yeah. *Golden Girls* and *Everybody Loves Raymond*. Those are the two. And not only that, but we would play with the dogs. Everything was so serious. Being a caregiver felt like so serious because like I said, you had to be vigilant all the time and, yes, taking care of things, take whether it's her medicine or her bath or whatnot, it helped you forget about that for a little while and just relax.

CG4 said:

More of that laughter came from things that she would misunderstand, and misinterpreted, and we would laugh over it. I was inducing that laughter, to get her off of a track of something, a worry, and it was probably out of line, but you make light of it, and then make a laughter out of it, and change things. To lighten things up, you know. It was helpful if she responded. If she participated, then I

had an accomplishment. By making an untrue or illogical assumption on her part, making a joke out of it, make the laughter, and go along with it. That way, we still get accomplished what she wanted to do, to a degree.

CG4 responded that he could use laughter therapy to bring an illogical assumption from his wife and make a joke out of it. “I was inducing that laughter” in order to make the situation light and still achieve what he wants without unnecessary arguments that could lead to more stress for both of them. He was actually purposefully inducing most of the laughter. CG6 said:

Well, I think that if you don't laugh, you'll cry. I think that's part of my philosophy on that. I think there are funny, funny moments that distract you. And I think laughter therapy is when you describe these funny moments to others. The benefit I have gotten was repeating the funny stories, and I found that helpful. Repeating the funny stories that occurred, like the bacon. So, I appreciate it. We get involved in more funny things that happened and the fun of telling it to others. I think an important part of laughter, is sharing it. But the funny story was you look forward to telling others because they're really good for your laughter. And when you get to the support group, you start telling the stories. Again, the laughter comes in. We do laugh a lot at the support group.

CG6's responses indicated that the aspect of laughter therapy that he finds very therapeutic is sharing funny stories with other people and vice versa. He shared that part of his enthusiasm in attending a support group is that they are able to share funny stories and get a good laugh from it. CG2 said:

Just some of the things actually that she had done, my mother had done, we could kind of laugh about it after the fact. So, we did. We talked about what she had done, something that she had said, and we laughed about it. We could laugh about it, so it does help. Because I just feel like if some of the stuff that she does or says that I can find it laughable, then I won't be so stressed about it, because some of the stuff that she says is funny as hell. So, when she says something like that, you know that that helps me. I don't get so...I can just laugh about it and walk away.

Table 4

Laughter Therapy Opportunities Theme

Major theme (Level 1)	Subthemes (Level 2)	Subthemes (Level 3)
Laughter therapy opportunities	Reducing stress and releasing tension	
	Relaxing and unwinding	
	Helping to forget and get away	
	Benefiting us both	

Other Coping Strategies

Exploring other coping strategies that the caregivers use in managing their caregiving stress is crucial to this study. Other coping strategies used by the caregivers is

the fourth major theme in the study. Three subthemes emerged from the caregivers' responses, and they are the following: respite care, support groups, and cognitive therapy.

Respite Care

Most of the caregivers' responses showed that they use some kind of respite care in order to have some relief and cope with the caregiving stress. The following themes below emerged from their own words on how they use respite care to cope with caregiving stress.

Accepting help from others. CG1 stated, "And I did have a caregiver. So, when someone else was at home with her, I would take a walk and just breathe the fresh air and walk. So just getting a caregiver, that alone was a coping strategy." She added that it is important to learn "how to accept help from other people; respite care." CG3 shared that her children and her husband's family have been great in assisting her. CG2's son gives her respite help when she attends her support group meeting, which is a part of her coping strategy. She stated, "My son, he stayed with her while I went to the meeting." CG4 shared that he also uses respite care by inviting the respite help to the house or dropping his wife at the respite house for just about an hour. He went further to explain that it is usually a good relief for him. CG4 said:

I was blessed with having the lady who had helped me for two months with my mother in-law, down the street. So, when I would go down to Kroger for groceries, I could either ask her to come over to the house, or I would drop my wife off there, you know, just for an hour, and that was my stress relief for the day."

Day care center. The day care center is an adult day care where the caregivers could drop off their loved ones with dementia during the day to be able to get a relief or take care of some other responsibilities rather than the 24/7 caregiving. This is also a service that they will have to pay for if the patient has no health care insurance to pay for it. CG1 reported, “And I put my mom in a daycare center for a while, that helped, an adult daycare kind of a thing, just to give me a couple of hours to go have lunch with a friend or something and just get away from the 24/7.” CG3 stated “You could take him to the Gathering Place (adult day care), put him there, and then you can go off and do something for two hours.” CG5 shared that she puts her mother in a day care center while she goes to work. She stated “Yeah, she’d go to the day center when I go to work.”

Support Groups

Most of the caregivers shared that they use the support groups as a coping strategy in dealing with their caregiving stress. They shared that support groups were very helpful to them. CG1, CG2, and CG3 shared that they have used support groups to cope with their caregiving stress. CG6 stated, “Support group was extremely helpful. That coupled with the support groups because you realize you can’t handle it alone. And when you get to the support group, you start telling the stories. Again, the laughter comes in. We do laugh a lot at the support group.” CG7 described that she attended conferences which are a form of a support group. She reported that some of these conferences require only conference call participation. She stated:

I also have attended several conferences now. And then I also participated in a nationwide conference call and there were three, almost two-hour-long conference

calls where you listen to many different stories. To listen to others is also very helpful.

Cognitive Therapy

Two of the caregivers shared that they use cognitive therapy to cope with their caregiving stress. CG3 responded:

Cognitive therapy, to be able to be meta to your current thoughts, and be able to say, 'Hold on, you're going in the wrong direction, here. Do not continue in this direction.' If you're angry or sad, just carrying on with that for a long period of time...you're supposed to feel your feelings and all, but after a while you need to be doing something else because it's not going to help you, staying angry.

CG6 said:

The other is, the main thing would have to be as I would constantly tell myself that it's not my wife talking, is the disease talking. So, I attributed it to the Alzheimer's and that took the personal part of it, seeing her acting in an inappropriate manner. And that's how I was able to cope with it, by reminding myself it's the disease talking. Self-talk. That it's the disease talking, not her talking. And that made it impersonal and able to cope.

Other coping strategies that the caregivers have used in managing their caregiving stress but have no commonalities among the participants are: walking, music, vacation, shopping, music, spiritual messages, and nature.

