INTRINSIC SPIRITUALITY AMONG ALZHEIMER'S CAREGIVERS: A PATHWAY TO RESILIENCY

Scott E. Wilks

Abstract: *The purpose of the study was to understand the influence of intrinsic spirituality on perceived resiliency among Alzheimer's caregivers. A cross-sectional research design was employed, surveying a sample of Alzheimer's caregivers (N=304) who attended caregiver support groups in the southeastern United States. Questionnaire items empirically measured a number of constructs, including perceived burden; frequency of prayer; intrinsic spirituality; and perceived resiliency. Demographic characteristics of the sample were reported. Over three-fourths of the sample reported a high frequency of prayer, along with a moderately high level of intrinsic spirituality. Regression analyses evaluating the relationship between spirituality and resiliency, while controlling for demographic variables, indicated a strong association and positive, significant relationship between intrinsic spirituality and resiliency. Implications for social work practice and education are discussed.*

Keywords: *Alzheimer's disease, caregiver, resiliency, social work, spirituality*

INTRODUCTION

The burden of caring for a loved one with Alzheimer's disease (AD) is well-documented (Gwyther, 1990; Patterson & Whitehouse, 1990): legal questions, financial strain, social and emotional burdens, and less personal time and privacy. Yet, despite the accumulation of aforementioned burden, caregivers have consistently adapted to and surmounted these challenges. As Gwyther (1990, p. 202) noted, the response to caregiving demands "requires adaptation but does not, ipso facto, lead to stress or family pathology...What is most remarkable in research literature is the evidence of strength and resourcefulness in responding to caregiving, often with little outside help."

The current study investigated such strength and resourcefulness among AD caregivers by examining a commonly reported source of strength, their sense of intrinsic spirituality. In doing so, this study proceeded beyond a perspective of spirituality as a coping strength, as revealed in contemporary research (e.g., Harris & Durkin, 2002; Stolley, Buckwalter, & Koenig, 1999), and examined its potential effect on an outcome variable of successful coping, resiliency. Guided by a conceptual model that emphasizes individual demand, resiliency factor(s), and an outcome of resiliency, the study assessed the following among a sample of AD caregivers: degree of burden, or demand; degree of intrinsic spirituality; perceived level of resiliency; and the relationship between intrinsic spirituality and the caregiver's perceived resiliency. The follow-

Scott E. Wilks, PhD. is assistant professor, School of Social Work, Louisiana State University, Baton Rouge, LA . This study is part of a dissertation conducted at the University of Georgia. Special acknowledgement is given to Committee Chair Betsy Vonk, PhD.
 Advances in Social Work Vol. 7 No.1 (Spring 2006) 67-89.

ing section presents a review of literature that includes relevant information on the study's population of interest, as well as theoretical explication of the study's relevant concepts, particularly as they relate to AD caregivers.

REVIEW OF LITERATURE

Alzheimer's Caregivers

There are over four million Americans with AD (Hebert, Scherr, Bienias, Bennett, & Evans, 2003). In addition to the diagnosed individuals suffering with this illness, AD affects family members and friends who become caregivers. For the purpose of this discussion, *caregiving* is defined as follows (Alzheimer's Association/National Alliance for Caregiving [AA/NAC], 2004):

> Providing unpaid care to a relative or friend who is aged 50 or over to help them take care of themselves...Caregiving may include help with personal needs or household chores. It might be taking care of a person's finances, arranging outside services, or visiting regularly to see how they are doing. This person need not live with (the caregiver). (p. 2)

In early stages of AD, caregiving includes helping determine who will manage the patient's financial and legal affairs when s/he is no longer able to, ensuring adequate funding for medical costs, and discussing with the patient and loved ones the appropriate kind of medical care (Cutler & Sramek, 1996). In later stages, proper caregiving involves developing a comfortable routine that includes meaningful and pleasant activities (Cutler & Sramek, 1996; Zgola, 1990). The most commonly reported activities of care are helping with dressing the care recipient and helping her/him get out of beds or chairs (AA/NAC, 2004).

