

5-1-2015

Depression and Spiritual Predictors of Wellness in Family Caregivers of Individuals with Alzheimer's Disease

Christine Green

George Fox University, cgreen11@georgefox.edu

This research is a product of the Doctor of Psychology (PsyD) program at George Fox University. [Find out more](#) about the program.

Recommended Citation

Green, Christine, "Depression and Spiritual Predictors of Wellness in Family Caregivers of Individuals with Alzheimer's Disease" (2015). *Doctor of Psychology (PsyD)*. Paper 175.
<http://digitalcommons.georgefox.edu/psyd/175>

This Dissertation is brought to you for free and open access by the Theses and Dissertations at Digital Commons @ George Fox University. It has been accepted for inclusion in Doctor of Psychology (PsyD) by an authorized administrator of Digital Commons @ George Fox University. For more information, please contact arolf@georgefox.edu.

Depression and Spiritual Predictors of Wellness in Family Caregivers of
Individuals with Alzheimer's Disease

by

Christine Green

Presented to the Faculty of the
Graduate Department of Clinical Psychology
George Fox University
in partial fulfillment
of the requirements for the degree of
Doctor of Psychology
in Clinical Psychology

Newberg, Oregon

May, 2015

Depression and spiritual predictors of wellness in family caregivers of individuals with

Alzheimer's disease

By

Christine Green, M.A.

has been approved

at the

Graduate School of Clinical Psychology

George Fox University

as a Dissertation for the Psy.D. degree

Signatures:

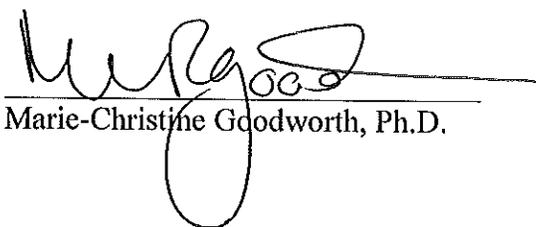


William Buhrow Jr., Psy.D. Chair

Members:



Mark McMinn, Ph.D., ABPP



Marie-Christine Goodworth, Ph.D.

5/19/15

Date

Depression and Spiritual Predictors of Wellness in Family Caregivers of
Individuals with Alzheimer's Disease

Christine Green

Graduate Department of Clinical Psychology at

George Fox University

Newberg, Oregon

Abstract

This study investigated the role of spirituality in family caregivers of individuals with Alzheimer's disease as a means of lessening the development of depressive symptomology arising through caregiver burden. For this study, there were 41 caregiver participants taking care of a family member with Alzheimer's disease. The population was obtained through various divisions of the Alzheimer's Association of the United States of America. Participants completed a basic demographic survey, the General Well-Being Schedule, the Patient Health Questionnaire-9, and the Spiritual Experience Index. Two groups, religious and non-religious, had their mental health functioning compared. Results from the 41 surveys suggest that spiritual family caregivers experience similar levels of mental health distress caring for their ill loved one as non-spiritual family members. Therefore, spiritual practice does not appear to moderate negative mental health functioning in family caregivers of Alzheimer's disease.

Table of Contents

Approval Page.....	ii
Abstract.....	iii
List of Tables	v
Chapter 1 Introduction	1
Alzheimer’s Disease and Caregiving.....	1
Caregiver Quality of Life.....	3
Depression in Caregivers	4
Coping Strategies	6
The Role of Spirituality	7
Spirituality and Depression.....	11
Chapter 2 Method	13
Participants.....	13
Instruments.....	13
Procedures.....	16
Design	17
Chapter 3 Results	18
Chapter 4 Discussion	22
References.....	28
Appendix A: Invitation to Participate and Consent Form	32
Appendix B: Copies of Assessments Used.....	34
Appendix C: Caregiver Demographics.....	46
Appendix D: Curriculum Vitae.....	52

List of Tables

Table 1	Demographics	14
Table 2	Caregiving Descriptives.....	14
Table 3	Non-Religious and Religious Groups	18
Table 4	Correlations.....	19
Table 5	SEI Scores from the Religious Group.....	20

Chapter 1

Introduction

Research has shown that the gradual loss of cognitive function characterized as Alzheimer's disease can lead to increased levels of depression for the patient with the illness (Sanders & Adams, 2005). In addition, if the person with Alzheimer's disease is cared for by a family member, that family member is also at-risk for increased levels of depression. Coping strategies for the family caregiver may help him or her reduce levels of depression. One such strategy could be spiritual practice, as spirituality can be a positive and supporting factor in a person's life (Gwyther, 2006; Smith & Harkness, 2002). As a source of strength during troubled times, spiritual practice may work to reduce depression among family members caring for a person with Alzheimer's disease.

Alzheimer's Disease and Caregiving

When people are diagnosed with terminal illness, family members are faced with the decision of how to care for their loved one. For some patients, care may be required for a short period of time, but for others care may be needed for years. Regarding types of care, the options are inpatient care, informal care (implying family members), or a combination of both. Family members who choose to care for their loved ones do so for a variety of reasons. Some family members choose to care out of obligation, others do so to preserve the relationship, some families have altruistic reasons, and still others may provide care out of implied rule of reciprocity (Kolmer, Tellings, Gelissen, Garretsen, & Bongers, 2008). Kolmer et al. found that

most families care for their ill loved one instead of choosing inpatient care out of the desire to preserve the relationship (Kolmer et al., 2008). It is estimated that 70-80% of Americans and Europeans who require long-term care receive such care from relatives and friends (Tang, Li & Liao, 2007).

While charitable reasons can be a primary motivator in family members choosing to care for their ill loved one, the financial implications of caring for a person with Alzheimer's disease can be another driving force. According to the Alzheimer's Association, in 2012 family caregivers (15.4 million total), provided more than 17.5 billion hours of unpaid care. That roughly equates to \$216 billion of unpaid hours (Alzheimer's Association, 2013). This figure exhibits the financial savings achieved by families choosing to care for their ill loved one as opposed to utilizing inpatient care, but the cost certainly comes in the hours of care provided.

When family members take a part-time or full-time role in caring for a loved one with Alzheimer's disease they can be referred to as family caregivers. For the purpose of this study, family caregivers can be any person considered relationally close to the patient such as blood and/or legal relatives and close friends. In some cases, a family caregiver is not professionally trained to treat and care for their loved one with Alzheimer's disease (Family Caregiving Alliance, 2013). In addition to lack of training, family caregivers may not have sufficient resources to protect their well-being from the negative impact of increasingly dire life circumstances enveloping people with Alzheimer's disease (DeMond, 2010).

Caregiver Quality of Life

During the course of their caregiving, family caregivers may experience negative physical and emotional symptoms called caregiver distress (Yilmaz, Turan, & Gundogar, 2009).

Caregiver distress affects the level of enrichment a person has in his or her existence, often referred to as quality of life. Quality of life pertains to both the patient with terminal illness and the family members caring for him or her (Arlt et al., 2008). Factors contributing to a positive quality of life include serenity, general well-being, and good financial status. Negative factors in quality of life are future worries, progression of illness, and stress. These negative factors can be predictably prevalent for family caregivers of patients with terminal illness, and a need for improved quality of life may arise. Good patient health, independence from the patient, and assistance are factors which can improve a caregiver's quality of life (Vellone, Piras, Talucci, & Cohen, 2008).

If levels of distress continue to override positive quality of life factors, family members run the risk of experiencing caregiver burnout (Yilmaz et al., 2009). Burnout occurs over the course of time, and the amount of time for a caregiver to experience burnout depends on the resiliency of each individual caregiver and the ratio of negative to positive quality of life factors (Vellone et al., 2008). Often a contributor to caregiver distress and burnout is the need to balance significant responsibilities outside of providing care for an ill loved one (Yu-Nu, Yea-Ing, Min-Chi, & Pei-Shan, 2011). Balancing a career, marriage and children in addition to providing care during the week to an ill loved one places high demands on personal time (Yu-Nu et al., 2011). When the demands on a person become too high, distress builds, and before long, negative quality of life factors can overpower positive quality of life factors and the family caregiver may experience burnout (Yilmaz et al., 2009).

In addition to diminishing positive quality of life factors (Takai, Takahashi, Iwamitsu, Oishi, & Miyaoka, 2011), family caregivers of people with Alzheimer's disease experience

heightened levels of clinical depression than the general population (Caspar & O'Rourke, 2009). Regardless of the age of the caregiver, any family member can experience increased levels of depression resulting from the stress of caring for a mentally ill loved one. To stand by someone of personal significance and watch as they gradually lose their cognitive functioning can be a painful and hopeless experience (Caspar & O'Rourke, 2009; Smith & Harkness, 2002). As a result, heightened levels of both depression and anxiety may arise for the family caregiver.

Depression in Caregivers

“The international literature identifies caregivers, particularly those who provide care for aging family members with [Alzheimer's disease], as among those who are most at risk for stress-related problems including anxiety and depression” (Sansoni, Vellone, & Piras, 2004, p. 94). Literature also defines several factors which correlate with levels of negative mental health outcomes such as depression. Factors such as self-esteem, caregiver burden, and emotion-focused coping are significantly correlated to levels of depression among family caregivers of individuals with Alzheimer's disease (Crespo, Lo'pez, & Zarit, 2005).

Depression in family caregivers may not manifest in clear patterns. Family caregivers of loved ones with Alzheimer's disease have frequent contact with the patient, and they may, in time, exhibit intrusive behaviors towards their loved one or become avoidant of their caregiving work. These behaviors, which may appear aggressive, actually stem from depression and general distress (Ulstein, Wyller, & Engedal, 2008). In addition, the progression of depressive symptoms is often related to the caregiver's overall health and the seemingly difficult behaviors of the ill loved one (Takai et al., 2011; Ulstein et al., 2008). Over time, the relationship between the patient's declining state of mind and the burden experienced by the family caregiver increases

(Holst & Edberg, 2011). Similarly, as the caregiver burden increases, so might behaviors such as avoidance, burnout, intrusion, and/or general distress.