Table 5

Other Coping Strategies and Subthemes

Major Theme (Level 1)	Subthemes (Level 2)	Subthemes (Level 3)
Other coping strategies	Respite care	Accepting help from others
		Daycare centers
	Support groups	
	Cognitive Therapy	

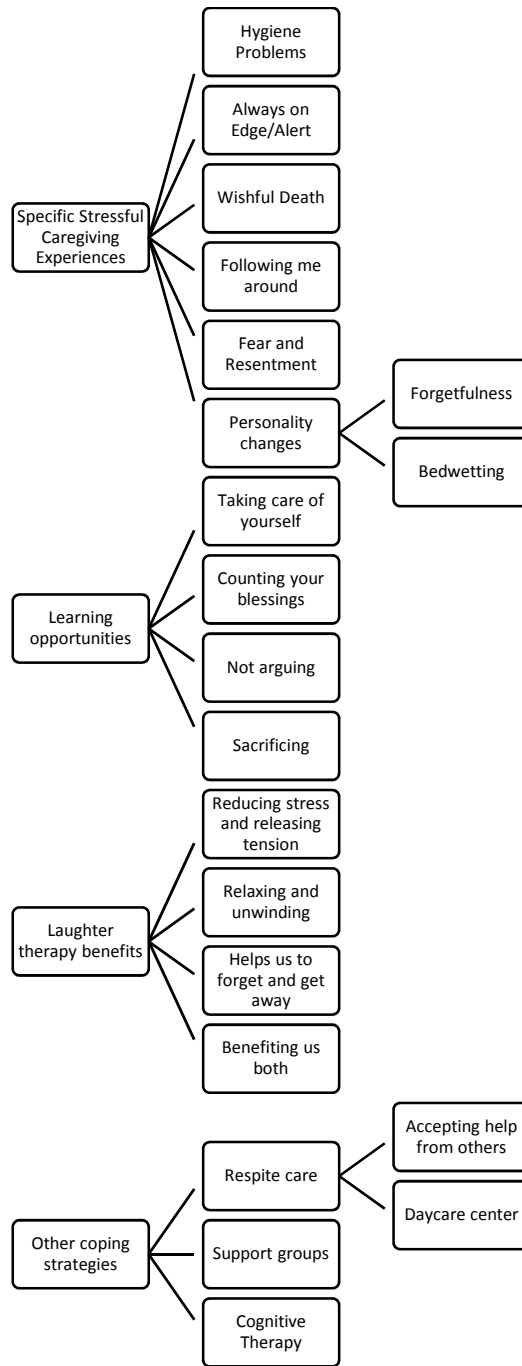


Figure 1. Summary of themes and two levels of subthemes.

Summary

This study sought to explore the participants' lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. Four core themes: specific stressful caregiving experiences, learning opportunities, laughter therapy benefits, and other coping strategies, provided a direction for their responses. All the caregivers detailed their specific stressful caregiving experiences and shed light on the daily challenges they battle in the process of providing care to their loved ones. They provided responses to their learning opportunities in the course of the caregiving responsibilities and how it affected their lives.

The caregivers' narratives of their experiences and descriptions of laughter therapy offered rich insights into how dementia caregivers cope with caregiving stress. All of them reported that intentionally using laughter as a therapeutic coping strategy is beneficial to them. The caregivers also responded to other coping strategies they have used to manage their caregiving stress. In the next chapter, I will analyze and interpret the study findings, discuss the limitations of the study, make recommendations for future research, and discuss implications for positive social change.

Chapter 5: Discussion, Conclusions, and Recommendations

Introduction

In this chapter, I fully discuss information gleaned from the responses of the participants in the study as it pertains to the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. I summarize the key findings of the study and discuss how these confirm, disconfirm, or extend the knowledge of dementia caregivers' experiences with caregiving stress and coping strategies as described in Chapter 2. These findings also answer the research questions that guided this study. The following research questions guided my exploration of the findings:

CQ1: How do dementia caregivers cope with caregiving stress?

CQ2: How do dementia caregivers describe stress associated with their caregiving role?

CQ3: How do dementia caregivers describe their experiences in using laughter to cope with their caregiving stress?

As this was a qualitative study with a phenomenological approach, the interpretation is significant to only the seven participants who are from a large metropolitan area in the Southwestern United States. The inclusion criteria for these participants were: to be a daughter, son, or a spouse of a dementia patient; to have provided care to the patient for more than 90 days, and to be age 21 and above. I selected participants from a support group and their participation was strictly voluntary without

any compensation. I collected demographic information (Appendix A) from the participants during the interviews prior to asking the interview questions (Appendix B).

Interpretation of Findings

The caregivers offered rich descriptions of their experiences with great insight into questions that guided the study. I discovered how the stress of caregiving could lead to feelings of helplessness and defeat in the lives of these caregivers; threatening their well-being to the extent of them becoming a secondary patient if no timely intervention were provided. The discussion of the findings focuses on the four major themes: specific stressful caregiving experiences, learning opportunities, laughter therapy benefits, and other coping strategies.

Stressful Caregiving Experiences

The theme of specific stressful caregiving experiences was derived a collection of the caregivers' responses describing their daily stressful experiences in providing care for their loved ones with dementia. The findings are in accord with what has been established in the literature, that the caregivers report high levels of stress over the course of providing care to their loved ones with dementia (Gibbons et al., 2014).

Most of the caregivers reported intense stress and burnout in their efforts to provide basic hygiene, which triggered anxiety, physical strain, and severe emotional distress among the caregivers. Some of these attempts to provide hygiene even triggered violence toward the caregivers. Van der Lee et al.'s (2014) review revealed that the severity of dementia patients' neuropsychiatric symptoms can determine caregivers' general burden and emotional distress.

Anxiety has been reported in the literature to be one of the major psychological symptoms to affect dementia caregivers (Contador et al., 2012). Responses from the caregivers describing how they are always anxious on daily basis, anticipating what the next stressor would be constituted the subtheme of having to be always on the edge or always alert. The anxiety reported by the caregivers is also a consequence of lack of resources to take care of their loved ones. The financial burden reported by the participants reinforces existing findings in the literature; as dementia symptoms worsen, the burden imposed on family members can result in increased emotional stress, depression, health impairments, lost wages due to disruptions in employment, and depleted income and finances (NAC, 2017).

The emergence of the wishful death subtheme is phenomenal to this study. It exposed the ambivalence of the emotions experienced by informal caregivers to the point of wishing death for themselves and their loved ones with dementia. The responses of some of the caregivers indicated conflicting feelings of both love and hopelessness toward their loved ones to the extent of developing some wishful death thoughts toward themselves or the loved ones. Caregivers who are experiencing severe stress and depression should be considered for counseling services to help them deal with their emotional issues.

One common response among these caregivers was that none had any intention of committing suicide or any such action, but they all entertained the wishful thought of giving up on life at a certain point. Those who wished death for their loved ones also made statements that indicated guilt for having such feelings. This finding confirms

existing knowledge, that wishful thinking is associated with negative outcomes (Gilhooly et al., 2016). The support group became one supportive system that offered caregivers the acceptance and encouragement to engage in a better perspective about the situation and know that they are not alone. Counselors and social workers could use community support groups to bring awareness to caregivers about the benefits of counseling services to address their emotional problems. A review by Cross et al. (2018) showed that caregivers recognize support groups as a beneficial source of connection with other individuals in similar situations, which could contribute to improved quality of life for both the caregivers and the dementia patients.

Pacing and following the caregiver around is one of the symptoms of dementia. From the reports of some of the caregivers, some of the “following me around” theme could cause stress and embarrassment to the caregivers. Dementia patients are not cognizant of their behaviors and could display embarrassing behaviors in public. It is essential that caregivers understand the symptoms of the disease. Education about dementia symptoms can benefit family and caregivers in order to understand that the negative behaviors associated with dementia are normal and unintentional (Reese et al., 2016).