Family members, especially spouses, are overwhelmingly the primary caregivers for relatives diagnosed with AD (Cutler & Sramek, 1996). Gwyther (1990, p. 194) noted that family caregiving offers a "commitment that includes a strong need to understand (their relatives), to make sense of their situations, and to garner professional validation for their heroic efforts." Seven out of ten AD care recipients live at home, and 90% of caregivers to these individuals are family members or close friends who are considered family (AA/NAC, 2004; U.S. Congress Office of Technology Assessment, 1987). Three-fourths of AD caregivers are women, and one in three has children or grandchildren under age 18 living at home (AA/NAC, 2004). A national study collaborated by the National Alliance for Caregiving and American Association of Retired Persons (NAC/AARP, 1997) surveyed over 1,500 English-speaking caregivers. Results revealed that the typical Alzheimer's caregiver is a 46 year old employed woman who spends 18 hours per week caring for her mother. Overall, more than eight in ten caregivers take care of a relative, while 15% take care of a friend and/or neighbor.

Burden of Caregiving

Caregiving *burden* suggests the negative psychological, economic, and/or physical effects of caring for a person who is impaired (Fredman, Daly, & Lazur, 1995). Compared to non-caregivers of similar age, AD caregivers are twice as likely to report high levels of burden as a direct result of caregiving (AA/NAC, 2004). The impact of caregiving burden is well-documented in research (AA/NAC, 2004; NAC/AARP, 1997; Ory, Hoffman, Yee, Tennstedt, & Schulz, 1999). AD caregivers devote an average of almost 18 hours per week to giving care. AD caregivers are much more likely to have less time with family, hobbies, vacations, and other leisure activities compared to non-caregivers of similar age. Almost fifteen percent of caregivers experience a physical or mental health problem as result of caregiving. Women are slightly more likely than men to have experienced said health problems. Almost twice as many older caregivers, aged 50-64, are more likely to experience health problems as a result of caregiving than the younger cohorts. Financial strain is common among this population (AA/NAC, 2004; Coon, Ory, & Schulz, 2003; Ory et al., 1999; NAC/AARP, 1997). Seven out of ten caregivers are employed, and a majority of these employed caregivers report missing time from work, cutting back from full-time to part-time, choosing early retirement, turning down a promotion, or giving up work altogether. Caregivers are generally not wealthy people – one in five household incomes is below $15,000 and only 11% have incomes over $75,000. The average lifetime cost of care for an individual with Alzheimer's is $174,000.

A few studies (e.g., Arai, Zarit, Sugiura, & Washio, 2002; Grunfeld, Coyle, Whelan, Clinch, Reyno, Earle, Willan, Viola, Coristine, Janz, & Glossop, 2004; Zarit, Reever, & Bach-Peterson, 1980) have used empirical measures, such as the Zarit Burden Interview, to assess overall levels of burden. Caregivers have consistently reported mild-to-moderate levels of burden, i.e., averaging between two and three on a 5-point scale.

Coping with Caregiving Burden

Rolland (1994) contended that it is not only important to understand the burden of AD on the caregiver, but also just as important to understand how the caregiver and family meet and adapt to these increasing burdens. Caregivers often feel lonely and isolated; as care recipients' health deteriorate, the demands of caregiving increase, and the changes in lifestyle often result in few social contacts (Cutler & Sramek, 1996). Effective coping mechanisms for the caregiver promote a sense of autonomy and control in understanding the biological impact of dementia, in recognizing the strengths and limitations of the care recipient and the caregiver, and in successfully navigating the health care system (McDaniel, Hepworth, & Doherty, 1992). By definition, *coping* refers to cognitions and behaviors used by the individual in evaluating stressors and in initiating activities with the aim of decreasing or managing its impact (Lazarus & Folkman, 1984; Margalit, Raviv, & Ankonina, 1992).

The Alzheimer's Association (2004) recommends that caregivers use specific community resources to assist with coping, including caregiver support groups. Support

groups can be ideal settings for normalizing the burdens shared by many caregivers (Cutler & Sramek, 1996). As Martindale-Adams, Nichols, Burns, and Malone (2002, p. 181) stated, the support group for AD caregivers is "a common method of promoting supportive communication by bringing people together who are dealing with the same issue, (and to) discuss a common problem and establish nurturing bonds with one another." The Alzheimer's Association (2004) reports relaxation techniques as an effective method of coping, including meditating, singing, listening to music, or taking a bath. Results from the NAC/AARP survey of caregivers (1997) revealed that the most commonly reported method of coping is prayer. Stolley et al. (1999) documented that caregivers use spiritual coping frequently, that they perceive prayer and trusting in God as effective coping mechanisms, and that internal religious activities help them get through the caregiving situation. The following section presents a closer examination of spirituality as it relates to AD caregivers.