Depression seems to be prevalent in mental health outcome studies of gerontological caregiving. Depressive symptoms, which originate after a family member assumes the responsibility of caring for a loved one, are positively associated with caregiver burden (Khalailaa & Litwin, 2011). Some studies suggest that caring for an older family member with dementia increases the sense of caregiver burden due to the strain of witnessing a loved one experience cognitive, behavioral and personality changes from the disease. This strain may over-tax family members' resources for emotion regulation, paving the way for depression to develop.

Lack of emotional resources seems to be one of two major contributing factors of caregiver burden (Au, Lai, Lau, Pan, & Lam, 2009). Fewer emotional coping resources are more likely in those possessing negative orientations. People with high negative orientations usually experience more impairment in objective problem-solving ability regardless of current states of mood (Grant, Weaver, Elliott, Bartolucci, & Newman-Giger, 2004).

The extent of care required by family members is the second major factor influencing levels of depression in family caregivers (Au et al., 2009). For example, a greater number of hours spent providing care directly increases levels of depression among family caregivers (Khalailaa et al., 2011). Personal sense of control or mastery may be significant for explaining the variability in family caregivers' abilities to handle the continuous demands of caring for a loved one with Alzheimer's disease. Caregivers who perceive their ability to manage these demands as inadequate are at greater risk for increased depressive symptoms (Au et al., 2009).

Family caregivers at risk for depressive distress respond to what one study defined as three categories: contextual factors, stressors, and individual caregiver appraisal of the situation. Contextual factors are the individual differences of family caregivers and their care recipients. These factors determine how family caregivers respond to the stresses of caring for an ill loved one. The stressors themselves dictate the direct demands and actions related to caring for a specific illness, such as Alzheimer's disease. Stressors are linked with the amount of assistance required by the family member to care for the ill loved one. Finally, a caregiver's appraisal of the situation also affects the amount of depressive distress, as personal appraisal includes caregiver emotional resources and coping skills (Tang et al., 2007).

Other negative mental health outcomes such as anxiety, sleep disturbance, fatigue and anger often co-occur with depression. One study found that prevalence rates of depression in family caregivers ranged from 20% to 73%, and those at higher levels of depression were more likely to experience these additional negative mental health outcomes (Siminoff, Wilson-Genderson, & Baker, Jr., 2010).

Coping Strategies

Human beings often search for meaning behind the major events of their lives, especially the traumatic ones, to help them accept such experiences. The nature of Alzheimer's disease can invoke a desire to find meaning or purpose for the family caregivers who must watch as their loved ones slip slowly away from them. Understanding this process of loss is similar to that of grieving death, and thus the capacity to find meaning under such loss proves to be a positive coping strategy for people (Kelley & Chan, 2012).

Healthcare professionals can provide interventions designed to mitigate the increasing levels of caregiver distress and help family members increase positive quality of life factors for themselves. The degree of intervention may depend on the relationship of the family caregiver to the patient with Alzheimer's disease, (e.g., spouse, child, etc.), but current research is limited in validating this assumption (Vellone et al., 2008). Even so, it is imperative that family caregivers receive some degree of intervention so that they might withstand the emotional onslaught that often occurs under the devastation of Alzheimer's disease (Joling et al., 2012).

Research highlights coping strategies for family caregivers of a variety of illnesses, but there is another aspect of some caregivers' lives which has yet to be investigated. The level of spirituality present within the family caregiver may have some effect on anxiety and depression severity. Religion and spirituality have been identified as positive means of coping throughout the human lifespan (Stuckey, 2001). Thus, further research may prove that religious and spiritual practices can promote better well-being for family caregivers of individuals with Alzheimer's disease.

The Role of Spirituality

The role of spirituality as a potential protective factor in family caregivers of individuals with Alzheimer's disease must first be defined, as spirituality is not the same as religious practice. "Although not entirely distinct, spirituality refers to one's relationship with God or a higher being and religion refers to a set of specific beliefs and behaviors shared by an organization" (Bush, Jameson, Barrera, Phillips, & Lachner et al., 2011, p. 191). Spirituality tends to be defined as source of meaning-making for people, and spirituality tends to be more

universal and widely applicable than religious practice. Religious practice is generally more specific and structured than spiritual practice.

Spirituality and religious practice can exist together or separately for individuals. In other words, a person can be spiritual and not religious, religious and not spiritual, or a person can be both (Nelson, Jacobson, Weinberger, Bhaskaran, & Rosenfeld, 2009). This distinction emphasizes the importance of recognizing both spirituality and religious practice since they do not require each to be relevant in people's lives.

The National Health Interview Survey investigated the religious and spiritual practices of 21,204 adults, including the church attendance of these individuals. Those who attended church services on a regular basis seemed to have increased longevity, stronger social ties and better overall health behaviors (Holt-Lunstad, Steffen, Sandberg, & Jensen, 2011). In addition to church attendance influencing positive health outcomes, the survey found other helpful factors related to religious and spiritual practice. Spirituality was related to increased sense of meaning in life, provided peace for the individual, facilitated forgiveness more readily, and was a tool for engaging compassionate and giving social relationships (Holt-Lunstad et al., 2011). All of these protective factors have the potential to reduce negative mental health outcomes.

When challenges arise or chronic stressors ensue, a sense of meaning and peace facilitated by spirituality and religious coping acts as a buffer against negative mental health outcomes. Since spirituality and religious practice can increase a personal sense of purpose and meaning, feelings of loneliness and despair are often minimized for such practicing individuals. Instead, feelings of optimism, well-being and hope can increase (Diaz, Horton, Green, Mellveen & Weiner, 2011). The ability to forgive oneself and maintain a grateful attitude through religious

and spiritual practice is also associated with better psychological and physical well-being (Holt-Lunstad et al., 2011).

For the general population, religion and spirituality are both predictors of well-being in older adults, as many older adults report that religion or spirituality is an important part of their lives. While younger adults may also report to be spiritual or religious, older adults tend to endorse higher levels of spiritual well-being than their younger counterparts. Older adults also tend to report using religion as a coping strategy when faced with illness. Adults who are religiously involved also tend to report higher levels of self-esteem and self-worth, lower levels of depression, and have lower blood pressure than adults who do not report to practice a religion or have spiritual beliefs (Bush et al., 2011). “In a sample of depressed older adults receiving clinical care, those who engaged in more public religious practices, more positive coping, or less negative religious coping reported less depression at baseline. In addition, those who engaged in more positive religious coping reported a greater reduction in depression from baseline to six-month follow-up, relative to those with less positive religious coping” (Bush et al., 2011, p. 192).

Some studies suggest that religious practice and spirituality can affect mental health outcomes in both directions of the continuum (Lonczak, Clifasefi, Marlatt, Blume, & Donovan, 2006). Positive or negative mental health outcomes mostly depend on the perspective of the individual, or his or her interpretation of the religious or spiritual practice. Individuals who use their religion or spirituality as a means to reflect a secure relationship with God, to find meaning, or to achieve a sense of spiritual connectedness tend to exhibit reduced levels of depression. However, individuals who tend to reflect an ominous view of the world and a religious struggle to find and conserve significance in life, tend to experience increased depression. In many cases,

however, a belief in a supportive, benevolent God can allow an individual to cope with significant loss with less depression and grief (Kelley & Chan, 2012).

Religion works as a supportive factor, keeping family members strong while undergoing the emotional strain of caring for a loved one with progressive, cognitive decline. For example, taking a mentally ill loved one to church services and participation in scripture reading on a regular basis can uplift and rejuvenate the patient as well as the family caregiver (Gerdner, Tripp-Reimer, & Simpson, 2007). “Spirituality, faith, and religious ritual seem to help exhausted families find meaning and purpose in adversity, an anchor for identity and a foundation for coping with change, loss, uncertainty, and the limits of control” (Gwyther, 2006, p. 1180). From these studies, evidence points to positive (or fewer negative) outcomes for family caregivers who report being spiritual.

Arguably, one of the greatest benefits in religious and spiritual practice is the socially supportive role of such belief systems. “Social resources can provide emotional support that enhances self-esteem and sense of belonging as well as informational guidance” (Au et al., 2009, p. 761). For family caregivers of people with Alzheimer’s disease, the caregiving role can lead to some degree of social isolation. This natural isolation may contribute to perceived caregiver burden and decreased quality of life. Social support has the potential to reduce depression in family caregivers of people with Alzheimer’s disease (Au et al., 2009). Participation in a church or religious community can provide a means of social support to potentially lessen the negative effects of caregiving burden and reduced quality of life.

Spirituality and Depression

Current research explaining the impact of spirituality on depression within the caregiving framework of family members with Alzheimer's disease is limited. One study used the Intrinsic Spirituality Scale (ISS) to assess the spirituality of families facing Alzheimer's disease and found that spirituality was a source of motivation, providing endurance to continue caring for their ill loved ones (Gough, Wilks, & Prattini, 2010). These results demonstrate how spirituality, prayer in particular, can motivate family members to continue caregiving in an emotionally and physically draining situation. As a result of this study, there is increased awareness of the importance of spirituality, and clinicians are beginning to encourage and support family caregivers' spiritual lives as they care for their loved ones (Gough et al., 2010).

Spiritual practices can provide additional resources to support the caregivers' well-being, thus potentially enhancing their quality of life during a time when emotional stability and physical strength wane. For healthcare professionals supporting family caregivers, allowing the opportunity for caregivers to explore their spirituality is probably more helpful than avoiding the discussion (Smith & Harkness, 2002). Though Alzheimer's disease is currently recognized as a neurocognitive disorder with no hope for recovery, spirituality can provide a sense of hope in a seemingly hopeless situation. Thus, family caregivers who are spiritual may have better overall well-being than caregivers who do not claim to be spiritual (Smith & Harkness, 2002), resulting in lowered depression. If true, healthcare professionals could encourage and support families' spiritual practices while in their caregiving roles as a means to reduce the frequency and intensity of depression.