Furthermore, the fear and resentment theme presented responses from two caregivers. One caregiver described how she expected her loved one to be appreciative of the care she provides to her. Again, this indicates lack of adequate knowledge of dementia to understand that dementia patients’ behaviors are unintentional. This lack of understanding affects the caregivers’ emotional well-being and causes them to suffer

more burnout. Most of the caregivers expressed feelings of fear of the daily stressors. These fears are valid. Future research should look into understanding the fear phenomenon among informal dementia caregivers in order to further protect their psychological health. Factors such as incapacity, despair, weariness, depression, patient neuropsychiatric symptoms, and a lack of knowledge about dementia can negatively affect dementia caregivers (Koca et al., 2017).

The theme of personality changes was reported by the caregivers as stressful, causing them to view their loved ones as strangers. Dementia patients display confusion, which can cause them to not recognize their spouses or children, and this forgetful behavior is found to be very distressing to the caregivers. Forgetfulness is a major symptom of dementia. Forgetting and misplacing items are among the specific stressful experiences reported by the caregivers. Bedwetting was reported as an observed personality change among the dementia patients. According to the caregivers, the challenges of continuously cleaning after their loved ones led to placing them in the nursing home or other care facilities. It is also noteworthy to mention that some of their reports showed a continuous visit to the nursing home or care facility to continue to assist in providing care to their loved ones. This also is in accord with the existing body of knowledge; some family caregivers continue to assist with bathing, dressing, and other activities of daily life in the nursing home or assisted living (Sheung-Tak, 2017).

Learning Opportunities

The theme of caregiving learning opportunities was the second major theme of this study, which coalesced around four subthemes: taking care of yourself, counting your

blessings, not arguing, and sacrificing. Most of the caregivers believed that it was critical for them to take care of themselves by resting, being prayerful, being patient with their loved ones, and so forth. Some of these responses are also mentioned later in this chapter as their coping strategies. These responses align well with the conceptual framework of Lazarus and Folkman's (1984) transactional model of stress and coping. If the primary appraisal (caregiving experiences) deems the interaction as stressful, individuals will start the secondary appraisal (taking care of yourself). During the secondary appraisal, individuals decide how they can best remedy their situations and change undesirable conditions. This appraisal is done by evaluating internal (e.g., willpower, inner strength) and external (e.g., rest, support groups/peers, professionals) coping options in order to produce a more positive environment.

The subtheme of counting your blessings is a reflective strategy, which allows the caregivers to be reflective and focus on something positive in their lives for a greater sense of well-being and happiness. This is a transactional mechanism in dealing with stress. The findings revealed that all the caregivers found arguing with their loved ones very stressful, and they each learned during the course of caregiving not to engage in arguments with a dementia patient. I considered that these arguments were occurring at the onset of their caregiving role until gaining more knowledge and awareness about dementia. Responses on the subtheme of sacrificing showed that caregivers who gave up something precious such as jobs, lifestyles, life goals, financial resources, family time, and so forth to take care of their loved ones found it a rewarding experience and were proud of their actions. Caring for relatives living with dementia can be rewarding (Egge,

2017). Only one caregiver found it unrewarding. This might be as a result of the anger and resentment she described toward her loved one. However, this deviation from the norm could equally be as a result of lack of adequate awareness about the dementia.

Laughter Therapy Benefits

The laughter therapy benefits theme was a collection of the caregivers' responses on their experiences in the use of different aspects of laughter as a coping strategy to manage their daily caregiving stress. The caregivers' responses portrayed the benefits of laughter in dealing with dementia caregiving stress and reinforced the definition of laughter therapy as it is in the literature. Laughter therapy was defined as the use of laughter as an emotional workout, which immediately places individuals in a new frame of mind away from all forms of negativity (Prakash, 2013).

It was found among the caregivers that laughter therapy has helped them at the end of the day to empty their mind, free from all the demands and pressures associated with caring for their loved one. The ability and willpower to intentionally plan and go through the motion of watching a humorous activity in order to experience relief from stress concurs with the definition of laughter therapy, which stated that it is a workout. I would assert that for the purposes of this study, laughter therapy should equally be viewed as a form of exercise (emotional workout) similar to a physical exercise (physical workout). One is called a physical exercise, and the other is called an emotional exercise; both aiming toward the same goal, to improve one's overall health and psychological well-being.

The transactional model of appraisal continues to present in the caregivers' experiences in use of laughter therapy to manage their caregiving stress. As the burden, and stress continued to intensify and overpower the caregivers' available resources to manage the caregiving stress, they sought to use laughter therapy in the form of watching sitcoms and stand-up comedians, sharing funny stories at support groups, inducing laughter from their loved ones with dementia (making jokes from the illogical assumptions over something said or done by their loved ones) to effectively manage the caregiving stress and maintain an emotional balance. The caregivers mentioned several benefits they experienced in using laughter therapy to manage their caregiving stress, among which are: that it reduced stress and released tension; helped them to relax and unwind; helped them to momentarily forget and escape ("get away") from caregiving responsibilities; and benefited their loved ones with dementia as well. Additional responses are that laughter therapy helped them to feel better and sleep better, and it felt like a vacation and a distraction from the stressors.

Other Coping Strategies

The fourth major theme, other coping strategies, emerged with three subthemes and two additional subthemes. Other coping strategies that the caregivers have used to manage their caregiving stress was explored in this section and the three major coping strategies that were discussed by most caregivers were respite care, support groups, and cognitive therapy.

The daycare center where they can drop off their loved ones with dementia during the day in order to get relief or manage few errands other than the 24/7 caregiving

represented a good option for respite care. Responses from the caregivers showed that a day care center could also serve as respite care, while caregivers go to work and return or even catch up with a friend for few hours. However, it is noteworthy to mention that the cost of day care services will be out of pocket if the individual with dementia has no health insurance coverage for this service. If lack of funding for this service becomes outstanding, then the caregiver's job might be sacrificed in order to stay home and provide care for the loved one.

All the caregivers in this study attend support groups and have each shared very positive outcomes from attendance, stating that a "support group was extremely helpful" and feels like a family. Source of connection with other individuals in a similar situation, practical assistance, guidance to community resources, identification of personal concerns, and the development of effective problem-solving techniques are all the benefits that dementia caregivers could draw from the support groups (Cross et al., 2018; Wang et al., 2012).

The caregivers also shared some coping skills in the form of cognitive therapy. One of the responses discussed redirecting the thought pattern by allowing positive thoughts about the situation at hand. Another response is the use of self-talk to redirect self, absorbing the neuropsychiatric behaviors as impersonal and blames any inappropriate talk on the dementia. This type of attitude helped the caregivers to cope better. Van der Lee et al.'s (2014) review showed that the severity of dementia patients' neuropsychiatric symptoms are the determinants of caregivers' general burden and emotional distress.

