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# RELIGIOUS COPING IN A SAMPLE OF OLDER ADULTS

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RELIGIOUS COPING IN A SAMPLE OF OLDER ADULTS

A DISSERTATION APPROVED FOR THE
DEPARTMENT OF EDUCATIONAL PSYCHOLOGY

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## Abstract

The population of older adults is growing, and will continue to grow in the United States (Administration on Aging, 2003). Thus, the need to understand the experiences of the elderly and to intervene appropriately is becoming increasingly important. The elderly have consistently shown to be a more religious group overall and to gain more positive benefits from religion than their younger counterparts (Beit-Hallahmi & Argyle,1998; Pargament, 1997). This study aims to examine the role of religious coping, perceived stress, active coping, and existential well-being as a predictor of psychological quality of life in a sample of older adults. Findings show that, overall, the elderly tend to be a resilient group and experience high levels of existential well-being and low amounts of perceived stress. Using hierarchical multiple regression, positive religious coping emerged as a significant unique predictor of psychological quality of life above and beyond existential well-being, perceived stress, and active coping. These findings have great meaning for practitioners who should be attuned to the religious experiences and beliefs of their elderly clients.

## Introduction: Perceived Stress, Aging, and Religion

The American Psychological Association has written a set of guidelines for psychological practice with older adults (APA, 2004). In this set of guidelines, psychologists are exhorted to be knowledgeable and aware of the social/psychological aspects of aging (Guideline 4) and the biological and health related aspects of aging (Guideline 6). There are significant stressors that the elderly population faces. Some of the stressors that the elderly face are the same as those faced by people of all ages; however, there are some stressors that are unique to circumstances specific to later life. Some of these stressors include adapting to physical changes and health problems (Schulz & Heckhausen, 1996), including hormonal changes, decreases in sensory perception, weakened immune system functioning, and dealing with possible side effects of medications used to correct health problems. Another stressor associated with later life is the negative stereotypes toward the older population (Kite & Wagner, 2002). Dealing with inevitable and often significant loss (of people, animals, roles, independence, health, etc.) is one of the major stressors faced the elderly population.

Lazarus and Folkman (1984) describe how one's interaction with the environment, and particularly one's appraisal of the magnitude of the stressor and one's ability to meet the stressor, create a stress response. This stress response is not caused solely by the stressor, but is the result of an interaction between environmental and internal processes. Perceived stress is the degree to which a person considers situations in his or her life as stressful (Cohen, Kamarck, & Mermelstein, 1983). Perceived stress is one's subjective experience of the stressful events and may differ greatly from objective measures of stress.

Perceived stress has been shown to affect coping style choices as well. Increases in perceived stress tend to correlate with the adoption of passive coping styles like emotion-focused coping. Likewise, decreases in perceived stress tend to favor the adoption of more active coping styles like problem-focused or active coping (Rascle, 2000). Aldwin and associates (1996) have shown that the elderly tend to underestimate the stressors that they face and hypothesized that this tendency could be a developmental process enabling the elderly to distance themselves from stress and appraise difficult situations as less problematic. This tendency for elders to underestimate stress is likely protective because increases in perceived stress are a risk factor for depression (Cacioppo et al., 2006).

Stress has been associated with many constructs concerning health and certain life situations. Taking a bio-psycho-social approach, chronic and traumatic stress challenge the body to maintain homeostasis, which creates an allostatic load (or systematic cost of maintaining homeostasis), that if serious enough or prolonged enough, is damaging to ones health in a multiplicity of ways (Lovallo, 2005). Those living in poverty are more at risk to experience chronically stressful living conditions (Evans, Gonella, Marcynyszyn, Gentile, & Salpekar, 2005). Stress has been linked to the suppression of the immune system (Segerstrom & Miller, 2004) and to catching the common cold (Cohen, Tyrrell, & Smith, 1993). Perceived stress could be particularly important for the elderly who face the challenges of losing control over multiple aspects of their life (physical functions, living arrangements, etc.). In sum, difficult life circumstances tend to create stress, and stress is a pathway to further biological, chemical, and psychological harm.

There is evidence that religion and spirituality play an important part in mitigating the effects of stress. Many people are able to find strength through their religious beliefs during times of stress. Religion may offer support to individuals, couples, and families through perceived support from a higher power or through social support from a spiritual or religious group (Wolf and Stevens, 2001). It enhances health and well-being and plays a significant role in a person's ability to cope with an existential crisis (Reed, 1991).

The relationship between stress and religion has also been investigated in many medical research studies. Among cancer patients, spiritual well-being has been negatively correlated with anxiety while coping with a cancer diagnosis (Kaczorowski, 1989). In their qualitative study of African-American women with breast cancer, Simon, Crowther, and Higgerson (2007) reported that most of the participants in their study mentioned that religion and faith helped them make it through their experience with breast cancer. For HIV-positive individuals, spiritual well-being has been positively correlated with psychological hardiness (Carson & Green, 1992). In a sample of individuals with chronic illness, spiritual well-being was positively related to psychosocial adjustment and accepting uncertainty (Landis, 1996).

## Religion and Spirituality

The psychological literature on the positive effects of religion and spirituality has exploded in the recent history and there has been increased interest in attending to these issues in counseling (Richards & Bergin, 2005). The physical and mental health benefits of religion and spirituality have been demonstrated in multiple research studies (Bridges & Moore, 2002; Cotton et al., 2006; Greenfield, Vaillant & Marks, 2009;

Harrison et al., 2001; Smith & Faris, 2002). However, defining and operationalizing religion and spirituality, and the differences between these constructs, has been a long-standing difficulty in this literature (Moberg, 2002). Before looking at the beneficial aspects of religion or spirituality and the ways in which they help people to cope with stress, it is important to define these terms.

Religion and spirituality have been defined historically in both substantive and functional views. The substantive view is concerned mainly with supernatural beings, deities, rituals, practices, or in short that which is deemed sacred. The functional view is concerned mainly with how people manage the "fundamental problems of existence" (Pargament, 1997, p. 27) and a "search for significance" in life (p. 30).

Spirituality has been defined in multiple ways. Tart (1975) defined spirituality as a vast realm of human potential that deals with ultimate purpose, higher entities, God, love, compassion, and purpose. Shafranske and Gorsuch (1984) defined it as a transcendent dimension within human experience that is discovered and examined in the midst of existential questioning. Along the same lines as Shafranske and Gorsuch, Doyle (1992) defined spirituality as a search for existential meaning (p. 302). Richards and Bergin (1997) stated that spirituality is usually "universal, ecumenical, internal, affective, spontaneous, and private" (p. 31). The 1975 National Interfaith Coalition on Aging defined spiritual well-being as "the affirmation of life in a relationship with God, self, community, and environment that nurtures and celebrates wholeness." Ai (2000, p. 2) has also defined spiritual well-being as something that "lies at the very core of one's life-span journey with respect to ultimate concern about the meaning of life and a need for wholeness, transcendence, or enlightenment. Achieving spiritual well-being implies

a sense of harmony, inner freedom, and peace in relationship to such infinite entity as God, community, nature, the environment, or the cosmos." By these definitions, spirituality has been seen as an internal state of being that deals with existential questions and does or does not necessarily need to include the concept of God.

Many definitions of religion are similar to definitions of spirituality, yet vary somewhat as well. For example, William James (1902/1961) indicated that religion refers to the feelings, acts, and experiences of individual men in their solitude, so far as they apprehend themselves to stand in relation to whatever they may consider the divine" (p. 42). Argyle and Beit-Hallahmi (1975) defined religion as a system of beliefs in, and worship practices toward, a divine or greater power. Richards and Bergin (1997) explained that religion tends to be "denominational, external, cognitive, behavioral, ritualistic, and public" (p. 31). Dollahite (1998) included the idea of a faith community in his definition of religion. He defined religion as "a covenant faith community with teachings and narratives that enhance spirituality and encourage morality" (p. 5). Pargament defined religion as "a search for significance in ways related to the sacred" (p. 32).

Based on these definitions, it appears that both spirituality and religion are concerned with questions of existential and eternal significance, may or may not include some type of infinite or transcendent being, and may or may not include certain actions or ritual. However more recently, there has been a tendency to equate spirituality with functional descriptions (i.e. existential) and religion with the substantive (i.e. concerned with ritual and deities). As a result, there has been an inclination to view religion in

more dogmatic, static, and negative ways and to view spirituality as more dynamic and positive (Zinnbauer & Pargament, 2005).