The purpose of this study was to explore the effect of spirituality on levels of depression in family caregivers of individuals with Alzheimer's disease. It was hypothesized that the rejuvenating properties of spiritual practice (Gerdner et al., 2007) would work as inhibitory agents against increased levels of depression brought on through caregiver distress, burden, and/or reduced quality of life. Regardless of the demands in a caregiver's role, if he or she is active in spiritual practice, he or she may experience less severe depressive symptoms than a family caregiver who does not engage in spiritual practices.

Chapter 2

Method

Participants

Forty-one participants who were actively caring for a person with Alzheimer's disease volunteered to participate in this study. To be invited to participate, caregivers had to be receiving support through a chapter of the Alzheimer's Association, and be related to the loved one by blood relation, lawful wedlock, legal guardianship, or be of significant importance to the patient, such as close family friends.

Of the 41 individuals who participated, 28 were spiritual (68.3%) and 13 were non-spiritual (31.7%). Some of the demographics and caregiver descriptives between the spiritual and non-spiritual groups are listed below in Table 1 and Table 2:

Instruments

The study used three assessment scales and a demographic survey which were combined to create one survey. The survey was distributed in a paper-pencil format and electronically through Survey Monkey, depending on the delivery preference of the various chapters of the Alzheimer's Association who agreed to participate. The survey had 85 items, taking about 20 minutes to complete.

The General Well-Being Schedule (GWBS) is the self-report scale used to measure overall well-being of the family caregivers. The GWBS contains 18 items about a person's life satisfaction and level of psychological distress. The six subscales of the GWBS measure anxiety, depression, positive well-being, self-control, vitality, and general health. A participant's score

Table 1

<i>Demographics</i>			
	Spiritual	Non-spiritual	Total
Average age	65.4 years	51.3 years	60.9
Gender	$M = 5, F = 23$	$M = 2, F = 11$	$M = 7, F = 34$
Ethnicity			
Asian/Pacific Islander	0	0	0
Black/African American	1	0	1
Hispanic/Latino	0	1	1
Middle Easterner	0	0	0
Native/American Indian	0	0	0
White/Caucasian	24	14	38
Biracial	0	0	0
Multiracial	1	0	1
Marital Status			
Single	0	2	2
Partnered	0	1	1
Married	26	10	36
Separated	0	0	0
Divorced	1	0	1
Widowed	1	0	1
Education			
Did not complete high school	0	0	0
High school diploma/GED	3	0	3
Some college	9	4	13
College degree	8	4	12
Some graduate school	2	1	3
Graduate degree	6	4	10
Average # of children under 18	<1	<1	<1
Average # of hours employed weekly	9.8	18.9	12.6

Table 2

<i>Caregiving Descriptives</i>			
	Spiritual	Non-spiritual	Total
% living with the caregiver	57	38	51
Average days/week in caregiving role	5.6	5.2	5.5
Average hours/day in caregiving role	11.5	7.5	10.2
Average years person has been diagnosed	5.8	4.8	5.5
Average years providing care	4.9	4.2	4.7

can range from 0 to 110, and scores fall within three levels of distress, with lower scores indicating higher distress. A score of 0 to 60 suggests severe levels of distress, scores between 61 and 72 reflect moderate distress, and any score that is 73 or higher indicates a positive well-being (Dupuy, 1977).

Depression of the family caregivers was assessed by the second self-report scale, the Patient Health Questionnaire-9 (PHQ-9). The PHQ-9 has 10 items, and it screens, diagnoses, and measures symptoms of depression. Items on the PHQ-9 are derived from the DSM-IV. Scores of 10 or higher on the PHQ-9 have a specificity and sensitivity of 88%. Depression severity is rated through a point system with 5, 10, 15, and 20+ points, suggesting mild, moderate, moderately severe, and severe depression respectively (Center for Quality Assessment in Mental Health, 2014). The PHQ-9 has a sensitivity and specificity of 88% for major depression and psychometrics generally find it to be sound in both reliability and validity. It has an internal consistency between .86 and .89 and is widely used in primary care settings (American Psychological Association, 2015).

There was a question in the survey which asked participants if they considered themselves religious or spiritual prior to completing the SEI. Participants who reported not to be religious or spiritual did not complete the SEI section of the survey. For those who indicated they had religious or spiritual beliefs, spirituality was measured with the Spiritual Experience Index (SEI). The SEI is a 38-item self-report scale designed to measure a person's spiritual experience without specific connections to certain religions and traditions. Questions on the SEI are answered on a 6-point Likert scale ranging from Strongly Disagree to Strongly Agree. The SEI contains two distinct subscales: Spiritual Support (SS) and Spiritual Openness (SO). These

subscales suggest preliminary evidence for internal consistency and construct validity (Genia, 1991). The psychometrics of the SEI are under-researched, therefore, its validity and reliability were unavailable

The demographic survey identified the caregivers' relationships to their loved ones with Alzheimer's disease, how long they have known their loved ones, how many hours/days per week they provided care, and how long their loved ones have been diagnosed with Alzheimer's disease. In addition, participants also identified how long they have been caring for their loved ones, how much additional help they get (i.e., other family members assisting in care), if they were balancing a job alongside caregiving, if they were married, and how many children they have. The caregivers' gender, marital status, race, and age were included in the survey as well.

Procedures

Participants were contacted through their support group facilitators in various chapters of Alzheimer's Association throughout the United States of America. The survey was distributed both electronically and in paper format depending on the preference of the Alzheimer's Association chapter participating. Participants who received the survey electronically were emailed a letter of consent by their support group facilitators containing the electronic survey link. Participants who received the paper survey were mailed a survey with an addressed and stamped envelope to mail the completed survey back to the researcher. The paper surveys were mailed to Alzheimer's Association chapter headquarters and distributed by the group facilitators at their monthly meetings. Of the 41 surveys, 22 were paper and 19 were electronic.

The electronic survey was designed to prohibit participants from skipping items, with the exception of the SEI section, which only allowed completion by participants who endorsed being

religious. If participants marked non-religious, the survey simply ended there. Three of the electronic surveys were incomplete and thus were excluded from some of the analysis. All of the paper surveys were completed in their entirety.

Design

Participants were divided into two groups: religious and non-religious and compared using two *t*-tests and three Pearson Correlations. The *t*-tests compared the scores of the GWBS and the PHQ-9 between the religious group and non-religious group. The Pearson Correlations took the scores of the religious group only and explored whether scores on the SEI correlated with scores on the GWBS and PHQ-9. A third correlation of the GWBS and PHQ-9 was also completed to compare the scores from these two well-being surveys. The demographic data was gathered for optional analysis and to note any patterns or consistencies in the participants.

Chapter 3

Results

Two independent samples *t*-tests were conducted to compare depression in the religious and non-religious groups. These two groups were determined by how participants answered the religious and spiritual question, endorsing either yes, to being religious or no to being religious. Table 3 below depicts the GWBS and PHQ-9 means and standard deviations of the religious and non-religious group.

Table 3

Non-Religious and Religious Groups

	Non-religious		Religious	
	Mean	SD	Mean	SD
GWBS	69.00	9.66	70.07	12.31
PHQ-9	7.62	4.52	6.39	5.07
	<i>n</i> = 13		<i>n</i> = 28	

The mean of the non-religious group on the GWBS was 69.00 with a standard deviation of 9.66, and mean of the religious group on the GWBS was 70.07 with a standard deviation of 12.31. Both means, 69.00 and 70.07, fall in the moderate distress range, suggesting that average participants experienced moderate levels of distress. The mean of the non-religious group on the PHQ-9 was 7.62 with a standard deviation of 4.52, and mean of the religious group on the PHQ-9 was 6.39 with a standard deviation of 5.07. Both means, 7.62 and 6.39, fall in the moderate

depression range, suggesting that average participants experienced moderate levels of depression. There was not a significant difference in the scores on the GWBS between the non-religious group and the religious group, $t(39) = -0.28, p = 0.78$. Additionally, there was not a significant difference in the scores on the PHQ-9 between the non-religious group and the religious group, $t(39) = 0.74, p = 0.46$. These results suggest that spirituality or religious practice does not provide significant protection from developing depression from caregiver distress.

Among the religious and spiritual group, some participants endorsed higher levels of spirituality than others. Three Pearson Correlations were completed to compare degrees of spirituality between the religious group and the GWBS and PHQ-9. (Note – three participants who endorsed being spiritual or religious did not complete the SEI section of the survey resulting in 25 participants in the religious group who completed the SEI.) The results from these correlations are listed in the following table:

Table 4

Correlations

Surveys	Pearson Correlation	Sig. (2-tailed)	<i>n</i>
SEI and GWBS	-0.05	0.816	25
SEI and PHQ-9	-0.00	0.98	25
GWBS and PHQ-9	-0.72	0.00	41

Scores on the SEI were not significantly correlated with the PHQ-9, $r(23) = -.004, p = .98$, and scores on the SEI were also not significantly correlated with the GWBS, $r(23) = -.049, p = .82$). These results suggest that religious participants who endorsed higher levels of

spirituality did not score significantly different on the GWBS and PHQ-9 from participants who endorsed lower levels of spirituality.

Scores between the GWBS and PHQ-9 were significantly correlated, $r(39) = -.72, p = .01$. These correlations suggest that higher or lower levels of spirituality are unrelated to depression in caregivers. In addition, low scores on the GWBS tend to match high scores on the PHQ-9. This correlation was expected because the point system of the GWBS runs opposite of the PHQ-9. High point totals on the GWBS indicate lower levels of distress, and high point totals on the PHQ-9 indicate higher levels of depression. Therefore, a person who is feeling relatively good should score high on the GWBS and low on the PHQ-9. This pattern was consistent within the participants in this study.