Unexpected Findings

The majority of the participants in this study, five out of seven participants, are females, which corresponds with the claim of Gibbons et al. (2014) that 65% of informal caregivers are women. In contradiction with Sörensen & Conwell (2011) that women handle caregiving stress better and show more improvements in depression than men, the current study found that the reverse is the case. Four females reported severe stress and three out of the four women reported wishful death. The only two males in the study reported moderate stress. Nevertheless, this finding should be approached with caution due to the small sample size. There were no notable differences in the responses among the spouses and children of dementia patients in their stressful caregiving experiences and laughter therapy experiences. Also, the level of education did not present any notable differences in their responses to caregiving experiences. Level of education did not assume a mediating role on stress. Out of the four caregivers who reported severe stress, two have master's degrees and doctoral degree, while the other two have a bachelor's degree and an associate degree. The highest level of education did not ameliorate the effect of stress or vice versa. However, it was observed from the responses, that the caregiver with the highest level of education (doctoral degree) sought additional resources.

Limitations of the Study

The limitations of this study are noted within this section. This study was limited to interviews with only spouses and adult children caregivers of individuals with dementia. It could not explore a broader experience to include other extended family

members such as siblings who equally provide care to their siblings with dementia. The small sample size is also a limitation to dementia caregivers who experience moderate to severe stress. Therefore, the outcome of the study provides only an understanding of this target population. Further research is needed with a larger population to address more diversity and transference to the general population. An additional limitation is that the samples were all selected from the support group and not from the general community. Further research is required to include other dementia caregivers who are in the general community in order to explore the differences in their experiences.

Recommendations

The recommendations that resulted from this study are written for (a) dementia caregivers, (b) healthcare professionals, and (c) researchers engaged in future research. The findings of this study offer improvements for programs and policy changes in the area of dementia caregivers' well-being and provides insight into the dynamic stressful and depressive experiences of dementia caregivers and their reported benefits of laughter therapy in mitigating caregiving stress.

Recommendations for Dementia Caregivers

Dementia caregivers who use laughter therapy to cope with their caregiving stress should consider the following:

1. Should purposefully secure 30–60 minutes of free time for three to five days a week when they can get away from the caregiving responsibilities to relax and enjoy some laughter therapy experiences. Referring to the caregivers'

responses during the interviews, this coping measure will reduce stress and help to improve psychological well-being.

2. Should seek knowledge and awareness about dementia and its expectations in order to be richly equipped with skills to provide a good quality of care to their loved ones with dementia. This will enhance their quality of life.
3. Should consider counseling services to help them deal with their emotional issues and be able to take care of themselves and provide a better quality of care to their loved ones. More consideration should be given to those caregivers who are experiencing severe stress and wishful death for themselves or their loved ones.
4. Should be able to accept help from others whenever it is made available without any sense of guilt. Caregivers should understand that accepting relief or respite help does not indicate less love for their loved ones. It actually means that they aspire to offer their loved ones a better quality of care by also taking care of themselves.

Recommendations for Health Care Professionals

Counselors and social workers will benefit from the awareness of dementia caregivers' experiences with laughter therapy to better understand how it helps caregivers in coping with their caregiving stress. Counselors could encourage other dementia caregivers who are experiencing stress and depression to explore laughter therapy and find out how it affects them. Specific caregiving experiences as found in this study will help counselors to understand the different types of moderate and severe stressful

experiences of dementia caregivers in the course of their caregiving responsibilities. This understanding will help counselors to be more empathic and willing to go above and beyond in searching and providing different available resources that will support caregivers and protect them from developing symptoms of depression.

The awareness will also help to inform program and policy changes that will tailor services to dementia caregivers such as providing free respite care so that caregivers can break away from their caregiving responsibilities and receive counseling services. This type of accommodation will meet the needs of the caregivers and improve their quality of life.

Counselors and social workers will benefit from insight regarding the benefits of laughter therapy. Social workers could introduce laughter therapy as an additional coping strategy that could be explored individually and also in the support groups. The study findings showed that caregivers could enjoy sharing their laugh-filled stories at support groups. All the participants in this study reported about the great benefits of support groups in terms of connecting with others in similar situations and gaining knowledge on how to improve their life experiences as caregivers.

Recommendations for Future Research

Recommendations for future research also constitute some limitations of this study. The following recommendations are written for researchers engaged in future study:

1. The study participants included spouses of dementia patients and adult children of dementia patients. Both male and female spouses, and daughters

volunteered to participate. There was no son volunteer. Consequently, the study could not explore the lived experiences of sons who provide caregiving to their parents with dementia. Therefore, exploring the lived experiences of dementia caregivers (sons of dementia patients) in using laughter therapy to cope with their caregiving stress will be an interesting phenomenological study for future research.

2. Further research is needed to include a larger sample population to address more diversity and transference to the general population. Due to the small sample size of this study, the findings of the study cannot universally apply to the general population of caregivers.
3. The study samples were all selected from the support group and not from the general community. Further research is needed to explore the differences in experiences among community caregivers who do not have affiliations with the support groups.
4. There is need for future research to measure how laughter therapy as a coping strategy reduces dementia caregivers' stress.
5. Further research shall look into understanding fear phenomena among informal dementia caregivers in order to tailor appropriate interventions.

Social Change Implications

Stress management has consistently been a force for positive social change by addressing effective coping strategies that improve health and maintain a good quality of life. The findings from this study could be used by dementia caregivers to decide whether

laughter therapy would be an effective, appropriate coping strategy for them. Laughter therapy among dementia caregivers should be considered an additional coping strategy among dementia caregivers and made public through the media/social media platforms in order to capture the attention and interest of dementia caregivers who are suffering moderate to severe caregiving stress and capture those who are new to dementia caregiving responsibilities and the stress associated with it.

Laughter therapy is an inexpensive and easily accessible self-management technique that has the ability to improve caregivers' moods. This type of coping strategy exercises not only the psychological but also the physiological parts of the body, thereby improving the caregivers' quality of life. Thus, the recommendation of 30–60 minutes' free time for three to five days a week when caregivers can get away from the caregiving responsibilities to relax and enjoy some laughter therapy exercises.

Improvements in dementia caregivers' health will be beneficial to the government and taxpayers in minimizing the healthcare expenses incurred in emergency room visits and hospitalizations. Insensitivity to caregivers' health and psychological well-being has caused secondary patients among the caregivers and further depleted healthcare funds by placing their loved ones in skilled nursing facilities or related placements. Therefore, more research should be encouraged to explore more coping and intervention strategies that will help dementia caregivers to stay healthy and provide care for their loved ones in the community. On the other hand, dementia caregivers whose mind and body are salubrious will be in a position to advocate for their loved ones with dementia.

Conclusion

The purpose of this phenomenological qualitative study was to address a gap in the literature concerning the lived experiences of dementia caregivers who use laughter therapy as a coping strategy to manage their caregiving stress. The results of this study are intended to illuminate the phenomena in the depth and \ caregiving stress. Laughter therapy among caregivers could be a useful, cost-effective, and easily accessible intervention with positive effects on stress.