Despite this trend to polarize religion and spirituality, there is some danger in separating the two constructs into completely different boxes. First, this polarization is methodologically problematic and limiting to both spirituality and religion. Viewing religion in purely substantive terms does not describe the ways in which religion works in the life of individuals and leaves religion feeling impersonal and alien (Pargament, 1997; Zinnbauer & Pargament, 2005). Additionally, viewing spirituality in purely functional terms can leave it with weak boundaries (Bruce, 1996). Thus, if spirituality is concerned with questions of existence, religion can, and for many does, provide a path, a ritual, and a community in which to understand these questions. It would be hard to imagine a religion that simply focused on ritual, deity, and community with no meaning behind the matter.

Second, research has shown that these two constructs are related. One study demonstrated that spiritual perceptions mediate the relationship between religious participation and quality of life (Greenfield, Vaillant & Marks, 2009), lending support to the idea that spirituality is expressed and fostered through religious channels. In one study on spirituality and religion with an elderly population, the majority of the participants could not define spirituality (Nelson-Becker, 2003). There is evidence that duplication in measurement might take place if attempting to measure spirituality and religiosity separately (Hill & Pargament, 2003). Though it is certainly not the case universally, many people experience their spiritual connection through religion. It appears that for an elderly population, which tends to be more religious than younger

counterparts (Beit-Hallahmi and Argyle, 1998), it makes some sense to discuss spirituality and religion together under the umbrella of religion. However, Pargament's definition of religion (a search for significance in ways related to the sacred) includes both the substantive and functional aspects by which spirituality and religion have been defined and seems fitting for the purposes of this study. Subsequently, the terms religion, religious, religiousness, or religiosity (including both substantive and functional aspects) will be used throughout this paper.

It should not be overlooked that the present author is taking a primarily Judeo-Christian view of religion and spirituality. Just as it is being argued here that religion fosters spirituality and that religion likely does not exist without some focus on existential questions and experience, the opposite might not be true. It is likely that there are spiritual traditions which reject the idea that ritual, deity, and community are needed or necessary to explore and discover the meaning of existence. It needs to be stated that these forms of spirituality are just as valid and important. This study, however, is not designed to address multiple avenues of spiritual experience. As will be discussed later, the sample population for this study is mainly Protestant and non-denominational Christian, thus this paper is excluding many other ways of viewing and experiencing spirituality and focusing on the type of religious experience that is salient for the vast majority of this sample.

## Religious Coping

Lazarus and Folkman (1984) distinguished coping as a process whereby individuals seek understanding and strength to deal with important personal or situational demands in their life. They introduced the concepts of primary and

secondary appraisal in the coping process. Primary appraisal is the first evaluation of an event as stressful, harmful, or threatening, whereas secondary appraisal is the individual's evaluation of his or her ability or option to meet this challenge. Religious constructs can be applied to Lazarus and Folkman's model of stress and coping to better understand religion as a form of coping (Pargament, 1997). Specifically, religion can be a part of each element in the coping process including religious appraisal of stress, religious coping activities, and even religious outcomes of coping (Pargament et al., 1990; Pargament et al., 1992). Religious attributions can be associated with viewing stressful circumstances in ways that may be more helpful, which can cultivate personal growth. For example, men who attributed stressful events, such as a friend's death, to God having a purpose were more likely to feel less distressed (Park & Cohen, 1993).

Depending on the types of attributions one gives about a stressor (i.e., blaming God vs. the idea that all things happen for a reason) one would cope in different ways and have different outcomes. Just as there are more or less beneficial ways to cope with stressors psychologically and physiologically (i.e. repeatedly getting drunk vs. exercising), there are also both positive and negative methods of religious coping. In studies with college students, hospitalized patients, and people coping with the Oklahoma City bombing, it was found that certain ways of religious coping led to more beneficial outcomes (Pargament, Smith, Koenig & Perez, 1998). In particular, seeking spiritual support, religious forgiveness, collaborative religious coping (i.e. perceiving a higher power as a partner in getting through stressful experiences), spiritual connection (i.e. feeling connected to a higher power while going through the coping process), religious purification (through rituals, sacraments, confessions, or fastings, etc.),

benevolent religious reappraisal (i.e. appraising the higher power as caring and the stressful experience as something that will eventually be for one's own good), and religious focus were all associated with positive physical and mental health outcomes. Positive religious coping has also been correlated with less depressed mood in adult survivors of childhood sexual abuse (Gall, 2006). Additionally, various ways of measuring positive religious coping have been linked to beneficial mental health outcomes through meta-analysis (Ano & Vasconcelles, 2005).

Negative religious coping includes spiritual discontent (i.e. displeasure with a higher power), punishing God reappraisal (the idea that negative situations happen because God is exacting a punishment), interpersonal religious discontent (or displeasure with ones congregation or spiritual associates), and demonic reappraisal (i.e. attributing negative life events to evil forces in one's life). Pargament and colleagues (1998) found that negative religious coping was associated with more negative physical and mental health outcomes. Shortz and Worthington (1994) found that among college students whose parents had divorced, attributing the divorce to God's anger (a negative religious attribution) was correlated with coping mechanisms of begging for a miracle, and outcomes of becoming angry and turning away from the church. However, this study was not longitudinal and could not answer whether negative religious coping was later more beneficial.

Some studies have been less conclusive regarding the connection between negative religious coping and poor mental health outcomes. Ano and Vasconcelles's (2005) meta-analysis indicated that while negative religious coping was related to negative psychological adjustment (i.e. depression, anxiety, etc.), negative religious

coping was not inversely related to positive psychological adjustment (i.e. optimism, life-satisfaction, stress related growth, etc). People who scored high on measures of negative religious coping did not necessarily score lower on measures of optimism, life-satisfaction, stress related growth, etc. Regarding this seemingly paradoxical finding, Pargament (1997) has mentioned, "Perhaps the negative patterns of religious coping reflect a process of religious struggle that ultimately holds more beneficial implications for the individual" (p.300). Negative religious coping could represent a type of spiritual pathway leading toward eventual growth (Ano and Vasconcelles, 2005).

More recent research has addressed aspects of negative religious coping as a spiritual pathway. Exline, Park, Smyth & Carey (2011) investigated anger toward God through the lens of social-cognitive theory. They discovered that anger toward God was less common than positive feelings toward God, but that the two expressions could be present at the same time in various degrees. They also found that participants were more likely to express anger toward God if they viewed a stressful situation as severe, if they viewed God's intentions as cruel, if they had difficulty finding meaning, and saw themselves as a victim. Anger toward God was likewise found to be linked with poorer coping with bereavement and cancer, particularly if anger toward God was sustained over time. Those who expressed high levels of anger toward God at pre-test, but not at post-test did better than those who endorsed high levels of anger toward God at both time 1 and time 2. Another longitudinal study found that spiritual discontent and demonic reappraisal at time 1 were associated with increases (19%-28%) in mortality risk 2 years later, even when controlling for baseline illness severity and mental health

status. The mortality risk was especially high if the negative religious coping remained consistent over the 2 year span (Pargament, Koenig, Tarakeshwar & Hahn, 2001).

This research indicates that some aspects of negative religious coping (if eventually resolved) can indicate a meaningful spiritual struggle and eventually lead to greater well-being. It also appears that psychological and physical health is negatively affected if negative religious coping persists over time and spiritual struggle is not resolved.

**Religious Coping during Later Life**

Many studies have shown that the elderly are a more religious group as a whole when compared to younger generations (Beit-Hallahmi and Argyle, 1998) and receive greater benefit from religious ways of coping than younger individuals (Pargament, 1997). For example, prayer has been shown to be more helpful to older participants than middle-aged or younger participants (Neighbors et al., 1983). Existential variables, operationalized as participation in religious and spiritual activity, sense of inner peace with self, comfort from religion, and accessibility to religious support and services, was a significant predictor of psychological well-being above and beyond demographic and other measures of physical and social resources in a community sample of elderly individuals (Fry, 2000). In a study of black and white elderly women who had experienced a stressful medical problem over the past year, 91% of the sample selected prayer as a way of coping with the stress. It was the most frequently reported way of coping in this sample (Conway, 1985). Additionally, a national sample showed that prayer was used more commonly by older respondents than younger ones (Levin & Taylor, 1997). Higher levels of formal religious participation were linked to more

personal growth for older rather than younger respondents in the 2005 National Survey of Midlife in the U.S. (Greenfield, Vaillant & Marks, 2009). Additionally, older adults are less likely to experience anger toward God (Exline, Park, Smyth, and Carey, 2011).