Spiritual Coping among Caregivers

Though spirituality is often linked with religion, it is important to note distinctions between the two constructs (Hugen, 2001; Stuckey, 2002). *Religion* is a particular doctrinal framework that guides sacred beliefs and practices in ways that are sanctioned by a broader faith community or institution. *Spirituality* refers to experiences that connect persons with sacred and/or meaningful entities and emotions. These experiences may create and sustain a personal relationship with a higher source of power, defined according to her/his own beliefs; or may relate to the effort of finding purpose and meaning in life. The distinction between spirituality and religion is important, as a complete understanding of spirituality includes a wide diversity of religious and nonreligious expressions; in other words, depending on the individual, spirituality may or may not be inclusive of religious expression.

Stuckey (2002, p. 152) noted that "it is vital that (caregivers) preserve connections to spiritual well-being by fostering and nurturing the spiritual care of those with AD and related dementias." Empirical research has shown evidence of spirituality as an effective coping mechanism among caregivers (Haley, Roth, Coleton, Ford, West, Collins, & Isobe, 1996; Mittelman, Roth, Coon, & Haley, 2004). Caregivers often spontaneously comment on the importance of their spiritual beliefs in helping them find meaning in the drudgery of caregiving activities, and specific items included in interviews and self-report measures that pertain to the role of spirituality are frequently endorsed (Gottlieb, Thompson, & Bourgeois, 2003). Harris and Durkin (2002, pp. 176-177) highlighted common themes from interviews with AD caregivers and care recipients, including coping through a sense of spirituality: "[T]heir spiritual beliefs were a source of comfort and support, especially on their bad days...(and) helped these individuals to meet the challenges of living with dementia by increasing their resilience in the face of the external and internal stresses of AD." For many caregivers, the overall, encompassing sense of spirituality facilitates coping appraisal; that is, "the process of determining the extent to which one is able to construct positive or negative meanings for any (caregiving) situation" (Gottlieb et al., 2003, p. 41). Thus, the caregiver's

intrinsic spirituality, which includes expression of spirituality as well as the overall, encompassing sense of spirituality, often appears to play a pivotal role in providing comfort and strength during hard times. Hodge (2003) provided a poignant depiction of intrinsic spirituality as the nature in which spirituality is salient in the individual's life as a motivating influence; the degree to which they find their ultimate purpose for life in their spirituality.

The above research highlights the understanding that the caregiver's sense of spirituality can often times be a source of strength, and thus, serves as a means of coping with burden. Recall that coping refers to cognitions and behaviors used to evaluate stress with the aim of decreasing its impact (Margalit et al., 1992). Thus, a logical question relevant to the current study arises: *If spirituality serves as a method of coping, does it work?* In other words, does the caregiver's spirituality influence her/his ability to overcome burden successfully? Such a question strikes at the nature of this study's other primary concept, resiliency.

Resiliency

Prior to the past couple of decades, resiliency was researched in medical and social sciences in a risk vacuum, of sorts; resiliency, or lack thereof, was a product of risk indicators – environmental factors that have been shown more likely to render failure (West, 1982). A growing dissatisfaction emerged with this deficit model of resiliency and provided impetus for a new generation of researchers who emphasized the role of positive, protective factors or processes, rather than risks/weaknesses, in the individual's ability to overcome adversity. Rutter (1990, p. 181), deemed by many as the pioneer of modern resiliency research, defined resiliency as ". . . the positive pole of the ubiquitous phenomenon of individual difference in people's responses to stress and adversity." Note the word *positive* in his theoretical definition of resiliency, a noticeable shift in perspective compared to the historical risk model.

Rutter viewed protective factors, or internal and environmental correlates to resiliency, not exclusively as inherent or constant, but rather, stemming also from the dynamic, active role of the individual. People negotiate their protective factors based on varying environmental circumstances, and the success of this negotiation – rather than the minimization of failure – identifies the individual's level of resiliency. Successful negotiation of environmental demands, in turn, may change the individual's perspective of those demands and enhance later success in similar circumstances. Rutter (1990) deemed a factor or process as *protective* if it moderates a risk (Rutter, 1990). Masten (1999; 2001; Masten, Best & Garmezy, 1990) added that in order to assess resiliency, adversity must be present and observed.