References

- Abril, E. P., Szczypka, G., & Emery, S. L. (2017). LMFAO! Humor as a response to fear: decomposing fear control within the extended parallel process model. *Journal of Broadcasting & Electronic Media*, *61*(1), 126-143.
<https://doi.org/10.1080/08838151.2016.1273921>
- Aggar, C. (2016). Implications of caregiving. *Journal of the Australasian Rehabilitation Nurses' Association*, *19*(2), 15-24.
- Alzheimer's Association (2014). 2014 Alzheimer's disease facts and figures. *Alzheimer's & Dementia*, *10*(2), 1-75.
- Allen, D. (2014). Laughter really can be the best medicine. *Nursing Standard*, *28*(32), 24-25. <https://doi.org/10.7748/ns2014.04.28.32.24.s28>
- American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.
- Atlas.ti, GmbH Berlin (2010) *Atlas website*. Retrieved from www.atlasti.com
- Andersen, D. (2015). What's so funny? Towards a client perspective on professionals' use of humour in drug treatment. *Drugs Education Prevention Policy*, *22*(3), 263–271. <https://doi.org/10.3109/09687637.2015.1016399>
- Bains, G. S., Berk, L. S., Lohman, E., Daher, N., Petrofsky, J., Schwab, E., & Deshpande, P. (2015). Humor's effect on short-term memory in health and diabetic older adults. *Alternative Therapies*, *21*(3), 16-25.
- Barral, C., Rodríguez-Cintas, L., Martínez-Luna, N., Bachiller, D., Pérez-Pazos, J., Alvarós, J., . . . Roncero, C. (2014). Reliability of the Beck Depression Inventory

- in opiate-dependent patients. *Journal of Substance Abuse*, 21(2), 1–6.
<https://doi.org/10.3109/14659891.2014.980859>
- Bast, E. S., & Berry, E. M. (2014). Laugh away the fat? Therapeutic humor in the control of stress-induced emotional eating. *Rambam Maimonides Medical Journal*, 5(1), 1-12. <https://doi.org/10.5041/rmmj.10141>
- Bekris, L. M., Yu, C. E., Bird, T. D., Tsuang, D. W. (2010). Genetics of Alzheimer disease. *Journal Geriatric Psychiatry Neurology*, 23(4):213–227.
<https://doi.org/10.1177/0891988710383571>
- Bennett, P. N., Parsons, T., Ben-Moshe, R. Weinberg, M., Neal, M., Gilbert, K., . . . Hutchinson, A. (2014). Laughter and humor therapy in dialysis. *Seminars in Dialysis*, 27(5), 488–493. <https://doi.org/10.1111/sdi.12194>
- Berk, R. A. (2015). The greatest veneration: humor as a coping strategy for the challenges of aging. *Social Work in Mental Health*, 13(1), 30–47.
<https://doi.org/10.1080/15332985.2014.890152>
- Bloudek, L. M, Spackman, E. D., Blankenburg, M., & Sullivan, S. D. (2011). Review and meta-analysis of biomarkers and diagnostic imaging in Alzheimer’s disease. *Journal of Alzheimer’s Disease*, 26, 627–645. <https://doi.org/10.3233/jad-2011-110458>
- Brodaty, H., & Arasaratnam, C. (2012). Meta-analysis of nonpharmacological interventions for neuropsychiatric symptoms of dementia. *American Journal of Psychiatry*, 169(9), 946–953. <https://doi.org/10.1176/appi.ajp.2012.11101529>

- Brody, H., & Donkin, M. (2009). Family caregivers of people with dementia. *Dialogues Clinical Neuroscience, 11*(2), 217-228.
- Byrne, M. (2009). Understanding life experiences through a phenomenological approach to research. *AORN Journal, 73*(4), 830–832. [https://doi.org/10.1016/s0001-2092\(06\)61812-7](https://doi.org/10.1016/s0001-2092(06)61812-7)
- Calvo-Perxas, L., Vilalta-Franch, J., Litwin, H., Turro-Garriga, Mira, P., & Garre-Olmo, J. (2018). What seems to matter in public policy and the health of informal caregivers? A cross-sectional study in 12 European countries. *PLoS ONE, 13*(3), e0194232. <https://doi.org/10.1371/journal.pone.0194232>
- Chen, H.-M., Huang, M.-F., Yeh, Y.-C., Huang, W.-H., & Chen, C.-S. (2015). Effectiveness of coping strategies intervention on caregiver burden among caregivers of elderly patients with dementia. *Psychogeriatrics, 15*(1), 20-25. <https://doi.org/10.1111/psyg.12071>
- Cohen-Mansfield, J. (2015). Behavioral and psychological symptoms of dementia. In P. A. Lichtenberg & B. T. Mast (Eds.), *APA handbook of clinical geropsychology: Vol. 2. Assessment, treatment, and issues of later life* (pp. 271-317). <https://doi.org/10.1037/14459-011>
- Cohen-Mansfield, J., Golander, H., & Heinik, J. (2013). Delusions and hallucinations in persons with dementia: A comparison of the perceptions of formal and informal caregivers. *Journal of Geriatric Psychiatry and Neurology 26*(4) 251-258. <https://doi.org/10.1177/0891988713509136>

- Collicutt, J., & Gray, A. (2012). A merry heart doeth good like a medicine: humour, religion and wellbeing. *Mental Health, Religion & Culture*, *15*(8), 759–778.
<https://doi.org/10.1080/13674676.2011.630385>
- Contador, I., Fernandez-Calvo, B., Palenzuela, D. L., Migueis, S., & Ramos, F. (2012). Prediction of burden in family caregivers of patients with dementia: A perspective of optimism based on generalized expectancies of control. *Aging & Mental Health*, *16*(6), 675-682. <https://doi.org/10.1080/13607863.2012.684666>
- Creswell, J. W. (2013). *Research design: Qualitative, quantitative, and mixed methods approaches* (4th ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2009). *Research design: Qualitative, quantitative, and mixed methods approaches* (3rd ed.). Thousand Oaks, CA: Sage Publications.
- Creswell, J. W. (2007). *Qualitative Inquiry & Research Design: choosing among five approaches* (2nd ed.). Thousand Oaks, CA: Sage Publications.
- Cross, A. J., Garip, G., & Sheffield, D. (2018). The psychosocial impact of caregiving in dementia and quality of life: A systematic review and meta-synthesis of qualitative research. *Psychology & Health*, *33*(11), 1321–1342.
- Daly, B., Thompsell, A., Sharpling, J., Rooney, Y. M., Hillman, L., Wanyonyi, K. L., . . . & Gallagher, J. E. (2018). Evidence summary: The relationship between oral health and dementia. *British Dental Journal*, *223*(11), 846-853.
<https://doi.org/10.1038/sj.bdj.2017.992>
- Danielsen, R. D. (2013). Humor: The best Rx you can write. *Clinicians Reviews*, *1*, 8-9.

- Dunkin, J.J. (2009). Aging and gender. *Neuropsychology of Women*. New York, NY: Springer Science + Business Media.
- Eberhart, N. K., & Hammen, C. L. (2010). Interpersonal style, stress, and depression: An examination of transactional and diathesis-stress models. *Journal of Social and Clinical Psychology, 29*(1), 23-38.
- Egdell, V. (2012). Development of support networks in informal dementia care: Guided, organic, and chance routes through support. *Canadian Journal on Aging, 31*(4), 445-455. <https://doi.org/10.1017/s0714980812000323>
- EGGE, R. (2017). Shining a light on those who provide dementia care. Retrieved from <https://blog.ssa.gov/author/robert-egge/>
- Epstein-Lubow, G., Gaudiano, B., Darling, E., Hinckley, M., Tremont, G., Kohn, R. (2012). Differences in depression severity in family caregivers of hospitalized individuals with dementia and family caregivers of outpatients with dementia. *American Journal of Geriatric Psychiatry, 20*(9):815–9
- Family Caregiver Alliance (2003). Taking care of you: Self-care for family caregivers. Retrieved from https://california.providence.org/~/_/media/Files/Providence%20CA/Saint%20John/Taking%20Care%20of%20YOU.pdf
- Folkman, S., & Lazarus, R. S. (1986). Stress processes and depressive symptomology. *Journal of Abnormal Psychology, 95*, 107-113.