Theorists have suggested possible reasons that religion is more important and more helpful to the older generation. Peck (1968, p. 88-92) suggested that religion might be more valuable with increasing age because older adults face developmental challenges with their physical bodies. They are also forced to come to terms with their own mortality (Havighurst, 1972). Thus, aging has been proposed as a gateway leading to new spiritual growth as one becomes aware of his or her own limitations and the finite nature of human life (Ai, 2000b). Pargament (1997) emphasized that older adults have less access to other secular resources and power in our culture and that religion is a coping resource that is available and easily accessible (p. 301). Another explanation posits that a cohort effect might be driving this finding (Levin & Taylor, 1997). This explanation claims that adults born in the early 20$^{th}$ century have been socialized to value religion more than adults born later in the century. There are multiple reasons why older adults seem to value religion more than younger adults and adolescents. It could be that each of these reasons is correct in some way.

The documented religiousness of the elderly might also be explained by Erikson's stage theory of psychosocial development. Erikson, who was heavily influenced by psychoanalytic theory, went beyond Freud's focus on specific body zones (oral, anal, latency, and phallic) and explained general issues at each developmental period. Erikson included a psychosocial perspective and showed the importance of social and cultural variables on development. Additionally, Erikson extended Freud's

five stage model to include developmental stages for older adults (Austrian, 2008; Crain, 1980). Erikson claimed that eight sequential stages of development exist which involve ego crises, states of disequilibrium, and critical tasks that enhance and guide one's sense of self-identity and ego identity. Upon the successful completion of each stage, a new psychological "virtue" or strength is acquired (Austrian, 2008). The stage that is implicated during later life is ego integrity versus despair. The stages are expressed in terms of polarities in which a favorable ratio is desired, however the first polarity should outweigh the second for successful or positive development to occur (Crain, 1980; Erikson, 1976).

As mentioned above, advanced age is seen as a time of loss and decline in both physical and social terms (Havighurst, 1968). The older population tends to experience more negative life events such as chronic illnesses, disabilities, losses of loved ones, and eventual death (Erikson, Erikson & Kivnick, 1986). Erikson theorized that as people age and approach death, they start to engage in a process of integrating the earlier life stages. They think about whether their life has been worthwhile. Butler (1963) described this process as a "life review." Integrity was described by Erikson as the "acceptance of one's own and only life cycle as something that had to be and that, by necessity, permitted of no substitutions…" (Erikson, 1980, p.104). On the other side of the polarity is despair. The ultimate form of despair, according to Erikson, was to realize that one's life was not worthwhile or as it should be and time has run out to do anything about it. He further claimed that this type of despair is often represented through disgust, or having aversion to most everything and everyone (Erikson, 1959).

The desirable outcome for this stage is for the adult to come to a sort of self acceptance where the individual realizes that he or she has made mistakes, but are willing to accept those mistakes in light of personal limitations at the time of commission or omission (Erikson, 1959; Crain, 1980). In his later writing, Erikson (1976) added a list of virtues for each developmental stage. Wisdom was the virtue added for this last stage of development. Erikson stated that wisdom was the result of a "dialectic struggle in old age (p. 5)" between the "search for integrity and a sense of despair and disgust" (p. 5). When considering the developmental stage which those in later years are struggling, it makes sense that religion would be implicated and important to consider when working with an elderly population.

## Hypotheses

As discussed above, the elderly are affected by multiple stressors, both general and unique to old age. The ways in which the elderly perceive these stressors play a large part in determining how they will cope with their struggles. For example, high amounts of perceived stress have been related to increases in emotion-focused coping, where lower levels of perceived stress have been related to increases in active coping (Rascle, 2000). In particular, the elderly population tends to be more religious than the younger portion of society. Consequently, it is likely that religious attributions may be implicated in the ways that the elderly cope with stressful situations and further be associated with increased quality of life in the face of their stressors. Additionally, since the elderly population tends to be more religious, it is likely that the elderly who are religious will gain access to functional and existential meaning through their religious practices and beliefs.

### Hypothesis 1

It is predicted that psychological quality of life will positively correlate with income, emotion-focused coping, active coping, personal religious devotion, existential well-being, and positive religious coping. It is predicted that perceived stress will negatively correlate with positive religious coping and psychological quality of life.

### Hypothesis 2

It is predicted that positive religious coping will emerge as a significant positive predictor of psychological quality of life above and beyond existential well-being, perceived stress, and active coping. Thus, it is hypothesized that even after accounting for existential beliefs (which include a more functional aspect of religion), perceived

stress, and active coping, religious coping (which adds a substantive aspect into the model) will account for significant variance in psychological quality of life.

## Method

### Participants

Participants were recruited from three senior citizen centers that each participate in a senior nutritional program, one church participating in the nutritional program, and three independent living communities. Each of these recruitment locations is from one county in the Southwestern United States. Some of these locations were rural and some were suburban. Participants were chosen based on their age (60 or over), and their willingness to fill out the survey packet. All participants were still relatively active and able to care for themselves and live independently. The initial number of participants was n = 98.

Participants were administered paper and pencil surveys containing informed consent forms, demographic information, and study measures. Additionally, participants were included in a drawing for $20 gift cards, of which there were 5 to give out.

There was a slight problem with missing data during this study. Some participants had difficulty finishing the survey packet. The majority of the missing data problems occurred during the first administration of the packet at the first recruiting location. The researcher thereafter initiated a system of checking for missing data when the participant turned in his or her packet. If missing data were discovered, the researcher would ask participants, without being pushy or demanding, to complete missing questions. Most of the participants seemed surprised to find out that they had, in fact, left out answering items on the packet. This system dramatically decreased the amount of missing data for the remainder of the surveys and is recommended for future research with an elderly population.

The primary way in which missing data were handled was through list-wise deletion. List-wise deletion was used for all cases in which there was a percentage of missing data points on any measure included on the packet that would make the measure impossible to score. Twenty-five participants were excluded from analysis because of insufficient data or because they failed to meet study population characteristics (i.e. they were too young). However, there were a few cases in which only one or a very few data points were missing. For these eight participants, the missing data point was replaced with that participant's mean score for all the other remaining data points on that measure. It is understood that there are certain limitations to this method of dealing with missing data, particularly the possibility of reducing variability, possibly increasing $R^2$, and decreasing standard errors. However, these risks were considered minimal because of the small amount of missing questions. Thus, it seemed more important to have enough participants to run the essential analyses, than to completely delete each participant with any missing data at all. After list-wise deletion and accounting for slight missing data, the total number of participants was reduced to n = 73.

Of all included participants, their ages were 60-96 (M = 74.6, SD = 9.52). Of these participants, 75% were female, 25% were male. The participants were asked to select from a list of possible self-identified ethnicities. The results were as follows: Caucasian/White (88.7%), Native American /American Indian (9.9%), Other (1.4%). The sample included primarily lower income individuals with 68.7% earning less than $25,000 annually, 25.4% earning between $25,000 and $50,000, 4.5% between $50,000 and $75,000, and only 1.5% reporting annual earnings of $100,000 or more. The

participants' reported amount of education clustered slightly toward the lower end. They reported their educational levels as follows: 9.7% finished some high school, 29.2% were high school graduates, 27.8% finished some college, 9.7% earned an associates degree, 13.9 % were college graduates, 8.3% earned a master's degree, and 1.4% had earned a doctoral degree.

**Instruments**

Survey measures were presented in the order in which they are described below:

**Demographic Questionnaire.** A short demographic questionnaire was designed for the purposes of this study. Participants were asked the following: age, gender, occupation, ethnicity, annual income, highest level of education, religious affiliation, regularity of church attendance, and regularity of personal devotional activities such as prayer, scripture reading, or meditation.

**Existential Well-being subscale (EWBS) from Spiritual Well-being Scale (SWBS).** The Spiritual Well-being Scale (SWBS; Paloutzian & Ellison, 1982) is a 20-item instrument consisting of two evenly distributed scales: religious well-being (RWB) and existential well-being (EWB). Each of the items is measured with 6-point Likert scales ranging from strongly agree to strongly disagree. The EWBS is intended to tap into one's sense of life purpose and satisfaction with existence. Sample questions from the EWBS are as follows: "I believe there is some real purpose for my life" and "I don't know who I am, where I came from, or where I am going."