Table 5 lists some of the statistical data of the SEI scores from the 25 participants who completed this portion of the survey:

Table 5

SEI Scores from the Religious Group

Religious Group	
Completed SEI's:	25
Range :	137-197
Mean:	168
Standard deviation:	15.7

The SEI scores items on a continuum and does not qualitatively rank levels of spirituality based on score groupings. Thus, scores on the SEI are merely higher or lower than others. Since spirituality is challenging to measure in a qualitative way, (i.e., higher vs. lower levels of

spirituality) the SEI excluded this element from its scoring and leaves comparison of scores to individual interpretation.

Chapter 4

Discussion

There are a variety of reasons as to why family members may choose to care for loved ones with debilitating illnesses (Kolmer et al., 2008). Regardless of the motivating factors, three out of every four people requiring long-term care receive it from a family member or close friend (Tang et al., 2007). Caring for a loved one with an incurable disease such as Alzheimer's can test the endurance of the caregiver and lead to depressive symptoms (Caspar & O'Rourke, 2009; Yilmaz et al., 2009). Based on current research, it seems that limited coping strategies may be a factor in the development of depression and caregiver distress among family caregivers of individuals with Alzheimer's disease (Crespo et al., 2005).

Family members with effective coping strategies seem to be more resistant to distress and depression. Research supports that having a religion or faith can serve as an effective coping strategy to moderate negative mental health outcomes during troubling or difficult events (Gerdner et al., 2007; Gwyther, 2006). With research suggesting positive outcomes among spiritual and/or religious caregivers, it was anticipated that similar results would be gathered by the research of this study. Thus, it was expected that spirituality would be associated with fewer depressive symptoms among family caregivers of individuals with Alzheimer's disease.

Contrary to the literature, however, results from this survey data did not reveal any significant differences of caregiver depression based on caregiver spirituality. Instead, results indicated that caregivers who reported to be religious were neither more likely nor less likely to

report depressive symptoms than caregivers who reportedly did not practice any religion or faith. In fact, even when examining the scores from the SEI only within the religious group, caregivers who reported more religious practices than other religious caregivers did not seem to fare any better regarding depressive symptoms.

One possibility as to why the results of this study did not coincide with previous research is that the majority of the participants reported only moderate levels of depression. Without more severe cases of depression, it is possible that any potential benefit of spirituality was undetectable. In other words, spirituality may not have a notable effect on mild to moderate levels of depression. Since most of the participants in this study endorsed only moderate levels of depression, the anticipated pattern of high-depression, low-spirituality and low-depression, high spirituality was unable to be evaluated. Instead the results may suggest that spirituality does not act as a noticeable moderator of depressive symptoms for a caregiver experiencing only a moderate level of depression.

Some literature finds spiritual and religious practice potentially unhelpful in relieving symptoms of distress and burnout. Pargament (1997) identified both positive and negative forms of religious coping, suggesting that caregivers may be affected differently in their religious and spiritual practices. In addition, it was unclear by Pargament's research if overall health was positively impacted by religious and spiritual practice (Pargament, 1997). In addition, prayer, a common form of religious and spiritual coping, may lead to greater disability and higher pain ratings because it may be a passive coping strategy associated with an avoidance response (Ashby & Lenhart, 1994). These studies align with the results of this research, suggesting that

caregivers did not receive substantial relief from depression through religious and spiritual practice.

Limitations

In addition to lower levels of depression among the majority of participants, several limitations may have influenced the findings of this study. The first limitation is the number of participants. This study reached out to chapters of the Alzheimer's Association across the United States and the survey was distributed to hundreds of individuals. There was ample opportunity for many participants to complete the survey, but the study received just 41 surveys within the allotted collection period. Due to a low response rate, the study essentially had a convenience sample which limits generalizing the results. Since only caregivers who were willing to complete the survey did so, it is possible that a more representative random sample might have shown different results.

Second, this research was designed to explore the relationship of family caregiving, spirituality and depression. However, because severely depressed individuals typically have more symptoms which impede participation, (e.g., low motivation, lack of interest, low energy, etc.) it is possible that those suffering the most from caregiver distress and burden opted out of participating. If true, it is likely that the current sample of 41 surveys was drawn from higher functioning individuals to begin with. As a result, the participants in this study were generally less depressed, and therefore, the beneficial effects of spirituality and religion may have been less detectable.

Suggestions for Future Research

For future research, a truly randomized sample of family caregivers of individuals with Alzheimer's disease should be selected. A random sample might provide a wider range of depression severity among the sample which may increase the chances of finding results that match those of other research.

In addition, while spirituality was not found to make a difference in depressive symptoms in this research, but perhaps spirituality provides relief or support in other ways. Future research could explore the additional areas of a family caregiver's life which might be improved by the support of spirituality and religious practice. If depressive symptoms in family caregivers are not relieved through spirituality, perhaps self-efficacy is increased, or a sense of social support improved. Literature suggests that spirituality can be helpful for family caregivers, so if not for depression specifically, maybe other aspects are improved by spiritual and religious practice.

Finally, there still is limited current research exploring the impact spirituality and religious practice have on depression among family caregivers of Alzheimer's disease. Thus, it may be premature to definitively state there is no connection between religious and spiritual practice and levels of depression among caregivers little research exists. In particular, the present study failed to include participants suffering from more significant depressive symptoms so the possibility of religious and spiritual practice impacting more severe levels of depression was unaddressed. Therefore, additional research is necessary before suggesting the results of this research are generalizable.

Conclusion

Despite inadequate training, family members and close friends often become the predominant source of care for individuals requiring long-term care (Family Caregiving Alliance, 2013). Family caregivers are at-risk for depression and burnout due in part to inadequate training to care for individuals with long-term needs, and also due to lack of effective coping strategies. In the case of family caregivers of people with Alzheimer's disease, the kind of care required for an individual with cognitive degeneration is stressful and readily conducive for depression (Ulstein et al., 2008; Takai et al., 2011). Spirituality, often considered a supportive aspect for individuals, appears to be a valuable outlet for healing and coping under distress (Bush, et al., 2011; Holt-Lunstad et al., 2011). Based on the literature, it seemed reasonable for spirituality or religious practice to also be a protective agent moderating the depressive symptoms of family caregivers of individuals with Alzheimer's disease (Au et al., 2009).

However, results from this research found that individual caregivers who engage in spiritual practices did not endorse fewer depression symptoms than caregivers who were not spiritual. Both religious and non-religious caregivers reported essentially the same moderate degree of depressive symptoms stemming from their care of a loved one with Alzheimer's disease. These findings may be due, in part, to the lack of a representative, random sample and the lower rate of depressive symptoms endorsed by most participants. Thus, additional research is encouraged to reduce these limitations.

Despite the results of this research, spirituality may still be an effective coping strategy for family members caring for ill loved ones on a long-term basis. Spirituality frequently is a source of encouragement and strength during times of stress and tribulation, and spiritual

practice might prove effective for family caregivers of Alzheimer's disease in future research.

Hopefully, this study will inspire future research explaining helpful ways to encourage and support the caregiving population.

References

- Alzheimer's Association. (2013). *Alzheimer's facts and figures*. Retrieved from http://www.alz.org/alzheimers_disease_facts_and_figures.asp#quickFacts.
- American Psychological Association. (2015). Patient Health Questionnaire (PHQ-9 and PHQ-2). Retrieved from: <http://www.apa.org/pi/about/publications/caregivers/practice-settings/assessment/tools/patient-health.aspx>.
- Arlt, S., Hornung, J., Eichenlaub, M., Jahn, H., Bullinger, M., & Petersen, C. (2008). The patient with dementia, the caregiver and the doctor: Cognition, depression and quality of life from three perspectives. *International Journal of Geriatric Psychiatry, 23*(6), 604-610. doi: 10.1002/gps.1946.
- Ashby, J. S., & Lenhart, R. S. (1994). Prayer as a strategy for chronic pain patients. *Rehabilitation Psychology, 39*(3), 205-209.
- Au, A., Lai, M-K., Lau, K-M, Pan, P-C., & Lam, L. (2009). Social support and well-being in dementia family caregivers: The mediating role of self-efficacy. *Aging & Mental Health, 13*(5), 761-768. doi: 10.1080/13607860902918223.
- Bush, A., Jameson, J., Barrera, T., Phillips, L., & Lachner, N. (2011). An evaluation of the brief multidimensional measure of religiousness/spirituality in older patients with prior depression or anxiety. *Mental Health, Religion & Culture, 15*(2), 191-203. doi: 10.1080/13674676.2011.566263.
- Caspar, S., & O'Rourke, N. (2009). The composition and structure of depressive symptomatology among young and older caregivers of persons with dementia. *Ageing International, 34*(1), 33-41. doi: 10.1007/s12126-009-9033-8.
- Center for Quality Assessment in Mental Health. (2014). The Patient Health Questionnaire-9. Retrieved from www.cqaimh.org.
- Crespo, M., Lo'pez, J., & Zarit, S. (2005). Depression and anxiety in primary caregivers: A comparative. *International Journal of Geriatric Psychiatry, 20*, 591-592. doi: 10.1002/gps.1321.
- DeMond, D. (2010). Caring for the family caregiver: A spiritual journey. *Journal of Religion, Spirituality & Aging, 22*(1-2), 120-135. doi: 10.1080/15528030903313920.
- Diaz, N. E., Horton, G., Green, D., Mellveen, J., & Weiner, M. (2011). Relationship between spirituality and depressive symptoms among inpatient individuals who abuse substances. *Counseling and Values, 56*, 43-56.

Dupuy, H. (1977). *The general well-being schedule. Measuring health: A guide to rating scales and questionnaire* (2nd ed.) New York, NY, Oxford University Press.

Family Caregiving Alliance: National Center on Caregiving. (2013). *Selected caregiver statistics*. Retrieved from:
http://www.caregiver.org/caregiver/jsp/content_node.jsp?nodeid=439.

Genia, V. (1991). The spiritual experience index: A measure of spiritual maturity. *Journal of Religion and Health*, 30, 337-347.