Resiliency and Spirituality

Documented largely in recent literature (e.g., Cook, 2000; Larson & Dearmont, 2002), the role of spirituality as a resource, i.e., *spiritual capital*, in enhancing resiliency and unity has been noted in diverse families and communities across the American demo-

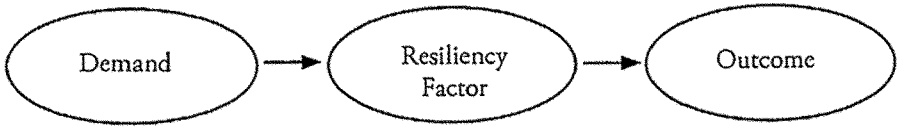
graphic spectrum, including rural farm communities; lower income, urban inner-city communities; cancer survivors; and survivors of major natural disasters. Spiritual and religious beliefs have been documented as a catalyst for renewed sense of purpose in life for parents caring for children with intellectual disabilities (Gardner & Harmon, 2002). Studies of civilian war survivors, particularly Hiroshima (Lifton, 1968) and the Holocaust (Greene, 2002), revealed that faith and spiritual rituals were key coping mechanisms for these individuals in such horrific circumstances.

In all of the aforementioned studies on resiliency and spirituality, it appears that the sense of or belief in spirituality acted as a protective factor, or encompassed various protective assets, for respondents in their respective samples. Recalling the population of interest in the current study, several studies (e.g., Ross, Holliman, & Dixon, 2003; Schulz, Mendelsohn, Haley, Mahoney, Allen, Zhang, Thompson, & Belle, 2003) have explored the role of caregivers' spirituality as a coping resource. There is a noteworthy distinction between *coping* studies, which emphasize management of stress (in this case, caregiving burden), and *resiliency* studies, which emphasize the ability to overcome burden successfully. While a number of studies have focused on coping, there is a scarce amount of published empirical studies focused on an explicit outcome of resiliency among the AD caregiver population. The dearth of such studies may be due, in part, to the novelty of resiliency as a research concept. The present study examines the influence of intrinsic spirituality on said explicit outcome of resiliency among AD caregivers. With this purpose in mind, the following framework was selected as the guide for the current study.

CONCEPTUAL FRAMEWORK

McCubbin and McCubbin (1993; Tak & McCubbin, 2002) developed the *resiliency model of stress, adjustment and adaptation* (RMSAA) to study resiliency among families with immediate stress or crises. This model was developed to understand why some families are more resilient than others and are better able to adjust and adapt to stress, distress and crises. There are three main features in the RMSAA, as illustrated in the Figure 1 below:

Figure 1. Resiliency model of stress, adjustment, and adaptation (RMSAA)

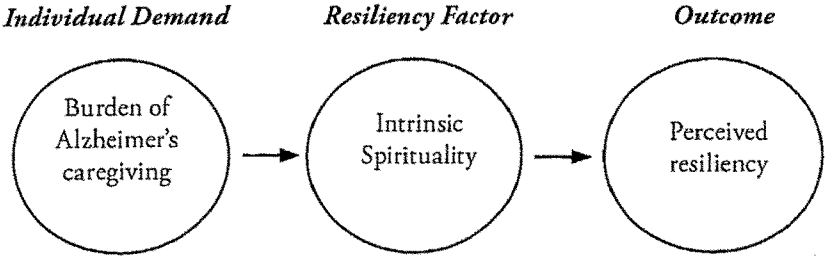


McCubbin and McCubbin's (1993) unit of analysis was the family, and thus, classified *demand* as a stimulus or condition that could threaten the family's integrity and well-being over time; it produces or calls for change in the family system. The researchers assumed a capability in families for managing the demand, depending on the resources available and utilization of such. The second feature in the model, *resiliency factor*, referred to those resources available to the individual or family, whose presence may explain why persons experience higher levels of life stresses and strains

but do not show high levels of distress (Tak and McCubbin, 2002). The model's final feature, *outcome*, referred to whatever is used to evaluate the system's capability to manage, reduce, or overcome its demands. McCubbin and McCubbin used family coping as its outcome.