The EWBS has been shown to have good psychometric properties. The test-retest alpha coefficient has been reported as follows: EWBS = .86 (Paloutzian & Ellison, 1982). Kirschling and Pittman (1989) also found the SWBS to have high

internal consistency in their study of a sample of hospice patient caregivers. Good convergent validity has been supported in studies where the RWBS, EWBS, and SWBS were each found to negatively correlate with measures of loneliness and positively correlate with measures of life purpose, intrinsic religious orientation, and self-esteem (Ellison, 1983). Additionally, the SWBS has been found to correlate with life satisfaction and emotional well-being (Kim, Heinemann, Bode, Sliwa & King, 2000), self-esteem and depression (Genia, 2001).

Other research suggests that the SWBS be limited to specific populations. Among a sample of the elderly, for example, the separate factors (EWB and RWB) were found to moderately correlate ($r = .65$, $p<.001$), suggesting possible multicollinearity of these variables for this population. In addition, the SWBS was developed using a predominantly Caucasian population of students from religiously affiliated colleges (Ellison, 1983; as cited in Utsey, Lee, Bolden, and Lanier, 2005). As a result, the validity of its use with ethnically and culturally diverse populations has been questioned (Utsey, Lee, Bolden, and Lanier, 2005). Additionally, the SWBS has been found to be subject to ceiling effects among conservative religious populations (Ledbetter, Smith, Vosler-Hunter & Fischer, 1991). Despite these limitations, the religious characteristics of the current study population are expected to be similar to those of the scale's development. Also, because Utsey, Lee, Bolden, and Lanier (2005) described possible multicollinearity between the EWBS and RWBS and because of possible exhaustion during the administration of the survey packet, it was decided to only use the EWBS. Cronbach α with the current sample for the EWBS = .85

**Perceived Stress Scale.** The Perceived Stress Scale (PSS) was developed by Cohen et al. (1983) to provide an overall measure of one's perception of the stressfulness of events and situations in his or her life. The instrument consists of a 14-item, five-point Likert-type scale. The scale's psychometric qualities were measured using three subgroups: two community student samples and one smoking cessation sample. Internal consistency (Cronbach's $\alpha > 0.80$) and test-retest correlations ($R < 0.80$) were satisfactory. Concurrent validity was verified by showing positive correlations between the PSS score, depressive symptoms ($R > 0.65$) and a global measure of physical psychosomatic symptoms (from R = 065 to R = 0.70). Cronbach's $\alpha$ for the current sample was acceptable at .76.

**Stressful Life Event.** Participants were provided a primer question, in which they were asked to think about and briefly describe their most stressful life event in the past year.

**Positive Religious Coping subscale of Brief RCOPE.** The Brief RCOPE is a 14-item measure of religious coping that includes two subscales which assess levels of positive and negative religious coping (Pargament, Smith, Koenig & Perez, 1998; Fetzer Institute, 2003). Each of the 14 items are measured on a four-point Likert scale where 1 = a great deal and 4 = not at all. For data analysis, this scale was reverse scored so that higher values indicated more religious coping. Items for this measure were taken from the longer version for the purpose of offering health and social science researchers an efficient and theoretically meaningful way to incorporate religious dimensions into their models of stress, coping, and health (Pargament, Smith, Koenig & Perez, 1998). The Brief RCOPE has been tested with three different samples, college students facing

stressful life experience, older hospitalized patients, and citizens living in Oklahoma City after the bombing of the Murrah Federal Building. It was found to have good internal consistency and good discriminant validity (Pargament, Smith, Koenig & Perez, 1998). Because multiple studies found that elderly populations were more religious overall, less likely to experience anger toward God (Exline, Park, Smyth, and Carey, 2011), and because of possible exhaustion during the administration of the survey packet, it was decided to measure positive religious coping only. Cronbach α for the positive religious coping scale with the current sample was good at α = .88. Some sample items include the following: "I looked for a stronger connection with God" and "I tried to see how God might be trying to strengthen me in this situation."

**Selected items from Brief COPE.** Other ways of coping were measured by selecting items from with the Brief COPE questionnaire (Carver, 1997). The Brief COPE is a 28-item measure which assesses various ways of coping with stressful life experiences measured on 14 different subscales. Each subscale has two items. The Brief COPE is a shortened, and somewhat amended, version of the COPE questionnaire (Carver, Scheier, Weintraub, 1989) and is intended to reduce completion time and redundant items (Carver, 1997). Two scales were omitted and three scales were slightly changed from the original COPE to increase construct validity. Additionally, the original COPE did not have a measure of self-blame, so a 2-item subscale for this type of coping was also added.

In the original COPE, the authors state that their subscales can be further categorized into three second-order factors: problem-focused (or active) coping, emotion-focused coping, and less useful coping resources (Carver, Scheier &

Weintraub, 1989). For the Brief COPE, the author has explained on his website that he does not have any instructions about adaptive, maladaptive, active or emotion-focused composite scores (http://www.psy.miami.edu/faculty/ccarver/sclBrCOPE.html, accessed Nov. 28, 2008). However, other second-order factors have emerged from previous research: emotion-focused coping, active coping, avoidance, and cognitive restructuring (Prati, Palestini & Pietrantoni, 2009). Four items were selected for the active coping scale and six items were selected for the emotion-focused scale. These items were selected based on the results of the study by Prati, Palestini & Pietrantoni (2009), the item's face validity for inclusion in such a scale, and also on the findings from a preliminary study by the current researcher using the Brief COPE. Reliability statistics from the current sample for the active and emotion-focused coping items were acceptable at $\alpha = .73$ and $\alpha = .75$, respectively.

**Psychological Domain, World Health Organization Quality of Life – BREF.** Quality of life was measured using the Psychological domain of the brief version of the World Health Organization Quality of Life assessment instrument (WHOQOL-BREF). This measure contains four domains of quality of life: (1) physical, (2) psychological, (3) social relationships, and (4) environmental (Skevington, Lofty & O'Connell, 2004). The original measure (WHOQOL-100) was developed from data collected in 23 countries with over 11,000 adult participants, thus enabling it to be a viable measure of quality of life in many cultures. The items in this shorter version were selected because of their ability to explain a substantial portion of the variance within their domains (WHOQOL Group, 1998). Scores on the WHOQOL-BREF correlated with scores on the WHOQOL-100 ($r=0.9$) (Izutsu, et al., 2005).

The psychological domain of the WHOQOL-BREF has good psychometric properties. Cronbach's alpha was acceptable at .80. The measure was also found to have discriminant validity as scores were significantly different between sick and well populations (Skevington, Lofty & O'Connell, 2004).

For the purposes of this study, two items from the original six were dropped because of possible theoretical similarity between the measure and questions on the Existential Well-being Scale. It was felt that including these questions would weaken the statistical model and leave it open to questions about an independent variable (EWB) simply predicting itself (Psychological QOL). These following questions were omitted: "How much do you enjoy life?" and "To what extent do you feel your life to be meaningful?" The remaining four questions asked participants to rate their ability to concentrate, their acceptance of their bodily appearance, their level of satisfaction with themselves, and how often they experience symptoms of depression or anxiety. After dropping these two questions, reliability statistics from the current sample was acceptable at $\alpha = .78$.

## Results

### Religious Demographic Information

The participants reported the following religious affiliations with 77.8% claiming some type of Protestant religious denomination, 11.1% reported being non-denominational Christian, 5.6% reported being Catholic, 1.4% reported being Baha'i, 1.4% reported being Agnostic and 2.8% reported Other without indicating their religious affiliation or preference.

Participants reported their church attendance as follows: 14.1% Never attending, 4.2% attending mainly on major holidays, 4.2% attending once a month, 11.3% attending twice a month, 42.3% attending weekly, and 23.9% attending more than once a week.

Participants generally reported a high level of personal religious activity or devotion (i.e. prayer, scripture reading, etc.) with the most common responses being Daily (43.8%). The other reported amounts of devotion were as follows: Multiple times a day (15.1%), 5-6 times a week (4.1%), 3-4 times a week (5.5%), 1-2 times a week (24.7%), and Never (6.8%).