Gerdner, L. A., Tripp-Reimer, T., Simpson, H. C. (2007). Hard lives, God's help, and struggling through: Caregiving in Arkansas delta. *Cross Cultural Gerontology*, 22(4), 355-374. doi: 10.1007/s10823-007-9047-1.

Gough, H., Wilks, S., & Prattini, R. (2010). Spirituality among Alzheimer's caregivers: Psychometric reevaluation of the Intrinsic Spirituality Scale. *Journal of Social Service Research*, 36(4), 278-288. doi: 10.1080/01488376.2010.493848.

Grant, J., Weaver, M., Elliott, T., Bartolucci, A., & Newman-Giger, J. (2004). Family caregivers of stroke survivors: Characteristics of caregivers at risk for depression. *Rehabilitation Psychology*, 49(2), 172-179. doi: 10.1037/0090-5550.49.2.172.

Gwyther, L. (2006). Spirituality and caring for older family members. *Southern Medical Journal*, 99(10), 1180-1181.

Holst, G., & Edberg, A. K. (2011). Wellbeing among people with dementia and their next of kin over a period of 3 years. *Scandinavian Journal of Caring Sciences*, 25(3), 549-557. doi: 10.1111/j.1471-6712.2010.00863.x

Holt-Lunstad, J., Steffen, P., Sandberg, J., & Jensen, B. (2011). Understanding the connection between spiritual well-being and physical health: an examination of ambulatory blood pressure, inflammation, blood lipids and fasting glucose. *Journal of Behavioral Medicine*, 34, 477-488. Doi: 10.1007/s10865-011-9343-7.

Joling, K. J., van Marwijk, H. W. J., Smit, F., van der Horst, H. E., Scheltens, P., van de Ven, P. M., ... van Hout, H. P. J. (2012). Does a family meetings intervention prevent depression and anxiety in family caregivers of dementia patients? A randomized trial. *PLoS ONE*, 7(1), 1-10. doi: 10.1371/journal.pone.0030936.

Kelley, M., & Chan, K. (2012). Assessing the role of attachment to God, meaning, and religious coping as mediators in the grief experience. *Death Studies* 36, 199-227, doi: 10.1080/07481187.2011.553317

- Khalailaa, R., & Litwin, H. (2011). Does filial piety decrease depression among family caregivers? *Aging & Mental Health, 15*(6), 679–686. doi: 10.1080/13607863.2011.569479.
- Kolmer, D. B. G., Tellings, A., Gelissen, J., Garretsen, H., & Bongers, I. (2008). Ranked motives of long-term care providing family caregivers. *Nordic College of Caring Science 22*, 29-39.
- Lonczak, H. S., Clifasefi, S. L., Marlatt, G. A., Blume, A. W., & Donovan, D. M. (2006). Religious coping and psychological functioning in a correctional population. *Mental Health, Religion & Culture, 9*(2), 171-192.
- Nelson, C., Jacobson, C., Weinberger, M., Bhaskaran, V., & Rosenfeld, B. (2009). The role of spirituality in the relationship between religiosity and depression in prostate cancer patients. *Annals of Behavioral Medicine, 38*, 105-114. doi: 10.1007/s12160-009-9139-y.
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. New York, NY: Guilford Press.
- Sanders, S., & Adams, K. B. (2005). Grief reactions and depression in caregivers of individuals with Alzheimer's disease: Results from a pilot study in an urban setting. *Health & Social Work, 3*(4), 287-295.
- Sansoni, J., Vellone, E., & Piras, G. (2004). Anxiety and depression in community-dwelling, Italian Alzheimer's disease caregivers. *International Journal of Nursing Practice, 10*, 93-100.
- Siminoff, L., Wilson-Genderson, M., & Baker Jr, S. (2010). Depressive symptoms in lung cancer patients and their family caregivers and the influence of family environment. *Psycho-Oncology, 19*, 1285–1293. doi: 10.1002/pon.1696
- Smith, A., & Harkness, J. (2002). Spirituality and meaning: A qualitative inquiry with caregivers of Alzheimer's disease. *Journal of Family Psychotherapy, 13*(1), 87.
- Stuckey, J. (2001). Blessed assurance: The role of religion and spirituality in Alzheimer's disease caregiving and other significant life events. *Journal of Aging Studies, 15*(1), 69.
- Takai, M., Takahashi, M., Iwamitsu, Y., Oishi, S., & Miyaoka, H. (2011). Subjective experiences of family caregivers of patients with dementia as predictive factors of quality of life. *Psychogeriatrics, 11*(2), 98-104. doi:10.1111/j.1479-8301.2011.00354.x.
- Tang, S., Li, C-Y., & Liao, Y-C. (2007). Factors associated with depressive distress among Taiwanese family caregivers of cancer patients at the end of life. *Palliative Medicine 21*, 249–257. doi: 10.1177/0269216307077334.

- Ulstein, I., Wyller, T. B., & Engedal, K. (2008). Correlates of intrusion and avoidance as stress response symptoms in family carers of patients suffering from dementia. *International Journal of Geriatric Psychiatry, 23*(10), 1051–1057. doi: 10.1002/gps.2032.
- Vellone, E., Piras, G., Talucci, C., & Cohen, M. Z. (2008). Quality of life for caregivers of people with Alzheimer's disease. *Journal of Advanced Nursing, 61*(2), 222-231. doi: 10.1111/j.1365-2648.2007.04494.x.
- Yilmaz, A., Turan, E., & Gundogar, D. (2009). Predictors of burnout in the family caregivers of Alzheimer's disease: Evidence from Turkey. *Australasian Journal on Ageing, 28*(1), 16-21. doi: 10.1111/j.1741-6612.2008.00319.x.
- Yu-Nu, W., Yea-Ing, L. S., Min-Chi, C., & Pei-Shan, Y. (2011). Reconciling work and family caregiving among adult-child family caregivers of older people with dementia: effects on role strain and depressive symptoms. *Journal of Advanced Nursing, 67*(4), 829-840. doi: 10.1111/j.1365-2648.2010.05505.x.

Appendix A

Paper Survey Letter of Consent



George Fox University
Graduate Department of Clinical Psychology
414 N. Meridian Street Newberg, Oregon 97132

Invitation of Participation & Informed Consent

Welcome,

You are invited to participate in a study intended to evaluate the well-being of people like you who care for family members with Alzheimer’s disease. Caring for someone with incurable mental decline is a tragic and stressful situation for both the ill person and the loved ones caring for him or her. I am conducting this study to assess the well-being of family members caring for an ill loved one.

Participation in this research is completely voluntary. However, I believe that your contribution may be valuable for others like you who are caring for an ill loved one, and encourage you to complete the following survey. After mailing the completed materials to me, you can expect to receive the overall results of this study in a few months. Results will be sent to your group facilitators who can then distribute the results to you.

This study is being performed under complete confidentiality, and any information you provide will not be forwarded to other organizations. You will not receive contact from other organizations or researchers due to your participation in this study. If you complete the following survey, it will be detached from this consent form to protect your identity. The intent of this project is to provide helpful information for family caregivers of people with Alzheimer’s disease. If you are willing to help me in my research, please sign the below consent line and complete the attached survey. Thank you very much for helping me with my project.

Best regards,

Christine B. Green, M.A.
Doctoral Student of Clinical Psychology
George Fox University
cgreen11@georgefox.edu

Printed Participant Name
Date: ____ / ____ / 201____

Participant Signature

Christine Green, M.A.

Electronic Survey with Letter of Consent



George Fox University
Graduate Department of Clinical Psychology
414 N. Meridian Street Newberg, Oregon 97132

Invitation of Participation & Informed Consent

Welcome,

You are invited to participate in a study intended to evaluate the well-being of people like you who care for family members with Alzheimer's disease. Caring for someone with incurable mental decline is a tragic and stressful situation for both the ill person and the loved ones caring for him or her. I am conducting this study to assess the well-being of family members caring for an ill loved one.

Participation in this research is completely voluntary. However, I believe that your contribution may be valuable for others like you who are caring for an ill loved one, and encourage you to complete the following survey. Click on the link at the bottom of this letter to open the survey. It should take about 20 minutes to complete and must be done in one sitting. If you choose to participate, you have the option to be entered into a drawing to win one of four \$25 Amazon gift cards. You will be prompted to submit your email address at the end of the survey if you would like to be entered into the drawing.

The info you submit will be held confidential and will not be forwarded to other organizations. You will not receive contact from other organizations or researchers due to your participation in this study. Your completion of this survey confirms your consent to participation. Thank you very much for helping me with my project.

Best regards,

Christine B. Green, M.A.
Doctoral Student of Clinical Psychology
George Fox University
cgreen11@georgefox.edu

William Buhrow, Psy.D.
Faculty Research Supervisor

Here is the link to the survey: <https://www.surveymonkey.com/s/MGL6FWR>
If you would prefer to receive a paper version of the survey, please call me directly at 503-348-8754.

Thank you!

Appendix B

Paper version of Survey

Family or Friend Caregiver Survey

Please complete following survey as honestly as possible, and please answer every question. Your data will be recorded anonymously and your identity will not be revealed through any answers you provide.

1. **What is your relationship to the loved one you are caring for?** (Circle only one.)

- | | |
|------------|------------------------|
| A. SPOUSE | E. GRANDCHILD |
| B. SIBLING | F. OTHER FAMILY MEMBER |
| C. PARENT | G. CLOSE FRIEND |
| D. CHILD | |

2. **How long (in years) have you known the loved one you are caring for?**

_____ YEARS

3. **How long has your loved one been diagnosed with Alzheimer's disease?**

_____ YEARS (IF LESS THAN 1 YEAR, HOW MANY MONTHS? _____ MONTHS)

4. **How long have you been providing care for your loved one with Alzheimer's disease?**

_____ YEARS (IF LESS THAN 1 YEAR, HOW MANY MONTHS? _____ MONTHS)

5. **How many days per week do you care for your loved one?**

_____ DAYS

6. **On an average day that you care for your loved one, how many hours (on average) are you providing care?**

_____ AVERAGE HOURS PER DAY

7. **If you receive additional help physically taking care of your loved one, on average, how many hours per week to you receive help?** (If you do not receive additional help physically caring for your loved one, write "N/A" in the blank.)