For the present study, the RMSAA has been adapted to reflect the specific differences in unit of analysis, protective factor, and outcome. The model contains the same general features as the RMSAA. The model's three main features are amended and explained for the current study (see Figure 2)

Figure 2. Caregiver model of resiliency adapted from the RMSAA



Because the unit of analysis in the current investigation is the AD caregiver, the demand is appropriately identified as *individual demand.* As described earlier, demand is any or all of the following types: physical, psychological, emotional, and/or financial distress associated with caregiving burden. The characteristic of burden is relevant to the current study by its existence. As Masten (1999; 2001; Masten, Best & Garmezy, 1990) emphasized, in order to infer resiliency, adversity must be identified. *Intrinsic spirituality* is entered as the resiliency factor in the model. An empirically significant, positive relationship between burden and intrinsic spirituality, along with a positive relationship between spirituality and a resiliency outcome (described below), would lend credibility of the benefits of spirituality as a protective factor among the caregiver population. The outcome variable in the current investigation is AD caregivers' *perceived level of resiliency.* Again, the model examines whether intrinsic spirituality influences their resiliency given the existence of caregiving burden. The question is not whether resiliency exists among AD caregivers, or, for that matter, any population. As Masten (1999; 2001) noted, resiliency is an ordinary phenomenon that may result within any person from the operation of human adaptive resources. In this study, the question of resiliency among AD caregivers lies in their perceived level of such.

HYPOTHESIS

Guided by McCubbin and McCubbin's (1993) conceptual model, the current investigation proposes the following hypothesis: Based on statistically significant differences in scores on the measures of spirituality and resiliency, the greater the degree of intrinsic spirituality, the higher the level of perceived resiliency.

METHODOLOGY

Sampling

As the current study attempted to examine a phenomenon at one point in time, a correlational, or cross-sectional, research design was employed. In particular, a survey method in the form of self-administered questionnaires was used to collect data. Caregivers in support groups under the auspice of the *Alzheimer's Association*, with chapters located in a southeast region of the United States, who had the opportunity to complete the questionnaires, constituted the sampling frame.

Packets of questionnaires were distributed to program directors who oversee the AD caregivers support groups in their particular region. Self-addressed, postage-paid envelopes were included in the packets. The directors, in turn, disseminated the questionnaires and envelopes to the facilitators of their respective caregiver support groups. Subsequent to distributing and collecting the questionnaires from caregivers during the support group session, the facilitators mailed the completed questionnaires back to the researcher. No additional follow-up mailings occurred, in order to prevent duplication of responses by previous participants and to avoid intrusiveness upon the work conducted by support group members and facilitators. Similar methodology – cross-sectional surveys with anonymous participants in group settings – is prevalent in recent literature, such as studies with victims of domestic violence (Bradley, Smith, Long, & O'Dowd, 2002).

With input from program directors, the strategy was to increase the response rate by facilitators' encouragement during group sessions, rather than allowing participants to complete questionnaires outside of session. The strategy proved successful, with over three hundred caregivers completing the questionnaires (N=304). Group facilitators documented the total number of attendees per support group during the time of data collection, e.g., the sampling frame. There were 430 caregivers present in support groups during the time of data collection, yielding a response rate of approximately 70%.

Measures

The two-page questionnaire was comprised of items pertaining to five general sections: demographic characteristics, burden, spirituality, prayer, and resiliency. Demographic items solicited information pertaining to gender, race, marital status (ms), age, and relationship to care recipient (rcr).

Burden. The Shortened Zarit Burden Interview (ZBI; Bedard, Malloy, Squire, Dubois, Lever, & O'Donnell, 2001) was included in the questionnaire to assess empirically the level of burden among AD caregivers. The scale assesses how participants feel about the stresses and strains of taking care of another person, based on a 5-point Likert-type response format ranging from *never* to *nearly always*. Examples of items included: "Do you feel strained when you are around your relative?" "Do you feel that you have lost control of your life since your relative's illness?" "Do you feel stressed

between caring for your relative and trying to meet other responsibilities?" Scores on the Shortened ZBI ranged from 0 – 48, with higher scores indicating a higher degree of burden. Past research (Zarit et al., 1980) showed estimates of the degree of burden for the original ZBI. Based on its range of scores from 0-88, the degree of burden were segregated into four range-comparable groups: (1) score of 0-20, little or no burden; (2) 21-40, mild to moderate burden; (3) 41-60, moderate to severe burden; and (4) 61-88, severe burden. No such degrees of burden were available for the Shortened ZBI. Based on the classification of degree of burden from the original ZBI, using four range-comparable groups, the degrees of burden for the Shortened ZBI are estimated as follows: (1) score of 0-12 = little or no burden; (2) 13-24 = mild to moderate burden; (3) 25-36 = moderate to severe burden; and (4) 37-48 = severe burden.