### Preliminary Data Analyses

Survey data were entered into SPSS software. A one-way between groups ANOVA was used to check for systematic differences on all major study variables (income, frequency of personal religious activities, education level, frequency of church attendance, existential well-being, perceived stress, religious coping, active coping, emotion-focused coping, and psychological quality of life) by location of recruitment (church, senior citizen center, and independent living center). There was no statistically

significant difference between groups on any of the study variables, except for frequency of church attendance [$F(2, 70) = 11.59$, $p < .01$]. Post hoc comparisons using Tukey HSD test indicated that the mean scores on frequency of church attendance for participants recruited from senior citizen centers ($M = 4.84$, $SD = 1.01$) and the church meal group ($M = 5.42$, $SD = .67$) were significantly higher than participants recruited from independent living centers ($M = 3.80$, $SD = 1.90$). This difference makes logical sense because participants recruited from senior citizen centers and the church meal group were already away from their home, indicating that they were relatively mobile, a prerequisite to attend a church service. Those who were recruited from independent living centers filled out survey questions at a social gathering inside their apartment building and were not required to travel anywhere to be contacted. Because there were no between-group differences on religious coping or frequency of personal religious activities, it appears that this difference in church attendance could be due to the effect of mobility.

**Zero-Order Correlations Matrix of Main Variables**

In an effort to address the first hypothesis, a matrix of zero-order Pearson correlations was created between scores on income, education level, perceived stress, emotion-focused coping, active coping, personal religious devotion, existential well-being, positive religious coping, and psychological quality of life. Table 1 provides the Pearson correlations between the study's main variables. The hypothesis that psychological quality of life would be positively and significantly related to income, education level, personal religious activity, existential well-being, religious coping, active coping, and emotion-focused coping was partially supported. As hypothesized,

psychological quality of life was positively and significantly correlated with existential well-being ($r = .61$, $n = 73$, $p < .01$) and positive religious coping ($r = .35$, $n = 73$, $p < .01$). However, contrary to the hypothesis, psychological quality of life was not significantly related to income, education level, active coping, emotion-focused coping, or personal religious activity.

The hypothesis that perceived stress would be negatively and significantly related to psychological quality of life and religious coping was also partially supported. Psychological quality of life was negatively and significantly related to perceived stress ($r = .55$, $n = 73$, $p < .01$). Though positive religious coping and perceived stress were negatively related, the relationship was not statistically significant.

The absence of a significant negative relationship between positive religious coping and perceived stress was at first quite surprising because coping, by definition, is an activity that is used to decrease stress. However, the perceived stress scale asked participants to assess how they would rate their stress and feelings in the past month. The stressful situation that participants were asked to briefly describe and then answer coping questions about was an event that happened in the past year. Additionally, a small number of the participants disregarded this instruction and responded with an event that happened a number of years ago. For example, one of the participants described a fairly well known natural disaster that had occurred approximately 13 years ago. Unfortunately, it is impossible to determine the scope of this problem because participants were not asked to indicate how long ago their particular stressor occurred. This time difference between perceived stress (in the past month) and the stressful event

(in the past year) could significantly affect the relationship between positive religious coping and perceived stress.

The lack of a significant positive relationship between positive religious coping and perceived stress based on time lapse is significant in and of itself. The mean score for perceived stress was relatively low (19.89 out of a possible 56), especially considering the large amount of stressors and losses that accompany advanced age. This finding corroborates other studies which have found that the elderly are a fairly resilient group and maintain positive outlooks, high morale, and express enjoyment for the experiences that accompany later life (Magai, 2001). It also corroborates earlier findings that the elderly tend to underestimate their amount of stress when measured subjectively (Aldwin et al., 1996).

Findings from this sample also corroborate past patterns of coping based on perceived stress scores. Lower scores on perceived stress have tended to correlate with higher scores on active coping. In the current sample, perceived stress was negatively and significantly correlated with active coping ($r = -.28$, $n = 73$, $p = .017$). Conversely, higher scores on perceived stress have correlated with lower scores on emotion-focused coping. In this sample, perceived stress and emotion-focused coping were positively correlated, but not significantly so. Clearly, the current sample is exhibiting similar dynamics that other researchers have found when measuring coping style and perceived stress.

**Hierarchical Multiple Regression**

Prior to conducting the hierarchical multiple regression, the variables were checked for normality. A table demonstrating the kurtosis and skewness of the study

variables is presented in Table 2. As can be seen from Table 2, some of the study variables exhibit negative skewness and some peakedness, however based on the histogram charts, the degree of non-normality is not to such a degree that it would preclude the use of multiple regression analysis. However, the results from the following multiple regression analysis should be interpreted with the knowledge that study variables did not perfectly mirror the normal curve.

The sample size of the current study is 73 participants which follows recommendations by Stevens (2002). He recommended that about 15 participants are needed per predictor variable. The current study is using four predictor variables which would put the necessary number of participants at approximately 75, thus the current sample of 73 fits the requirement.

There were some questions about possible multicollinearity between independent variables. Existential well-being and perceived stress were highly correlated ($r = -.67$). Despite this correlation between EWB and perceived stress, the variables were retained in their original form in the regression analysis for two statistical reasons and one theoretical reason. First, the correlation was not above $r = \pm .7$. Both Stevens (2002) and Pallant (2010) give higher Pearson correlation cut-offs ($r = .8$ and .9, respectively). Second, the variance inflation factor (VIF) for EWB and perceived stress were both well below 10. The VIF for EWB was 1.86 and the VIF for perceived stress was 1.82 in step 1 of the regression model. Stevens (2002) recommends 10 as a VIF that would cause a serious call for concern about multicollinearity.

Finally, existential well-being is an important variable in this model because it provides a measure of functional or existential religious experience. One element of this

study is determining whether substantive and functional aspects of religious experience are intertwined or separate. As has been mentioned, there has been a tendency to separate substantive and functional definitions and to associate the substantive with cold religious dogma and to associate the functional with open spirituality. Thus the former is seen more negatively and the latter is seen more positively. The intention here is not to vilify one or the other, but to discover whether functional and substantive aspects are present together and each beneficial in their own right. Without including existential well-being into the model, it would be impossible to determine whether the substantive and functional are indeed intertwined in this population.

To investigate whether positive religious coping contributes uniquely to prediction of psychological quality of life, a hierarchical multiple regression was performed. Existential well-being was added into the model because it provides a way of measuring the participants' view concerning existential questions. Additionally, it was highly correlated with psychological QOL, the dependent variable ($r = .61$). Perceived stress was next entered into the model because of the strong negative effect of stress on quality of life. Additionally, perceived stress was negatively correlated with Psychological QOL ($r = -.55$). Active coping was entered into the model because it was correlated with psychological quality of life ($r = .21$) and because it provides a possible contrast to religious coping. In the Step 2, positive religious coping was added to the regression model. It is anticipated that positive religious coping will explain unique variance in psychological quality of life. Table 3 contains a summary of results for the main steps of the hierarchical analyses.

The combined variables in Step 1 explained 41% of the variance in psychological QOL, $F(3, 69) = 15.83$, $p < .001$. Existential well-being was the strongest predictor ($\beta = .44$, $p = .001$). After entering positive religious coping at Step 2, the total variance explained by the whole model was 44%, $F(4,68) = 13.46$, $p < .001$. After controlling for existential well-being, perceived stress, and active coping, positive religious coping explained an additional 3% of the variance, $R^2\Delta = .03$, $F\Delta(1, 68) = 4.17$, $p < .05$. Again, existential well-being emerged as the strongest predictor of psychological QOL ($\beta = .37$, $p < .01$), however including positive religious coping into the model weakened the strength of EWB in the model. Thus, the hypothesis that positive religious coping would explain unique variance after controlling for EWB, perceived stress, and active coping was supported.

One possible criticism of the current regression model needs to be addressed. The model is trying to predict psychological QOL with EWB as the first predictor. At first glance, it might seem that these variables are similar and, therefore, highly predictive of each other. The Pearson correlation between these two variables is $r = .61$, which also might cause concern for possible self-prediction of the variables. However, looking at the actual items for psychological QOL reveal that the variable is asking about one's ability to concentrate, body image acceptance, satisfaction with one's self, and depression/anxiety. The items on the EWB ask questions about the extent to which one feels their life to be meaningful, whether life is a positive experience, and their level of doubt or assurance about their future. Because these questions seem to be qualitatively different, it made sense to include EWB as a predictor of psychological

QOL. Additionally, excluding EWB from the model would not allow for all of the study questions to be answered.

## Discussion

There are multiple findings from the present study. First, there was a statistically significant difference in church attendance between seniors sampled from independent living centers and those who filled out questionnaires at senior citizen centers or at a church participating in a senior citizen nutritional program. This difference is likely a result of limited mobility on the part of those who live at the independent living centers. However, though there was a difference in the frequency of church attendance between these two groups, this difference did not seem to have much of an effect on psychological quality of life as church attendance and psychological QOL were not significantly correlated.