_____ HOURS PER WEEK

8. **Does your loved one with Alzheimer's disease live with you?** (Circle the letter.)

- A. YES
- B. NO

9. As a caregiver, do you have any personal health concerns and/or disabilities?

- A. YES
- B. NO

10. Does your loved one have any other medical or mental health concerns other than those caused by Alzheimer's disease?

- A. YES
- B. NO

11. What is your gender?

- A. MALE
- B. FEMALE

12. What is/are your ethnicity/ethnicities?

- | | |
|---------------------------|---------------------------|
| A. ASIAN/PACIFIC ISLANDER | E. NATIVE/AMERICAN INDIAN |
| B. BLACK/AFRICAN AMERICAN | F. WHITE/CAUCASIAN |
| C. HISPANIC/LATINO | G. BIRACIAL |
| D. MIDDLE EASTERNER | H. MULTIRACIAL |

13. How many years of education have you completed?

- | | |
|---------------------------------|--------------------|
| A. DID NOT COMPLETE HIGH SCHOOL | D. COLLEGE DEGREE |
| B. HIGH SCHOOL DIPLOMA/GED | E. SOME GRADUATE |
| SCHOOL | |
| C. SOME COLLEGE | F. GRADUATE DEGREE |

14. If you are employed, how many hours per week do you work?

_____ HOURS

15. What is your marital status?

- | | |
|--------------|--------------|
| A. SINGLE | D. SEPARATED |
| B. PARTNERED | E. DIVORCED |
| C. MARRIED | F. WIDOWED |

16. How many people live in the same household as yours?

_____ PEOPLE

17. If you have children, under 18 years of age, how many live with you?

_____ CHILDREN

18. What is your age?

_____ YEARS OLD

19. What is your religion or belief system?

- | | |
|-----------------------|----------------------|
| A. NOT RELIGIOUS | E. ISLAM |
| B. BUDDHISM | F. JUDIASIM |
| C. CHRISTIAN/CATHOLIC | G. NEW AGE |
| D. HINDUISM | H. OTHER (Write-in): |
-

20. How have you been feeling in general? (Circle the letter that matches best.)

- | | |
|---------------------------|---|
| A. In excellent spirits | D. I've been up and down in spirits a lot |
| B. In very good spirits | E. In low spirits mostly |
| C. In good spirits mostly | F. In very low spirits |

21. Have you been bothered by nervousness or your "nerves"?

- A. Extremely so, to the point where I could not work or take care of things
- B. Very much so
- C. Quite a bit
- D. Some, enough to bother me
- E. A little
- F. Not at all

22. Have you been in firm control of your behavior, thoughts, emotions, or feelings?

- | | |
|---------------------------|------------------------------------|
| A. Yes, definitely so | D. Not too well |
| B. Yes, for the most part | E. No, and I am somewhat disturbed |
| C. Generally so | F. No, and I am very disturbed |

23. Have you felt so sad, discouraged, hopeless, or had so many problems that you wondered if anything was worthwhile?

- A. Extremely so, to the point I have just about given up
- B. Very much so
- C. Quite a bit
- D. Some, enough to bother me

- E. A little bit
- F. Not at all

24. Have you been under or felt that you were under any strain, stress, or pressure?

- A. Yes, almost more than I could bear
- B. Yes, quite a bit of pressure
- C. Yes, some, more than usual
- D. Yes, some, but about usual
- E. Yes, a little
- F. Not at all

25. How happy, satisfied, or pleased have you been with your personal life?

- A. Extremely happy, couldn't have been more satisfied or pleased
- B. Very happy
- C. Fairly happy
- D. Satisfied; pleased
- E. Somewhat dissatisfied
- F. Very dissatisfied

26. Have you had a reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel, or of your memory?

- A. Not at all
- B. Only a little
- C. Some, but not enough to be concerned
- D. Some, and I've been a little concerned
- E. Some, and I am quite concerned
- F. Much, and I am very concerned

27. Have you been anxious, worried, or upset?

- A. Extremely so, to the point of being sick, or almost sick
- B. Very much so
- C. Quite a bit
- D. Some, enough to bother me
- E. A little bit
- F. Not at all

28. Have you been waking up fresh and rested?

- A. Every day
- B. Most every day
- C. Fairly often
- D. Less than half of the time
- E. Rarely
- F. None of the time

29. Have you been bothered by any illness, bodily disorder, pain, or fears about your health?

- A. All of the time
- D. Some of the time

- B. Most of the time
- C. A good bit of the time
- E. A little of the time
- F. None of the time

30. Has your daily life been full of things that are interesting to you?

- A. All of the time
- B. Most of the time
- C. A good bit of the time
- D. Some of the time
- E. A little bit of the time
- F. None of the time

31. Have you felt downhearted and blue?

- A. All of the time
- B. Most of the time
- C. A good bit of the time
- D. Some of the time
- E. A little bit of the time
- F. None of the time

32. Have you been feeling emotionally stable and sure of yourself?

- A. All of the time
- B. Most of the time
- C. A good but of the time
- D. Some of the time
- E. A little bit of the time
- F. None of the time

33. Have you felt tired, worn out, used up, or exhausted?

- A. All of the time
- B. Most of the time
- C. A good bit of the time
- D. Some of the time
- E. A little bit of the time
- F. None of the time

34. How concerned or worried about your health have you been? (Circle the number that seems closest to how you have generally felt *during the past month.*)

**Not
concerned
at all**
10
8
6
4
2
0
**Very
concerned**

35. How relaxed or tense have you been? (Circle the number that seems closest to how you have generally felt *during the past month.*)

**Very
relaxed**
10
8
6
4
2
0
**Very
tense**

36. How much energy, pep, and vitality have you felt? (Circle the number that seems closest to how you have generally felt *during the past month.*)

Very energetic, dynamic	10	8	6	4	2	0	No energy at all, listless
--------------------------------	----	---	---	---	---	---	-----------------------------------

37. How depressed or cheerful have you been? (Circle the number that seems closest to how you have generally felt *during the past month.*)

Very cheerful	10	8	6	4	2	0	Very depressed
----------------------	----	---	---	---	---	---	-----------------------

38. Over the last 2 weeks, how often have you had little interest or pleasure in doing things?

- | | |
|-----------------|-------------------------------|
| A. Not at all | C. More than half of the days |
| B. Several days | D. Nearly every day |

39. Over the last 2 weeks, how often have you been feeling down, depressed, or hopeless?

- | | |
|-----------------|-------------------------------|
| A. Not at all | C. More than half of the days |
| B. Several days | D. Nearly every day |

40. Over the last 2 weeks, how often have you had trouble falling or staying asleep, or sleeping too much?

- | | |
|-----------------|-------------------------------|
| A. Not at all | C. More than half of the days |
| B. Several days | D. Nearly every day |

41. Over the last 2 weeks, how often have you been feeling tired or having little energy?

- | | |
|-----------------|-------------------------------|
| A. Not at all | C. More than half of the days |
| B. Several days | D. Nearly every day |

42. Over the last 2 weeks, how often have you had poor appetite or overeating?

- | | |
|-----------------|-------------------------------|
| A. Not at all | C. More than half of the days |
| B. Several days | D. Nearly every day |

43. Over the last 2 weeks, how often have you been feeling bad about yourself, or that you are a failure or have you let yourself or your family down?

- | | |
|-----------------|-------------------------------|
| A. Not at all | C. More than half of the days |
| B. Several days | D. Nearly every day |

44. Over the last 2 weeks, how often have you had trouble concentrating on things, such as reading the newspaper or watching television?

- A. Not at all
- B. Several days
- C. More than half of the days
- D. Nearly every day

45. Over the last 2 weeks, how often have you been moving or speaking so slowly that other people could have noticed. Or the opposite: being so fidgety or restless that you have been moving around a lot more than usual?

- A. Not at all
- B. Several days
- C. More than half of the days
- D. Nearly every day

46. Over the last 2 weeks, how often have you had thoughts that you would be better off dead, or of hurting yourself?

- A. Not at all
- B. Several days
- C. More than half of the days
- D. Nearly every day

47. If you noticed any problems over the past 2 weeks, how difficult have these problems made it for you to do your work, take care of things at home, or get along with other people?