- Ford, T. E., Platt, T., Richardson, K., & Tucker, R. (2016). The psychology of humor: Basic research and translation. *Translational Issues in Psychological Science*, 2(1), 1-3.
- Frisby, B. N., Horan, S. M., & Booth-Butterfield, M. (2016) The role of humor styles and shared laughter in the post divorce recovery process. *Journal of Divorce & Remarriage*, 57(1), 56-75.
- Freud, S. (1905). *Three essays on the theory of sexuality: A case of hysteria*. In J. Strachey (Ed.), *The standard edition of the complete psychological works of Sigmund Freud* (Vol. 7; pp. 123-246). New York, NY: W. W. Norton.
- Gallagher, D., Ni Mhaolain, A., Crosby, L., Ryan, D., Lacey, L., Coen, R.F., . . . Lawlor, B.A. (2011). Self- efficacy for managing dementia may protect against burden and depression in Alzheimer's caregivers. *Aging & Mental Health*, 15(6), 663–670. <https://doi.org/10.1080/13607863.2011.562179>
- Galvin, J.E., & Sadowsky, C. H. (2012). Practical Guidelines for the Recognition and Diagnosis of Dementia. *Journal of the American Board of Family Medicine*, 25(3), 367-382. <https://doi.org/10.3122/jabfm.2012.03.100181>
- Ghafouri1, R. (2015). Effects of humor therapy on blood pressure in patients undergoing hemodialysis. *Avicenna Journal of Phytomedicine*, 5(1), 40.
- Gibbons, C., Creese, J., Tran, M., Brazil, K., Chambers, L., & Weaver, B. (2014). The psychological and health consequences of caring for a spouse with dementia: A critical comparison of husbands and wives. *Journal of Women & Aging*, 26(1):3–21.

- Gilbert, R. (2014). Laughter therapy: promoting health and well bring. *Nursing & Residential Care, 16*(7), 392-395. <https://doi.org/10.12968/nrec.2014.16.7.392>
- Gilhooly, K. J., Gilhooly, M. L. M., Sullivan, M. P., McIntyre, A., Wilson, L., Harding, E., . . . Crutch, S. (2016) A meta-review of stress, coping and interventions in dementia and dementia caregiving. *BMC Geriatrics, 16*(1), 1056. <https://doi.org/10.1186/s12877-016-0280-8>
- Goh, Y. W., Sawang, S., & Oei, T. P. S. (2010). The revised transactional model (RTM) of occupational stress and coping: An improved process approach. *Australian & New Zealand Journal of Organisational Psychology, 3*(1), 13-20. <https://doi.org/10.1375/ajop.3.1.13>
- Gold, J. I., Treadwell, M., Weissman, L., & Vichinsky, E. (2008). An expanded transactional stress and coping model for siblings of children with sickle cell disease: Family functioning and sibling coping, self-efficacy and perceived social support. *Child: Care, Health & Development, 34*(4), 502-512. <https://doi.org/10.1111/j.1365-2214.2008.00810.x>
- Golden, M. A., & Lund, D. A. (2009). Identifying themes regarding the benefits and limitations of caregiver support group conversations. *Journal of Gerontological Social Work, 52*(2), 154-170. <https://doi.org/10.1080/01634370802561968>
- Gräbel, E., & Adabbo, R. (2011). Perceived burden of informal caregivers of a chronically ill older family member: Burden in the context of the transactional stress model of Lazarus and Folkman. *Journal of Gerontopsychology and Geriatric Psychiatry, 24*(3), 143-154.

- Greene, J. C., & Caracelli, V. J. (Eds.). (1997). *Advances in mixed-method evaluation: The challenges and benefits of integrating diverse paradigms*. (New Directions for Evaluation. No. 74). San Francisco, CA: Jossey-Bass.
- Haley, W. E., Levine, E. G., Brown, S. L., & Bartolucci, A. A. (1987). Stress, appraisal, coping, and social support as predictors of adaptational outcome among dementia caregivers. *Psychology and Aging, 2*(4), 323-330.
- Herlily, B., & Corey, G. (2006). *ACA ethical standards casebook* (6th ed.). Alexandria, VA: American Counseling Association.
- Hirst, M. (2005). Carer distress: A prospective, population-based study. *Social Science and Medicine, 61*(3), 697–708. <https://doi.org/10.1016/j.socscimed.2005.01.001>
- Hoyt, M. F., & Andreas, S. (2015). Humor in brief therapy: A dialogue. Part 1. *Journal of Systemic Therapies, 34*(3), 14–25. <https://doi.org/10.1521/jsyt.2015.34.3.14>
- Huang, M. F., Huang, W. H., Su, Y. C., Hou, S. Y., Chen, H. M., Yeh, Y. C., . . . Chen, C. S. (2015). Coping strategy and caregiver burden among caregivers of patients with dementia. *American Journal of Alzheimer's Disease and Other Dementias, 30*(7), 694–698.
- Karasz, A. (2005). Cultural differences in conceptual models of depression. *Social Science & Medicine, 60*(7): 1625–35.
- Kim, S. H., Kim, Y. H., & Kim, H. J. (2015). Laughter and stress relief in cancer patients: A pilot study. *Evidence-Based Complementary and Alternative Medicine, 1*, 1-6.

- Kirschner, J., Young, J., & Fanjoy, R. (2014). Stress and coping as a function of experience level in collegiate flight students. *Journal of Aviation Technology and Engineering*, 3(2), 14–19. <https://doi.org/10.7771/2159-6670.1092>
- Ko, H.-J., & Youn, C.-H. (2011) Effects of laughter therapy on depression, cognition and sleep among the community-dwelling elderly. *Geriatrics & Gerontology International*, 11(3), 267-274. <https://doi.org/10.1111/j.1447-0594.2010.00680.x>
- Koca, E., Taskapilioglu, O., & Bakar, M. (2017). Caregiver burden in different stages of Alzheimer’s disease. *Archives of Neuropsychiatry*, 54(1), 82-86. <https://doi.org/10.5152/npa.2016.11304>
- Kong, M., Shin, S. H., Lee, E., & Yun, E. K. (2014). The effect of laughter therapy on radiation dermatitis in patients with breast cancer: a single-blind prospective pilot study. *OncoTargets and Therapy*, 7, 2053-2059.
- Konradt, B., Hirsch, R, D., Jonitz, M. F., & Junglas, K. (2013). Evaluation for a standardized humor group in a clinical setting. A feasibility study for older patients with depression. *International Journal of Geriatric Psychiatry*, 28(8), 850-857. <https://doi.org/10.1002/gps.3893>
- Kopelman, M. D. (2002). Disorders of memory. *Brain*, 125(10), 2152–2190. <https://doi.org/10.1093/brain/awf229>
- Langa, K.M., & Levine, D. A (2014). The diagnosis and management of mild cognitive impairment: A clinical review. *Journal of the American Medical Association*, 312(23), 2551–2561. <https://doi.org/10.1001/jama.2014.13806>