Second, the current study corroborates a number of previous findings about perceived stress and coping among the elderly. Previous research has found the elderly to be a fairly resilient group and express enjoyment for later life experiences (Maggai, 2001) which was also found among this sample based on the low mean scores on perceived stress (M = 19.89 out of possible 56) and high mean scores on existential well-being (M = 48.56 out of possible 60). It can be said with fair certainty that the majority of the participants experienced a fairly high degree of existential well-being and perceived relatively low levels of stress in their lives.

This low level of perceived stress also corroborates previous findings that the elderly tend to underreport their stressors when stress is measured subjectively (Aldwin et al., 1996). Reasons for this underestimation could be numerous. Aldwin and associates posited that underestimating stress among the elderly was a developmental process that helped the elderly to appraise difficult situations in less problematic ways.

The high scores on existential well-being exhibited by this sample of elders indicate that, even despite all of the objective stressors that the elderly face, they exhibit a great deal of optimism about the future and the general positive nature of life. It could be that elders underestimate their subjective stress because of the "life review" (Butler, 1963) and perspective taking that Erikson discusses in his writing about the final stage of development, Ego Integrity vs. Despair. Erikson (1976) claimed that the virtue associated with this final stage was wisdom. It is possible that having gained wisdom by achieving an amount of ego integrity that the elderly have a different perspective on their life and on the stressors that they face, making these stressors less aversive.

Third, the current sample corroborates past research about coping patterns based on perceived stress. Lower amounts of perceived stress have been associated with increased active coping and higher amounts of perceived stress have been associated with more emotion-focused coping. A similar pattern emerged with the current sample. As was mentioned previously, the mean score for perceived stress for the entire sample was low. Also, perceived stress and active coping were significantly and negatively correlated while perceived stress and emotion-focused coping were positively, though not significantly, related. This finding that perceived stress is related to coping style could be explained in a couple of ways. First, as one perceives stress to be low, it is easier to take action to overcome and possibly eliminate the stress. However, if the stress is perceived to be more intense, then it could be seen as overwhelming and lead the person to rely on others for social and emotional support to deal with the stressor. Second, self-efficacy, though not measured in this sample, could be having an effect on the scores of perceived stress. Self-efficacy has been found to significantly reduce and

weaken the effect of perceived stress in predicting QOL in cancer patients (Kreitler, Peleg, & Ehrenfeld, 2007). In fact, many of the questions on the Perceived Stress Scale ask about one's sense of their capacity to meet their challenges (i.e. "how often have you felt confident about your ability to handle your personal problems?" and "how often have you been angered because of things that happened that were outside of your control?"). A high sense of self-efficacy would encourage the use of active coping mechanisms because the person would feel empowered and able to handle the stressors through his or her own effort. Though perceived stress and self-efficacy are different constructs, there is undoubtedly some overlap.

Fourth, existential well-being, perceived stress, and religious coping were all significantly related to psychological quality of life. In the regression model, existential well-being emerged as the strongest predictor of QOL, followed by perceived stress, then religious coping. However, religious coping did explain unique, and significant, variance in QOL. This is significant because even after accounting for the participants' amount of existential optimism or worry, their amount of subjective stress, and their active coping, positive religious coping is still a meaningful construct in predicting the sample's ability to concentrate, accept their body image, their level of self-satisfaction, and depression / anxiety. This finding supports previous research about the relative importance of religion to the elderly (Beit-Hallahmi & Argyle, 1998; Pargament, 1997).

On a deeper level, the unique predictive power of religious coping above and beyond existential well-being is a commentary on the different ways that religion has been conceptualized over time. Religion has been defined in substantive (concerned with ritual, deities, etc.) and functional (concerned with a search for sacredness and

meaning in life) terms (Pargament, 1997). More recently in the lay community and some scientific circles, spirituality and religion have been polarized with spirituality being seen as more functional (existential) and religion being seen as more substantive (ritualistic, organized, and god-centered). This polarization has tended to lead to more stagnant and negative views of religion and more positive views of spirituality (Zinnbauer & Pargament, 2005). Existential well-being could be seen as a reflection of the functional definition and religious coping as a more substantive definition. If anything, the findings from this study support the arguments made by Pargament and Zinnbauer (2005) and Bruce (1996) against polarizing substantive and functional definitions and labeling them as religion and spirituality, respectively. In the regression model, positive religious coping weakened the predictive power of existential well-being and they both became robust predictors of psychological quality of life. This indicates that the substantive and functional views of religion are shared and intertwined, though not perfectly. It would seem that for this religious, mainly Protestant elderly sample, substantive ideas about God and ritual added meaning toward predicting psychological quality of life beyond the functional or existential concepts of religion.

## Limitations of Current Study

Study limitations include a relatively small sample size and a potential self-selection bias, given participants were volunteers. Though it might seem to be a limitation of the study, the sample was primarily Christian, however this study was concerned mainly with the religious experiences and reliance on God and religion during trying times by those who have this particular belief in God. Thus, the findings may not generalize to elders of other religious traditions or spiritual paths. Additionally, the population was primarily Caucasian and female, which limits the generalizability of study outcomes onto other ethnicities and males. Another limitation inherent to survey research is the reliance on memory and self-report. This study asked participants to remember a stressful event that happened in the past year and answer questions about how they coped with that event. Though this is a perfectly sound research method, some of the participants did not follow instructions exactly and described events that happened more than a year in the past. There is no way of determining the elapsed time since the stressor. This limitation inserts a certain level of error into the results.

Statistically, there was a certain level of non-normality displayed by some of the study variables. This also presents a slight limitation to the interpretation of the multiple regression analysis.

## Future Research

Many of the limitations of this research directly flow into suggestions for future research on religious coping among elderly populations. First, though this research had a focus on the religious coping behaviors of Christian elders, more research needs to be done with elders from diverse religious groups and spiritual pathways to better understand the ways in which religious or spiritual narratives and beliefs affect the mental health and coping skills among the elderly.

Second, this study was limited by a sample that was relatively homogeneous in terms of ethnicity. A more diverse sample would allow for more generalizability among other ethnicities. This is becoming more and more important as the population in the United States grows not only older, but more ethnically diverse.

Third, a more broad and inclusive study would be important for studying religious coping. Negative religious coping was discarded from this study due theoretical assumptions about the religious attitudes among the elderly and to the possibility of exhaustion among the participants. Including negative religious coping in future studies with the elderly would be important to discover the relationship that positive and negative religious coping have to each other among the elderly.

Additionally, the idea of process is very important when discussing religious coping. Previous research has shown that negative and positive religious coping are not simply static constructs, but develop through time (Exline, Park, Smyth & Carey, 2011; Pargament, Koenig, Tarakeshwar & Hahn, 2001). The ways in which religious coping might develop and change over time was also associated with positive and negative changes in mental health. However, not much of this research has focused on the

elderly. Applying the idea of process through longitudinal research is another future research avenue for the study of religious coping among the elderly.

## Implications for Practice

The findings from the present study are important for psychologists and other practitioners working with both elderly individuals and Christian elders in particular. First, it seems clear that some elderly individuals tend to subjectively report less stress than could be warranted given their situation. Thus, it behooves practitioners to assess in depth the degree and seriousness of stressors faced by elderly clients. Because perceived stress is related to coping style, it would also be important for practitioners to become aware of the ways in which their elderly clients are coping with their stress. For clients that are actually underreporting stress, it might be helpful for practitioners to help their clients engage in more emotion-focused coping by enriching their social support networks or helping them get linked into a local group or activity. Helping clients to find more effective and helpful ways of coping is an essential part of the therapeutic process.

Finally, it seems clear that for religious elders, not only is existential well-being related to QOL, but religious themes represent important ways of finding meaning in life and coping with stress. Practitioners would do well to assess and consider the role that religion plays in the life of their clients. Adding a religious or spiritual element into therapy not only enriches the therapeutic relationship for the client, but gives practitioners access to content that could prove very useful in helping their clients.