- A. Not difficult at all
- B. Somewhat difficult
- C. Very difficult
- D. Extremely difficult

48. I often feel closely related to a power greater than myself.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree
- F. Strongly Agree

49. I often feel that I have little control over what happens to me.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree
- F. Strongly agree

50. My faith gives my life meaning and purpose.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree
- F. Strongly agree

51. My faith is a way of life.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

52. Ideas from faiths different from my own may increase my understanding of spiritual truth.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

53. One should not marry someone of a different faith.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

54. My faith is an important part of my individual identity.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

55. My faith helps me confront tragedy and suffering.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

56. My faith is often a deeply emotional experience.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

57. It is difficult for me to form a clear, concrete image of God.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

58. I believe that there is only one true faith.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree
- F. Strongly agree

59. It is important that I follow the religious beliefs of my parents.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree
- F. Strongly agree

60. Learning about different faiths is an important part of my spiritual development.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree
- F. Strongly agree

61. I often think about issues concerning my faith.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree
- F. Strongly agree

62. If my faith is strong enough, I will not experience doubt.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree
- F. Strongly agree

63. Obedience to religious doctrine is the most important aspect of my faith.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree
- F. Strongly agree

64. My relationship to God is experienced as unconditional love.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree
- F. Strongly agree

65. My spiritual beliefs change as I encounter new ideas and experiences.

- A. Strongly disagree
- B. Disagree
- C. Somewhat disagree
- D. Somewhat agree
- E. Agree

- C. Somewhat disagree F. Strongly agree

66. I am sometimes uncertain about the best way to resolve a moral conflict.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

67. I often fear God's punishment.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

68. Although I sometimes fall short of my spiritual ideals, I am still basically a good and worthwhile person.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

69. A primary purpose of prayer is to avoid personal tragedy.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

70. I can experience spiritual doubts and still remain committed to my faith.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

71. I believe that the world is basically good.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

72. My faith enables me to experience forgiveness when I act against my moral conscience.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree

- C. Somewhat disagree F. Strongly agree

73. It is important that my spiritual beliefs conform with those of persons closest to me.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

74. Persons of different faiths share a common spiritual bond.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

75. I gain spiritual strength by trusting in a higher power.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

76. There is usually only one right solution to any moral dilemma.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

77. I make a conscious effort to live in accordance with my spiritual values.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

78. I feel a strong spiritual bond with all of humankind.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

79. My faith is a private experience which I rarely, if ever, share with others.

- A. Strongly disagree D. Somewhat agree
B. Disagree E. Agree
C. Somewhat disagree F. Strongly agree

80. Sharing my faith with others is important for my spiritual growth.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

81. I never challenge the teachings of my faith.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

82. I believe that the world is basically evil.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

83. Religious scriptures are best interpreted as symbolic attempts to convey ultimate truths.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

84. My faith guides my whole approach to life.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

85. Improving the human community is an important spiritual goal.

- | | |
|----------------------|-------------------|
| A. Strongly disagree | D. Somewhat agree |
| B. Disagree | E. Agree |
| C. Somewhat disagree | F. Strongly agree |

Thank you for completing this survey!

Appendix C

Caregiver Demographics

Table 1. Individual demographics for relationship, years knowing, years diagnosed, years caring, and days per week caring for loved one with AD

Participant	Relationship	Years knowing	Years diagnosed	Years caring	Days caring
1	Child	55	6	6	7
2	Spouse	60	11	11	7
3	Spouse	31	14	12	7
4	Spouse	48	8	7	7
5	Parent	63	5	4	4
6	Child	52	5	1	2
7	Child	38	12	12	7
8	Sibling	72	2	2	1
9	Spouse	24	5	5	0
10	Spouse	55	7	7	7
11	Child	66	2	2	2
12	Spouse	63	4	4	5
13	Spouse	42	4	4	7
14	Spouse	30	4	4	7
15	Child	38	<1	<1	1
16	Spouse	52	2	2	7
17	Parent	72	8	15	7
18	Parent	56	3	0	7
19	Spouse	53	6	6	7
20	Spouse	55	3	3	7
21	Other family	52	2	2	7
22	Spouse	46	4	4	7
23	Spouse	17	<1	<1	7
24	Spouse	54	2	3	7
25	Spouse	54	2	2	7
26	Spouse	35	5	5	7
27	Child	68	8	4	1
28	Spouse	43	8	8	0
29	Spouse	24	4	4	7
30	Spouse	25	6	3	7
31	Spouse	38	4	4	7
32	Child	52	10	8	5
33	Spouse	45	9	9	2

34	Child	49	2	2	7
35	Close friend	2	3	<1	5
36	Parent	31	7	7	1
37	Grandchild	34	3	3	7
38	Spouse	51	25	6	7
39	Spouse	46	3	3	7
40	Spouse	30	2	2	7
41	Spouse	34	3	3	7

Table 2. Total participants per category from individual demographics in Table 1

	Relationship	Years knowing	Years diagnosed	Years caring	Days caring
Totals	Spouse: 25	0-10 yrs: 1	0-5 yrs: 26	0-5 yrs: 28	0 days: 3
	Child: 8	11-20 yrs: 1	6-10 yrs: 11	6-10 yrs: 9	1-2 days: 6
	Parent: 4	21-30 yrs: 6	11-15 yrs: 3	11-15 yrs: 4	3-4 days: 1
	Sibling: 1	31-40 yrs: 7	16-20 yrs: 0	16+ yrs: 0	5-6 days: 3
	Grandchild: 1	41-50 yrs: 7	21-25 yrs: 1		7 days: 28
	Other family: 1	51-60 yrs: 13	26+ yrs: 0		
	Close friend: 1	61-70 yrs: 4			
		71+ yrs: 2			

Table 3. Individual demographics for hours of care each day, hours of care assistance, if the loved one lives with the caregiver, and if the caregiver has personal health concerns

Participant	Hours per day	Weekly hours assisted	Live with caregiver	Caregiver health prob.
1	3	168	No	Yes
2	24	60	Yes	No
3	6	6	No	Yes
4	10	0	Yes	No
5	24	168	No	Yes
6	6	156	No	No
7	1	168	No	Yes
8	2	168	No	No
9	0	0	No	Yes
10	20	0	Yes	No
11	6	168	No	No
12	2	168	No	No
13	24	10	Yes	Yes
14	5	20	Yes	No
15	5	1	No	No

16	12	7	Yes	Yes
17	18	15	No	Yes
18	0	24	No	No
19	24	7	Yes	Yes
20	24	0	Yes	No
21	3	148	No	Yes
22	24	0	Yes	Yes
23	3	0	Yes	No
24	10	8	Yes	No
25	24	21	Yes	No
26	6	0	Yes	Yes
27	2	168	No	Yes
28	1	168	No	Yes
29	15	15	Yes	Yes
30	12	12	Yes	No
31	10	0	Yes	Yes
32	2	120	No	No
33	2	164	Yes	Yes
34	24	0	No	Yes
35	8	35	No	No
36	0	168	No	Yes
37	2	5	Yes	Yes
38	24	0	Yes	No
39	4	7	Yes	Yes
40	24	0	Yes	No
41	2	168	No	Yes

Table 4. Total participants per category from individual demographics in Table 3

	Hours per day	Weekly hours assisted	Live with caregiver	Caregiver health prob.
Totals	0-6 hrs: 22	0-10 hrs: 19	Yes: 21	Yes: 22
	7-12 hrs: 6	11-25 hrs: 6	No: 20	No: 19
	13-18 hrs: 2	26-50 hrs: 1		
	19-24 hrs: 11	51-100 hrs: 1		
		101-150 hrs: 2		
		151+ hrs: 12		

Table 5. Individual demographics for loved one co-morbid illnesses, caregiver gender, caregiver ethnicity, caregiver education, and caregiver weekly hours employed

Participant	Patient co-morbidity	Gender	Ethnicity	Education	Hours employed
1	Yes	Female	White	College degree	60
2	Yes	Male	White	Graduate degree	0
3	No	Male	White	Graduate degree	0
4	No	Female	White	Some college	10
5	Yes	Female	White	College degree	0
6	Yes	Female	White	H.S. diploma	18
7	No	Female	Multiracial	Some graduate	50
8	No	Female	White	H.S. diploma	0
9	Yes	Female	White	Some college	0
10	No	Female	White	Some college	0
11	Yes	Female	White	Graduate degree	0
12	No	Female	White	Some college	0
13	Yes	Female	White	H.S. diploma	0
14	No	Male	White	Some college	40
15	No	Female	White	College degree	40
16	No	Female	Black	Some college	0
17	Yes	Female	White	Some college	0
18	Yes	Female	White	College degree	34
19	No	Male	White	Graduate degree	0
20	No	Female	White	College degree	0
21	Yes	Female	White	Some graduate	24
22	No	Female	White	College degree	0
23	No	Female	White	College degree	0
24	Yes	Female	White	College degree	0
25	Yes	Female	White	Some college	0
26	Yes	Female	White	Graduate degree	0
27	Yes	Male	White	Some graduate	0
28	Yes	Female	White	Graduate degree	0
29	No	Female	Latino	Some college	0
30	No	Female	White	Some college	12
31	No	Female	White	Some college	30
32	Yes	Female	White	College degree	30
33	Yes	Female	White	Graduate degree	45
34	Yes	Female	White	Graduate degree	40
35	Yes	Female	White	Some college	45
36	Yes	Female	White	Graduate degree	40

37	Yes	Male	White	College degree	0
38	No	Male	White	College degree	0
39	Yes	Female	White	Graduate degree	0
40	No	Female	White	Some college	0
41	Yes	Female	White	College degree	0

Table 6. Total participants per category from individual demographics in Table 5

	Patient co-morbidity	Gender	Ethnicity	Education	Hours employed
Total	Yes: 23 No: 18	Female: 34 Male: 7	White: 38 Black: 1 Latino: 1 Multiracial: 1	H.S. Diploma: 3 Some college: 13 College degree: 12 Some graduate: 3 Graduate degree: 10	Not employed: 26 1-10 hrs: 1 11-20 hrs: 2 21-30 hrs: 1 31-40 hrs: 7 40+ hrs: 4

Table 7. Individual demographics for caregiver marital status, number of people at home with caregiver, children under 18 years old at home, caregiver age, and caregiver belief system

Participant	Marital status	Others at home	Children		Caregiver age	Religion/belief
			<18 yrs.			
1	Married	1	0		55	None
2	Married	2	0		83	Christian
3	Married	0	0		71	Christian
4	Married	2	0		69	Christian
5	Divorced	1	0		63	Christian
6	Married	1	0		52	Christian
7	Married	1	0		38	Christian
8	Married	2	0		72	Christian
9	Married	0	0		72	Christian
10	Married	0	0		73	Christian
11	Married	2	0		66	Christian
12	Married	1	0		75	Christian
13	Married	2	0		73	Christian
14	Married	1	0		60	Christian
15	Married	4	2		38	Christian
16	Married	2	0		71	Christian
17	Widowed	1	0		72	Christian
18	Married	4	1		56	Christian
19	Married	2	0		79	Christian