- Larson, E. B., Yaffe, K., & Langa, K. M. (2013). New insights into the dementia epidemic. *New England Journal of Medicine*, *369*(24), 2275–2277.
- Lazarus, R.S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York, NY: Springer.
- Lee, E. (2015). Do technology-based support groups reduce care burden among dementia caregivers? A review. *Journal of Evidence-Informed Social Work*, *12*(5), 474-487. <https://doi.org/10.1080/15433714.2014.930362>
- Leedy, P. D., & Ormrod, J. E. (2012). *Practical research: planning and design* (10th ed.). Boston, MA: Pearson.
- Leedy, P. D., & Ormrod, J. E. (2005). *Practical Research: Planning and Design* (8th ed.). Upper Saddle River, NJ: Pearson Merrill Prentice Hall.
- Lichtenberg, P. A., Mast, B. T., Carpenter, B. D., & Loebach Wetherell, J. (2015). In P. A. Lichtenberg & B. T. Mast (Eds.), *APA handbook of clinical geropsychology: Vol. 2. Assessment, treatment, and issues of later life*. Washington, DC: American Psychological Association.
- Link, G. (2015). The administration for community living: Programs and initiatives providing family caregiver support. *Generations*, *39*(4), 57-63.
- Livingston, G., Sommerlad, A., Orgeta, V., Costafreda, S. G., Huntley, J., Ames, D., . . . Mukadam, M. (2017). Dementia prevention, intervention, and care. *Lancet*, *390*(10113), 2673–2734. [https://doi.org/10.1016/S0140-6736\(17\)31363-6](https://doi.org/10.1016/S0140-6736(17)31363-6)
- Loy, C. T., Schofield, P. R., Turner, A. M., Kwok, J. B. (2014). Genetics of dementia. *Lancet*, *383*(9919), 828–840. [https://doi.org/10.1016/s0140-6736\(13\)60630-3](https://doi.org/10.1016/s0140-6736(13)60630-3)

- Lucas, C. (2014). Laughter is the best medicine. *Cancer and Society*, 15, 300-1301.
- MacDonald, C. M. (2004). A chuckle a day keeps the doctor away: Therapeutic humor and laughter. *Journal of Psychosocial Nursing & Mental Health Services*, 42(3), 18-25. <https://doi.org/10.3928/02793695-20040315-05>
- Miklossy, J. (2015). Historic evidence to support a causal relationship between spirochetal infections and Alzheimer's disease. *Frontiers in Aging Neuroscience*, 7(46), 1-12. <https://doi.org/10.3389/fnagi.2015.00046>
- Modak, T., Sarkar, S., Sagar, R. (2016). Dorothea Dix: A proponent of humane treatment of mentally ill. *Journal of Mental Health and Human Behavior*, 21(1), 69-71. <https://doi.org/10.4103/0971-8990.182088>
- Moon, H., & Dilworth-Anderson, P. (2015). Baby boomer caregiver and dementia caregiving: Findings from the National Study of Caregiving. *Age and Ageing*, 44(2), 300–306.
- Mora-Ripoll, R. (2010). The therapeutic value of laughter in medicine. *Alternative Therapies in Health And Medicine*, 16(6), 56-64.
- Moustakas, C. (1994). *Phenomenological research methods*. Thousand Oaks, CA: Sage Publications.
- National Alliance for Caregiving. (2017). Dementia caregiving in the U.S. Retrieved from http://www.caregiving.org/wpcontent/uploads/2017/02/DementiaCaregivingFINAL_WEB.pdf

- Nolo (August 2018). Getting social security disability benefits for dementia. Retrieved from <https://www.nolo.com/legal-encyclopedia/getting-social-security-disability-benefits-dementia.html>
- Nyatanga, B. (2014). Does humour have a place in palliative care? *British Journal of Community Nursing, 19*(4), 202.
- Ozcakar, N., Kartal, M., Dirik, G. Tekin, N., & Guldal, D. (2012). Burnout and relevant factors in nursing staff: What affects the staff working in an elderly nursing home? *Turkish Journal of Geriatrics, 15*(3), 266-272.
- Panegyres, P. K. & Gray, V. (2010). Dementia risk factors for Australian baby boomers. *Neurology International, 2*(1), 57-61. <https://doi.org/10.4081/ni.2010.e13>
- Papastavrou, E., Tsangari, H., Karayiannis, G., Papacostas, S., Efstathiou, G., & Sourtzi, P. (2011). Caring and coping: The dementia caregivers. *Aging & Mental Health, 15*(6), 702-711. <https://doi.org/10.1080/13607863.2011.562178>
- Prakash, V. (2013). Laughter therapy for mind and body: An interview with Vishwa Prakash. *Alternative and Complementary Therapies, 19*(4), 205. <https://doi.org/10.1089/act.2013.19410>
- Reese, T. T., Thiel, D. J., & Cocker, K. E. (2016). Behavioral disorders in dementia: Appropriate nondrug interventions and antipsychotic. *American Family Physician, 94*(4), 276-282. Retrieved from <https://www.aafp.org/afp/2016/0815/p276.html>
- Rieger, A., & McGrail, J. P (2013). Coping humor and family functioning in parents of children with disabilities. *Rehabilitation Psychology, 58*(1) 89–97.

- Reitz C., Brayne C., & Mayeux R. (2011). Epidemiology of Alzheimer disease. *Nature Reviews Neurology*, 7(3):137–52. <https://doi.org/10.1038/nrneurol.2011.2>
- Roaldsen, B. L., Sørli, T., & Lorem, G. F. (2015). Cancer survivors' experiences of humour while navigating through challenging landscapes—a socio-narrative approach. *Scandinavian Journal Caring Sciences*, 29(4), 724–733. <https://doi.org/10.1111/scs.12203>
- Roche, L., Croot, K., MacCann, C., Cramer, B., & Diehl-Schmid, J. (2015). The role of coping strategies in psychological outcomes for frontotemporal dementia caregivers. *Journal of Geriatric Psychiatry and Neurology*, 28(3), 218–228. <https://doi.org/10.1177/0891988715588830>
- Rosdinom, R., Zarina, M. Z. N., Zanariah, M. S., Marhani, M., & Suzaily, W. (2013). Behavioural and psychological symptoms of dementia, cognitive impairment and caregiver burden in patients with dementia. *Preventive Medicine*, 57, 67–69. <https://doi.org/10.1016/j.ypmed.2012.12.025>
- Sanabria-Castro, A., Alvarado-Echeverría, I., & Monge-Bonilla, C. (2017). Molecular pathogenesis of Alzheimer's disease: An update. *Annals of Neurosciences*, 24, 46–54. <https://doi.org/10.1159/000464422>
- Schoenmakers, B., Buntinx, F., & DeLepeleire (2010). Supporting the dementia family caregiver: The effect of homecare intervention on general well-being. *Aging & Mental Health*, 14(1), 44–56. <https://doi.org/10.1080/13607860902845533>
- Scott, C. V., Hyer, L. A., & McKenzie, L. C. (2015). The healing power of laughter: The applicability of humor as a psychotherapy technique with depressed and anxious

older adults. *Social Work in Mental Health*, 13(1), 48–60.