## Tables

Table 1

*Descriptive Statistics for Main Variables (Mean, Standard Deviation, Pearson Correlation)*

| Variables | M | SD | 1 | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9 |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Per. Rel. | 3.99 | 1.65 | 1.00 | -- | -- | -- | -- | -- | -- | -- | -- |
| 2. Education | 3.19 | 1.52 | .05 | 1.00 | -- | -- | -- | -- | -- | -- | -- |
| 3. Attendance | 4.35 | 1.67 | .40** | .23 | 1.00 | -- | -- | -- | -- | -- | -- |
| 4. EWB | 48.56 | 9.07 | .23 | .11 | .24* | 1.00 | -- | -- | -- | -- | -- |
| 5. Per. Stress | 19.89 | 7.24 | -.18 | -.29* | -.15 | -.67** | 1.00 | -- | -- | -- | -- |
| 6. RCOPE | 22.48 | 4.93 | .55** | .06 | .45** | .33** | -.16 | 1.00 | -- | -- | -- |
| 7. Act. Cope | 13.14 | 2.66 | .19 | .15 | .13 | .31** | -.28* | .37** | 1.00 | -- | -- |
| 8. Emo. Cope | 16.64 | 4.08 | .18 | .06 | .15 | .16 | .06 | .38** | .29* | 1.00 | -- |
| 9. Psy. QOL | 23.07 | 4.10 | .21 | .20 | .14 | .61** | -.55** | .35** | .21 | .02 | 1.00 |

*Note.* Per. Rel. = personal religious activity; Attendance = frequency of church attendance; EWB = existential well-being; Per. Stress = perceived stress; RCOPE = positive religious coping; Act. Cope = Active Coping; Emo. Cope = emotion-focused coping; Psy. QOL = psychological quality of life.

* $p < .05$. ** $p < .01$.

Table 2

*Kurtosis and Skewness Statistics of Major Study Variables*

| Variable | Kurtosis | Skewness |
|---|---|---|
| 1. Psychological QOL | 1.52 | -.87 |
| 2. Existential Well-being | .97 | -.87 |
| 3. Perceived Stress | .03 | .44 |
| 4. Active Coping | -.03 | -.93 |
| 5. Positive Religious Coping | .25 | -.88 |

Table 3

*Unique Relations of Existential Well-being, Perceived Stress, Active Coping, and Positive Religious Coping Predicting Psychological Quality of Life*

| Step | Predictor variable | *B* | *SE B* | β | *t* | $R^2$ | $\Delta R^2$ | *F* | *df* |
|---|---|---|---|---|---|---|---|---|---|
| 1. | | | | | | | | | |
| | EWB | .14 | .04 | .44** | 3.48** | .41 | .41** | 15.83** | 3, 69 |
| | Perceived Stress | -.10 | .05 | -.25* | -2.02* | | | | |
| | Active Coping | .00 | .11 | .00 | .02 | | | | |
| 2. | | | | | | | | | |
| | EWB | .12 | .04 | .37** | 2.90** | .44 | .03* | 4.17* | 4, 68 |
| | Perceived Stress | -.12 | .05 | -.28* | -2.30* | | | | |
| | Active Coping | -.07 | .11 | -.06 | -.60 | | | | |
| | Pos. Rel. Coping | .12 | .06 | .21* | 2.04* | | | | |

*Note*. EWB = Existential Well-being; Pos. Rel. Coping = Positive Religious Coping
* $p < .05$; ** $p < .01$

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## Appendix A

## Definitions

1. Perceived stress – the degree to which a person considers situations in his or her life as stressful (Cohen, Kamarck, & Mermelstein, 1983).
2. Positive religious coping – ways of turning to God during times of struggle characterized by seeking support, forgiveness, collaboration with God, ritual, and seeing the stressor as God's way of helping one to grow (Pargament, 1997).
3. Negative religious coping – ways of turning to or away from God during times of struggle characterized by discontent, believing God is punishing, displeasure with fellow congregates or spiritual associates, and attributing negative events to the power of the devil (Pargament, 1997).
4. Active coping – a way of coping that is characterized by planning and taking action to meet a challenge.
5. Emotion-focused coping – a way of coping that is characterized by venting and seeking emotional support from others, usually deemed as a more passive way of coping.
6. Existential well-being – relates to one's sense of life's purpose and satisfaction with existence.
7. Psychological well-being – in this study, psychological well-being relates to one's ability to concentrate, body image acceptance, self-satisfaction, and frequency of depression and anxiety symptoms.

8. Functional religion/spirituality – an aspect of religion or spirituality that is concerned with the “fundamental problems of existence” and significance in life (Pargament, 1997, p. 27, 30).
9. Substantive religion/spirituality – An aspect of religion or spirituality that is concerned with supernatural beings, deities, rituals, and practices (Pargament, 1997).

## Appendix B

### Example of Informed Consent

**University of Oklahoma**
**Institutional Review Board**
**Informed Consent to Participate in a Research Study**

**Project Title:** Religious Coping in a Sample of Older Adults
**Principal Investigator:** James K. Fisher, M.Ed.
**Department:** Educational Psychology

You are being asked to volunteer for this research study. This study is being conducted at The University of Oklahoma. You were selected as a possible participant because you are above the age of 65.

Please read this form and ask any questions that you may have before agreeing to take part in this study.

**Purpose of the Research Study**

The purpose of this study is to understand how religion and spirituality influence the lives of older adults as they go through stressful experiences.

**Number of Participants**

About 200 people will take part in this study.

**Procedures**

If you agree to be in this study, you will be asked to do the following:

Read through the survey questions carefully and answer them honestly. If you are not able to read the survey questions, you will be assisted. The questions and possible answers will be read to you.

**Length of Participation**

The survey will take approximately 30 minutes to complete.

**This study has the following risks:**

It might be psychologically and mentally taxing to think about stressful experiences and ways of coping with stressful experiences.

Some research designs require that the full intent of the study not be explained prior to participation. Although we have described the general nature of the tasks that you will be asked to perform, the full intent of the study may not be explained to you until after the completion of the study. At that time, we may provide you will a full debriefing which will include an explanation of the hypothesis that was tested and other relevant background information

pertaining to the study. You will also be given an opportunity to ask any questions you have about the hypothesis and the procedures used in the study.

**Benefits of being in the study are**

There are no direct benefits of being in the study.

**Confidentiality**

In published reports, there will be no information included that will make it possible to identify you without your permission. Research records will be stored securely and only approved researchers will have access to the records.

There are organizations that may inspect and/or copy your research records for quality assurance and data analysis. These organizations include the Department of Educational Psychology and the OU Institutional Review Board.

**Compensation**

If you choose to participate in the study and fill out a questionnaire, your name will be entered into a raffle for 1 of 5 $20 gift cards to Wal-Mart. If you choose to withdraw from the study, you will still be included in the raffle.

**Voluntary Nature of the Study**

Participation in this study is voluntary. If you withdraw or decline participation, you will not be penalized or lose benefits or services unrelated to the study. If you decide to participate, you may decline to answer any question and may choose to withdraw at any time.

**Contacts and Questions**

If you have concerns or complaints about the research, the researcher(s) conducting this study can be contacted at

James K. Fisher
(405) 271-8001 x43204
james_fisher@ou.edu

Paula McWhirter
(405) 325-5975
PaulaMcWhirter@ou.edu

Contact the researcher(s) if you have questions or if you have experienced a research-related injury.

If you have any questions about your rights as a research participant, concerns, or complaints about the research and wish to talk to someone other than individuals on the research team or if you cannot reach the research team, you may contact the University of Oklahoma – Norman Campus Institutional Review Board (OU-NC IRB) at 405-325-8110 or irb@ou.edu.

***You will be given a copy of this information to keep for your records. If you are not given a copy of this consent form, please request one.***

## Statement of Consent

I have read the above information. I have asked questions and have received satisfactory answers. I consent to participate in the study.

Signature Date

## Appendix C

### Example of Demographics Form

Age:_____

Gender:
1. Female
2. Male

Ethnicity:
1. American Indian / Native American
2. African American / Black
3. Caucasian / White
4. Hispanic / Latino(a)
5. Asian / Pacific Islander
6. Middle Eastern
7. Other

What is your approximate yearly income?
1. Under $25,000
2. Between $25,000 and $50,000
3. Between $50,000 and $75,000
4. Between $75,000 and $100,000
5. Over $100,000

How often do you engage in personal religious or spiritual devotion (such as personal prayer, scripture reading, meditation, etc.)?
1. Never
2. 1 or 2 times a week
3. 3 or 4 times a week
4. 5 or 6 times a week
5. Daily
6. Multiple times a day

What is the highest level of education you attained?
1. Some high school
2. High school graduate
3. Some college
4. Associates degree
5. College graduate
6. Masters degree
7. Doctoral degree
8. Professional degree (JD, MD, etc.)