Spirituality. Hodge's (2003) Intrinsic Spirituality Scale (ISS) was included, a six-item instrument that evaluates the level to which individuals tap into their internalized, spiritual commitment (Burris, 1999; Hodge, 2003). ISS responses are on a continuum from zero, where spirituality answers no questions about life, to ten, where spirituality answers absolutely all questions about life. Higher total scores indicated a greater sense of intrinsic spirituality. Cronbach's alpha coefficient was measured at .96 for the ISS, indicating sound internal consistency. Concurrent validity of the ISS was obtained through correlations with scores on similar measures (see Allport & Ross, 1967; Miller, 1998), including intrinsic religion ($r = .911$, $p < .001$); and with measures of theoretically contrasting constructs, such as alcohol use ($r = -.489$, $p < .001$).

Prayer. To complement the spirituality data and for validity purposes with the ISS, frequency of private prayer was assessed, using a 4-point Likert response format adapted from Meisenhelder and Chandler's (2001) study, ranging from *never* to *daily*. Private prayer, rather than prayer among other individuals or groups, was assessed because the current study's unit of analysis was at the individual level, the AD caregiver.

Resiliency. The Connor-Davidson Resilience Scale (CD-RISC; Connor & Davidson, 2003) is a "new rating scale to assess resilience...comprise(d) of 25 items, each rated on a 5-point scale" (p. 76). A 5-point Likert-type response format on the CD-RISC ranges from *not true at all* to *nearly true all of the time*. Total scores range from 0-100, with higher scores indicating a greater the level of perceived resiliency. The CD-RISC has demonstrated adequate psychometric findings (Connor & Davidson, 2003, pp. 78-80), including Cronbach's alpha previously measured at .89 for the full scale. Connor and Davidson (pp. 79-80) assessed scale's concurrent validity, measuring it with scores from the Kobasa hardiness measure (KHM; Kobasa, 1979), the Sheehan Social Support Scale (SSS; Sheehan, 1993), the Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983), and the Sheehan Stress Vulnerability Scale (SVS; Sheehan, Raj, & Sheehan, 1990). CD-RISC scores showed significant positive correlation with the KHM (Pearson $r = 0.83$, $p < .0001$) and the SSS (Spearman $r = 0.36$, $p < .0001$), while scores were significantly negatively correlated with the PSS (Pearson $r = -0.76$, $p < .001$) and the SVS (Spearman $r = -0.32$, $p < .0001$).

Statistical Analyses

Descriptive analysis was used to report the demographic characteristics of the sample; and scores on the empirical measures of burden, spirituality, prayer (frequency and coping), and resiliency. For cross-tabulation purposes with other measures in the study (e.g., level of burden), age was also converted into a dichotomous variable: *younger adults* below age 60, and *older adults* aged 60 and above. Although these groupings were subjective, a number of credible sources have identified adults as *older* or *younger* based on the aforementioned age groupings (e.g., Weinstein-Shr, 1995).

Linear and multiple regression analyses were used to examine intrinsic spirituality as a predictor from scores on the study's outcome variable, perceived level of resiliency, along with the inclusion of demographic variables to test for extraneous influence. Regression was the chosen method of analysis because it is generally considered a more appropriate method with interval/ratio (I/R) independent and dependent variables (see Babbie, Halley, & Zaino, 2000, pp. 263, 315).