<https://doi.org/10.1080/15332985.2014.972493>

Scott, J. L., Dawkins, S., Quinn, M. G., Sanderson, K., Elliott, K. J., Stirling, C., . . .

Robinson A. (2016). Caring for the carer: A systematic review of pure technology-based cognitive behavioral therapy (TB-CBT) interventions for dementia carers. *Aging & Mental Health Volume: 20*(8), 793-803.

<https://doi.org/10.1080/13607863.2015.1040724>

Shahidi, M., Mojtahed, A., Modabbernia, A., Mojtahed, M., Shafiabady, A., Delavar, A.,

& Honari, H. (2011). Laughter yoga versus group exercise program in elderly depressed women: A randomized controlled trial. *International*, 26(3), 322-327.

<https://doi.org/10.1002/gps.2545>

Sheung-Tak, C. (2017). Dementia caregiver burden: A research update and critical

analysis. *Current Psychiatry Reports*, 19(9), 64. <https://doi.org/10.1007/s11920-017-0818-2>

Smith, A. D., Refsum, H., & Jacoby, R. (2016). Evidence-based prevention and treatment of dementia. *Lancet Neurology*, 15(10), 1005-1006.

[https://doi.org/10.1016/s1474-4422\(16\)30074-6](https://doi.org/10.1016/s1474-4422(16)30074-6)

Snelling, S. (2012). Why laughter is crucial for caregivers. Retrieved from

<http://www.nextavenue.org/article/2012-11/why-laughter-crucial-caregivers>

Snyder, C. M., Fauth, E., Wanzek, J., Piercy, K. W., Norton, M. C., Corcoran, C., . . .

Tschanz, J. T. (2015). Dementia caregivers' coping strategies and their

- relationship to health and well-being: The Cache county study. *Aging & Mental Health, 19*(5), 390-399. <https://doi.org/10.1080/13607863.2014.939610>
- Sommers-Flanagan, R. & Sommers-Flanagan, J. (2007). *Becoming an ethical helping professional* (7th ed.). Hoboken, NJ: John Wiley & Sons.
- Sörensen, C., & Conwell, Y. (2011). Issues in dementia caregiving: Effects on mental and physical health, intervention strategies, and research needs. *The American Journal of Geriatric Psychiatry, 19*(6), 491-496. <https://doi.org/10.1097/jgp.0b013e31821c0e6e>
- Stein, D. J. (2013). What is a mental disorder? A perspective from cognitive-affective from science. *Canadian Journal of Psychiatry, 58*(12), 656–62.
- Stengel, B. S. (2014). After the Laughter. *Educational Philosophy and Theory, 46*(2), 200–211.
- Stream, W. B. (2009). Laughter prescription. *Canadian Family Physician, 55*(10), 965-967.
- Sun, F. (2014). Caregiving stress and coping: A thematic analysis of Chinese family caregivers of persons with dementia. *Dementia, 13*(6), 803-818.
- Sutcliffe, C. L., Roe, B., Jasper, R., Jolley, D., & Challis, D. J. (2017). People with dementia and carers' experiences of dementia care and services: Outcomes of a focus group study. *Archives of Neuropsychiatry, 54*(1), 82-86. <https://doi.org/10.1177/1471301213511957>
- Tretteteig, S., Vatne, S., Rokstad, A. M. M. (2016). The influence of day care centers for people with dementia on family caregivers: An integrative review of the

literature. *Aging & Mental Health*, 20(5), 450-462.

<https://doi.org/10.1080/13607863.2015.1023765>

Van den Block, L. (2014). The need for integrating palliative care in ageing and dementia policies. *European Journal of Public Health* 24(5), 705–6.

<https://doi.org/10.1093/eurpub/cku084>

Van der Lee, J., Bakker, T. J. E. M., Duivenvoorden, H. J., Droes, R. M. (2017). The psychosocial impact of caregiving in dementia and quality of life: A systematic review and meta-synthesis of qualitative research. *Psychology & Health*, 21(3), 232-240.

Van der Lee, J., Bakker, T. J., Duivenvoorden, H. J., & Droes, R. M. (2014). Multivariate models of subjective caregiver burden in dementia: A systematic review. *Ageing Research Reviews*, 15, 76-93.

van der Linde, R. M., Denning, T. Matthews, F. E., & Brayne C. (2014). Grouping of behavioural and psychological symptoms of dementia, *International Journal of Geriatric Psychiatry*, 29, 562–568.

Volicer, L. (2013). Narrative review: Palliative care in dementia. *Progress in Palliative Care*, 21(3), 146-150.

Vrticka, P., Black, J. M., & Reiss, A. L. (2013). The neural basis of humour processing. *Nature Reviews Neuroscience*, 14, 860-868.

Wang, L.-Q., Chien, W.-T., & Lee, I. Y. N. (2012). An experimental study on the effectiveness of a mutual support group for family caregivers of a relative with

- dementia in mainland China. *Contemporary Nurse: A Journal for the Australian Nursing Profession*, 40(2), 210-224. <https://doi.org/10.5172/conu.2012.40.2.210>
- Witt-Hoblit, I. D., Miller, M. N., & Camp, C. J. (2016). Effects of sustained, coordinated activities programming in long-term care: The memory in rhythm program. *Advances in Aging Research*, 5(1), 1-8. <https://doi.org/10.4236/aar.2016.51001>
- Yang, Z., Zhang, K., Lin, P. J., Clevenger, C., & Atherly, A. (2012). A longitudinal analysis of the lifetime cost of dementia. *Health Services Research*, 47(4):1660-1678. <https://doi.org/10.1111/j.1475-6773.2011.01365.x>
- Yin, R. K. (2003). *Case Study Research: Design and methods* (2nd ed.). Thousand Oaks, CA: Sage Publications.

Appendix A: Demographic Information

1. Pseudonym (Coded Names as CG #1, CG #2, etc.): _____
2. Age: _____
3. Gender: (a) Male (b) Female
4. Race/Ethnicity: _____
5. Educational Level: (a) High school diploma or equivalent (b) Some college with no degree (c) Associate degree (d) Bachelor's degree (e) Master's degree (f) Doctoral degree
6. Relationship to care recipient: _____
7. Length of time as caregiver: _____
8. Stress Level: (a) Low (b) Moderate (c) Severe
9. Have you used laughter therapy in managing caregiving stress: (a) Yes (b) No

Appendix B: Interview Questions

1. Can you describe specific stressful experiences associated with caring for your loved one with dementia?
2. Can you describe things you have learned from caring for your loved one and how it has impacted your life?
3. How would you describe laughter therapy?
4. What aspects of laughter therapy have been particularly helpful to you?
5. Can you describe how laughter therapy assists you in terms of your overall caregiving experience?
6. What are other coping strategies you have used to manage the stress associated with caring for your loved one with dementia?