20	Married	2	0	75	Christian
21	Married	3	0	52	Christian
22	Married	1	0	62	Christian
23	Married	2	0	65	Christian
24	Married	3	0	75	Christian
25	Married	2	0	70	Christian
26	Married	2	0	64	Christian
27	Married	1	0	68	None
28	Married	1	0	69	None
29	Married	2	0	59	None
30	Married	2	0	55	Christian
31	Married	2	0	60	None
32	Married	2	0	52	None
33	Married	0	0	63	Judaism
34	Partnered	4	1	14	None
35	Married	4	2	42	None
36	Single	1	0	31	None
37	Single	2	0	34	None
38	Married	2	0	67	Judaism
39	Married	2	0	67	None
40	Married	3	0	54	None
41	Married	1	0	62	None

Table 8. Total participants per category from individual demographics in Table 7

	Marital status	Others at home	Children <18 yrs.	Caregiver age	Religion/belief
Total	Married: 36	0 people: 4	0 children: 37	<18 yrs: 1	Christian: 26
	Single: 2	1 person: 12	1 child: 2	19-30 yrs: 0	None: 13
	Partnered: 1	2 people: 18	2 children: 2	31-40 yrs: 4	Judaism: 2
	Divorced: 1	3 people: 3		41-50 yrs: 1	
	Widowed: 1	4 people: 4		51-60 yrs: 10	
				61-70 yrs: 13	
				71+ yrs: 12	

Appendix D

Curriculum Vitae

Christine B. Green

205 West 30th Street
Vancouver, WA 98660
503.348.8754
cgreen11@georgefox.edu

Education

- | | |
|----------------------|---|
| 5.2016 (Anticipated) | <p>Doctor of Psychology
George Fox University, Newberg, Oregon
Graduate Department of Clinical Psychology: APA Accredited</p> |
| 5.2013 | <p>Masters of Arts in Clinical Psychology
George Fox University, Newberg, Oregon
Graduate Department of Clinical Psychology: APA Accredited</p> |
| 5.2008 | <p>Bachelor of Science in Human Development
Minor in Elementary Education
Warner Pacific College, Portland, Oregon
Graduated Summa Cum Laude</p> |

Supervised Clinical Experience

- | | |
|------------------|---|
| 7.2013 to 6.2015 | <p>Primary Care Behavioral Health Consultant
Oregon Health and Science University (OHSU)
OHSU Family Medicine at Scappoose, Scappoose, Oregon
Total hours per week: 20
Supervisors: Tami Hoogestraat, PsyD; Marie-Christine Goodworth PhD;
Darren Janzen, PsyD; Joan Fleishman, PsyD
Population: children, adolescents and adults</p> <ul style="list-style-type: none"> • Conduct intake interviews with patients to obtain current information and pertinent history regarding their overall health and functioning • Perform evidence-based cognitive behavioral interventions with patients according to their diagnostic presentation through the following modalities: |
|------------------|---|

- Warm hand-off: brief, often one-time meeting with patient following an appointment with patient's primary care provider, consisting mainly of immediate behavioral health intervention
- Short-term psychotherapy: 6 to 12, 50-minute sessions of psychotherapy consisting mainly of behavioral health interventions with some process-oriented therapy
- Long-term psychotherapy: 12 or more, 50-minute sessions of psychotherapy, combining both behavioral health intervention and processing (often focused on deep issues such as trauma)
- Provide comprehensive assessments and relevant recommendations for patients in need of psychological evaluation
- Attend weekly didactic trainings with social workers, psychiatric mental health nurse practitioner, and physicians on selected topics for training
- Consult with providers regarding shared patients
- Utilize electronic health record system for patient charting
- Participate in weekly individual supervision with licensed psychologist in order to ensure optimal treatment for each patient

9.2012 to 7.2013

Psychology Counselor

Clark County Juvenile Court, Vancouver, Washington

Total hours per week: 17

Supervisors: Shirley Shen, PhD & Christine Krause, PsyD

Population: adolescents

- Provide individual counseling for adjudicated youth ages 12 to 18 in both inpatient and outpatient setting
- Facilitate DBT oriented group therapy for adjudicated youth
- Provide comprehensive assessment including projective assessment
- Work alongside connections staff and support teams for adjudicated youth
- Attend weekly didactic training facilitated by supervisors
- Receive one-on-one and group supervision each week with one or both supervisors
- Prepare and present relevant case and topic presentations

1.2012 to 4.2012

University Counselor

George Fox University, Newberg, Oregon

Total hours per week: 2

Supervisor: Mary Peterson, PhD, ABPP/CL

Population: college students

- Practice Rogerian psychotherapy with two undergraduate students

- Conduct intake interviews, mental-status exams, and individual weekly therapy
- Explain and obtain informed consent at the beginning of therapy, developed a treatment plan, kept weekly progress notes, and provided a termination summary at the end of treatment
- Participate in weekly individual and group supervision including case conceptualization, peer consultation, and videotape review

Supervised experience

9.2014 to 4.2015

Supervision of Second Year Student

George Fox University, Newberg, Oregon

Total hours per week: 1

- Provide weekly supervision for second-year student, further supporting her first practicum experience
- Submit bi-weekly journals on the supervision process
- Intervene with clinical intervention skills, insight, and ethical situations as necessary
- Video record two supervision sessions per semester and review with clinical mentor

Research Experience and Presentations

5.2015

Dissertation

Working with various chapters of the American Alzheimer's Association, the dissertation studies mental health outcomes and spirituality among family caregivers of Alzheimer's disease. The study aims to utilize spirituality and religiosity as protective measures against negative mental health outcomes brought about by distress from caring for loved ones with Alzheimer's disease.

3.2015

Poster Presentation

Green, C., Buhrow, W., McMinn, M. & Goodworth, M-C. (2015). The relationship of spirituality and depression in family caregivers of individuals with Alzheimer's disease. Presented at the Richter Scholarship Symposium, Newberg, Oregon.

5.2014

Poster Presentation

Green, C., Presler, B. & Buhrow, W. (2014). The effect of inadequate sleep

and spirituality on anxiety and stress among college students.
Presented at the Oregon Psychological Association 2014 Annual
Conference, Portland, Oregon.

- 5.2014 **Poster Presentation**
Theye, A., Holt, J., Green, C. & Payne, T. (2014). Assessment checklist of
family readiness for kindergarten. Presented at Oregon Psychology
Association 2014 Annual Conference, Portland, Oregon.
- 3.2014 **Guest Lecturer**
Green, C. (2014). Principles of trauma therapy: Symptoms, evaluation and
treatment based on the book by J. Briere, PhD and C. Scott, MD.
Presented at Oregon Health and Science University, Richmond
Campus, Portland, Oregon.
- 5.2013 **Guest Lecturer**
Green, C. (2013). The psychopathology of conduct problems. Presented at
Clark County Juvenile Court, Vancouver, Washington.
- 4.2013 **Poster Presentation**
Presler, B., Green, C. & Buhrow, W. (2013). The effect of George Fox
University premarital education class on emotional intimacy.
Presented at the Christian Association of Psychological Studies 2013
Annual Conference, Portland, Oregon.
- 4.2013 **Guest Lecturer**
Shen, S., Green, C. The psychology of suicide in teens: Clinical and ethical
standards of care. Presented at Clark County Juvenile Court,
Vancouver, Washington.

Professional Development

Children and Adolescents:

- 10.2014 **Understanding and Treating ADHD in Children**
Erika Doty, PsyD
George Fox University
- 10.2014 **Learning Disabilities: A Neurological Perspective**
Tabitha Becker, PsyD
George Fox University

Erica Tan, Psy.D.
George Fox University

Professional Affiliations and Certifications

2011 to present	American Psychological Association Student affiliate
2009 to present	Elementary Education Teaching Certification Washington State, Grades K-5
2008 to present Certification	Early Education and Elementary Education Teaching Oregon State, Grades K-8

Teaching Experience

9.2013 to 11.2013	Guest Lecturer Cognitive Behavioral Therapy course George Fox University Doctorate of Clinical Psychology Newberg, Oregon
3.2009 to 6.2015	Certified Substitute Teacher Grades kindergarten through fifth Evergreen School District Vancouver, Washington
	Classified Substitute Teacher Grades kindergarten through twelfth Evergreen School District Vancouver, Washington

Honors and Awards

12.2013	Richter Scholar Grant Recipient George Fox University (Newberg, Oregon) Awarded a Richter Scholars Grant towards dissertation costs
---------	--

Professional Affiliations

American Psychological Association, Graduate Student Affiliate

Assessment Training

- 16 Personality Factor Questionnaire
- Adaptive Behavior Assessment – II
- Autism Spectrum Rating Scale
- Boston Naming Test
- Beery-Buktenica Developmental Test of Visual-Motor Integration – 6
- California Verbal Learning Test – 2
- Child Anxiety Inventory
- Child Depression Inventory
- Gray Oral Reading Test – 5
- Halstead Reitan Neuropsychological Battery
- House-Tree-Person Test
- Medical Symptom Validity Test
- Millon Clinical Multiaxial Inventory – III
- Mini Mental Status Exam
- Peabody Picture Vocabulary Test – 4
- Piers-Harris Self-Concept
- Repeatable Battery for the Assessment of Neuropsychological Status
- Rey-Osterrieth Complex Figure Test
- Robert's Apperception Test for Children – 2
- Trauma Symptom Checklist
- Wechsler Individual Achievement Test – III
- Wide Range Achievement Test – 4
- Woodcock-Johnson – III Cognitive and Achievement batteries
- Word Memory Test

References

William Buhrow, PsyD
Licensed Clinical Psychologist
George Fox University Health and Counseling Center
503.476.7742
bbuhrow@georgefox.edu

Marie-Christine Goodworth, PhD
Licensed Clinical Psychologist
George Fox University/Oregon Health and Science University
480.748.7060
mgoodworth@georgefox.edu

Tamara Hoogestraat, PsyD, MBA
Licensed Clinical Psychologist
Sundstrom Clinical Services/Oregon Health and Science University
503.939.1686
tthoog@aol.com