What is your religious affiliation?
1. Protestant (Baptist, Presbyterian, Church of Christ, etc.)
2. Catholic
3. Orthodox
4. Non-denominational Christian
5. LDS
6. Jewish
7. Islam
8. Jehovah's Witness
9. Other:
   _____

How often do you attend religious services?
1. Never
2. 1 or 2 times a year (mainly for holidays)
3. 1 time a month
4. 2 times a month
5. Every week
6. More than 1 time a week

## Appendix D

### Existential Well-being Subscale (EWBS)

For each of the following statements circle the choice that best indicates the extent of your agreement or disagreement as it describes your personal experience:

**SA = Strong Agree**
**MA = Moderately Agree**
**A = Agree**
**D = Disagree**
**MD = Moderately Disagree**
**SD = Strongly Disagree**

1. I don't know who I am, where I came from, or where I am going.

   SA MA A D MD SD

2. I feel that life is a positive experience

   SA MA A D MD SD

3. I feel unsettled about my future.

   SA MA A D MD SD

4. I feel very fulfilled and satisfied with life.

   SA MA A D MD SD

5. I feel a sense of well-being about the direction my life is headed in.

   SA MA A D MD SD

6. I don't enjoy much about life.

   SA MA A D MD SD

7. I feel good about my future.

   SA MA A D MD SD

8. I feel that life is full of conflict and unhappiness.

   SA MA A D MD SD

9. Life doesn't have much meaning.

   SA MA A D MD SD

10. I believe there is some real purpose for my life.

    SA MA A D MD SD

## Appendix E

### Perceived Stress Scale (PSS)

The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate *how often* you felt or thought a certain way. Although some of the questions are similar, there are differences between them and you should treat each one as a separate question. The best approach is to answer each question fairly quickly. That is, don't try to count up the number of times you felt a particular way, but rather indicate the alternative that seems like a reasonable estimate.

1. In the last month, how often have you been upset because of something that happened unexpectedly?
    0. Never
    1. Almost Never
    2. Sometimes
    3. Fairly Often
    4. Very Often

2. In the last month, how often have you felt you were unable to control the important things in your life?
    0. Never
    1. Almost Never
    2. Sometimes
    3. Fairly Often
    4. Very Often

3. In the last month, how often have you felt nervous and "stressed"?
    0. Never
    1. Almost Never
    2. Sometimes
    3. Fairly Often
    4. Very Often

4. In the last month, how often have you dealt successfully with irritating life hassles?
    0. Never
    1. Almost Never
    2. Sometimes
    3. Fairly Often
    4. Very Often

5. In the last month, how often have you felt that you were effectively coping with important changes that were occurring in your life?
   0. Never
   1. Almost Never
   2. Sometimes
   3. Fairly Often
   4. Very Often

6. In the last month, how often have you felt confident about your ability to handle your personal problems?
   0. Never
   1. Almost Never
   2. Sometimes
   3. Fairly Often
   4. Very Often

7. In the last month, how often have you felt that things were going your way?
   0. Never
   1. Almost Never
   2. Sometimes
   3. Fairly Often
   4. Very Often

8. In the last month, how often have you found that you could not cope with all the things that you had to do?
   0. Never
   1. Almost Never
   2. Sometimes
   3. Fairly Often
   4. Very Often

9. In the last month, how often have you been able to control irritation in your life?
   0. Never
   1. Almost Never
   2. Sometimes
   3. Fairly Often
   4. Very Often

10. In the last month, how often have you felt that you were on top of things?
    0. Never
    1. Almost Never
    2. Sometimes
    3. Fairly Often
    4. Very Often

11. In the last month, how often have you been angered because of things that happened that were outside of your control?
    0. Never
    1. Almost Never
    2. Sometimes
    3. Fairly Often
    4. Very Often

12. In the last month, how often have you found yourself thinking about things that you have to accomplish?
    0. Never
    1. Almost Never
    2. Sometimes
    3. Fairly Often
    4. Very Often

13. In the last month, how often have you been able to control the way you spend your time?
    0. Never
    1. Almost Never
    2. Sometimes
    3. Fairly Often
    4. Very Often

14. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?
    0. Never
    1. Almost Never
    2. Sometimes
    3. Fairly Often
    4. Very Often

## Appendix F

### Stressful Life Event

Negative events occur in everyone's life. While many of these events may not be too emotionally taxing, some can be extremely stressful. For the purposes of this questionnaire, please recall and think about the most stressful event that has occurred in your life in the past 1 year.

Please briefly explain the nature of your stressful experience:

_____

_____

_____

_____

_____

## Appendix G

### Positive Religious Coping subscale from Brief RCOPE

Instructions: The following items deal with ways you coped with the negative event in your life. There are many ways to try to deal with problems. These items ask what you did to cope with this negative event. Obviously different people deal with things in different ways, but we are interested in how you tried to deal with it. Each item says something about a particular way of coping. We want to know to what extent you did what the item says. How much or how frequently? Don't answer on the basis of what worked or not—just whether or not you did it. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can. Circle the answer that best applies to you.

1. I looked for a stronger connection with God.
    1 – Not at all
    2 – Somewhat
    3 – Quite a bit
    4 – A great deal

2. I sought God's love and care.
    1 – Not at all
    2 – Somewhat
    3 – Quite a bit
    4 – A great deal

3. I sought help from God in letting go of my anger.
    1 – Not at all
    2 – Somewhat
    3 – Quite a bit
    4 – A great deal

4. I tried to put my plans into action together with God.
    1 – Not at all
    2 – Somewhat
    3 – Quite a bit
    4 – A great deal

5. I tried to see how God might be trying to strengthen me in this situation.
    1 – Not at all
    2 – Somewhat
    3 – Quite a bit
    4 – A great deal

6. I asked forgiveness of my sins.
    1 – Not at all
    2 – Somewhat
    3 – Quite a bit
    4 – A great deal

7. I focused on religion to stop worrying about my problems.
    1 – Not at all
    2 – Somewhat
    3 – Quite a bit
    4 – A great deal

## Appendix H

### Active Coping and Emotion-focused Coping Items from Brief COPE

These items deal with ways you coped with the stressful situation. There are many ways to try to deal with problems. These items ask what you did to cope with this situation. Obviously, different people deal with things in different ways, but I'm interested in how you've tried to deal with it. Each item says something about a particular way of coping. I want to know to what extent you did what the item says. How much or how frequently. Don't answer on the basis of whether it worked or not—just whether or not you we're doing it. Use these response choices. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

1 = I did not do this at all
2 = I did this a little bit
3 = I did this a medium amount
4 = I did this a lot

1. I concentrated my efforts on doing something about the situation I'm in.

   1 2 3 4

2. I got emotional support from others.

   1 2 3 4

3. I took action to try to make the situation better.

   1 2 3 4

4. I said things to let my unpleasant feelings escape.

   1 2 3 4

5. I got help and advice from other people.

   1 2 3 4

6. I tried to come up with a strategy about what to do.

   1 2 3 4

7. I got comfort and understanding from someone.

   1 2 3 4

8. I expressed my negative feelings.

   1 2 3 4

9. I tried to get advice or help from other people about what to do.

   1 2 3 4

10. I thought hard about what steps to take.

    1 2 3 4

## Appendix I

### Psychological Domain: World Health Organization

### Quality of Life – Bref (WHOQOL-Bref)

The following questions ask how you feel about your quality of life, health, or other areas of your life. I will read out each question to you, along with the response options. **Please choose the answer that appears most appropriate.** If you are unsure about which response to give to a question, the first response you think of is often the best one.
Please keep in mind your standards, hopes, pleasures and concerns. We ask that you think about your life **in the last four weeks.**

| | | Not at all | A little | A moderate amount | Very much | An extreme amount |
|---|---|---|---|---|---|---|
| 1. | How much do you enjoy life? | 1 | 2 | 3 | 4 | 5 |
| 2. | To what extent do you feel your life to be meaningful? | 1 | 2 | 3 | 4 | 5 |
| 3. | How well are you able to concentrate? | 1 | 2 | 3 | 4 | 5 |
| 4. | Are you able to accept your bodily appearance? | 1 | 2 | 3 | 4 | 5 |

| | | Very dissatisfied | Dissatisfied | Neither satisfied nor dissatisfied | Satisfied | Very satisfied |
|---|---|---|---|---|---|---|
| 5. | How satisfied are you with yourself? | 1 | 2 | 3 | 4 | 5 |

| | | Often | Seldom | Quite Often | Very Often | Always |
|---|---|---|---|---|---|---|
| 6. | How often do you have negative feelings such as blue mood, despair, anxiety, depression? | 5 | 4 | 3 | 2 | 1 |