RESULTS

Demographics

In total, 304 AD caregivers participated in the study. Female caregivers, 233 (76.6%), constituted over three-fourths of the sample. Among the 297 respondents who disclosed their age, the average was 62.7 (*SD*=13.53), and ranged from ages 20 to 93. In terms of race, the majority respondents, 261 (85.9%), identified themselves as White. All but one respondent in the sample (n=303) disclosed her/his marital status; as expected, most caregivers, 240 (79.2%), were married. Respondents were also asked to reveal the nature of their relationship to the care recipient. Not surprisingly, the highest number of caregivers, 131 (43.1%), were spouses of care recipients, followed by children of recipients, 118 (38.8%). Table 1 reveals the information on the demographic characteristics of the 304 caregivers.

Burden

The level of caregiving burden was measured using scores from the *Shortened ZBI* scale (Bedard et al., 2001). All but one respondent in the sample (n=303) disclosed her/his level of caregiving burden. Caregivers averaged a score of 19.1 (*SD*=7.84), with scores ranging from 0 to 42. Based on previously mentioned estimates of degree of burden, the average burden score by the entire sample indicated a mild-to-moderate level of burden. Every group among the demographic factors averaged in this range, as well.

Table 1. Demographic characteristics of the sample (n=304)

Variable/Label	n	%
Gender		
Female	233	76.6
Male	71	23.4
Age		
Older adults (age 60+)	175	57.6
Younger adults (below age 60)	122	40.1
Missing	7	2.3
Ethnicity		
African American	40	13.2
Hispanic	2	0.7
White	261	85.9
Multi-ethnic	1	0.3
Marital status		
Single	14	4.6
Married	240	78.9
Divorced	31	10.2
Widowed	14	4.6
Single-cohabitating	4	1.3
Missing	1	0.3
Relationship to care recipient		
Spouse	131	43.1
Child	118	38.8
Friend	13	4.3
Other	42	13.8

Prayer

The entire sample of AD caregivers responded to the frequency of prayer item. An overwhelming majority, 236 respondents (77.6%), reported engaging in private prayer on a daily basis. Forty-seven (15.5%) pray on a weekly basis, and five respondents (1.6%) do so on a monthly basis. Sixteen participants (5.3%) reported that they never engage in private prayer.

Spirituality

Data from the ISS (Hodge, 2003) was used to assess the degree of intrinsic spirituality among the AD caregiver sample. Recall that scores ranged from 0-10, with higher scores indicating a greater extent of intrinsic spirituality. The mean score on the ISS was over seven (M=7.6, SD=2.15). Females indicated slightly higher ISS scores than males. African Americans reported higher scores of intrinsic spirituality than other ethnic groups (*multiethnic* group excluded, considering only one respondent identified as such on this measure). Table 2 illustrates scores on the ISS, categorized by demographics.

Table 2. Means and standard deviations on ISS responses (n=298)

Variable/Label	M	SD	n
Gender			
Female	7.8	2.08	227
Male	7.1	2.30	71
Age			
Older adults (age 60+)	7.5	2.16	172
Younger adults (below age 60)	7.8	2.13	119
Ethnicity			
African American	8.6	1.81	40
Hispanic	6.9	3.66	2
White	7.5	2.16	255
Multi-ethnic	9.7	0.00	1
Marital status			
Single	6.6	2.84	13
Married	7.6	2.17	236
Divorced	8.3	1.71	31
Widowed	7.4	1.28	13
Single-cohabitating	7.3	3.03	4
Relationship to care recipient			
Spouse	7.3	2.23	128
Child	7.9	1.91	116
Friend	8.0	1.80	13
Other	7.5	2.54	41

Because prior research (e.g., Pargament, Smith, Koenig, & Perez, 1998) have shown a relationship between spirituality and prayer frequency, additional concurrent validity of the ISS was considered via its correlation with the ordinal measure of prayer frequency: *Spearman* r=.570, p<.0001.

Resiliency

Scores from the *CD-RISC* (Connor & Davidson, 2003) were examined to assess perceived levels of resiliency among AD caregivers. The perceived resiliency among the sample was relatively high, averaging 73.4 (SD=13.35) with scores ranging from 4 to 100. Table 3 shows scores on the CD-RISC, categorized by demographic groups.

Resiliency scores among gender groups were comparable, as well as those among groups of marital status, and relationship to care recipient. Younger adults reported higher resiliency (M=75.5) than older adults (M=72). Among ethnic groups, African Americans averaged the highest level of resiliency (M=76.4), while Hispanic respondents reported the lowest resiliency scores (M=67.5). Again, multiethnicity was excluded because of the lone respondent identified on this measure.

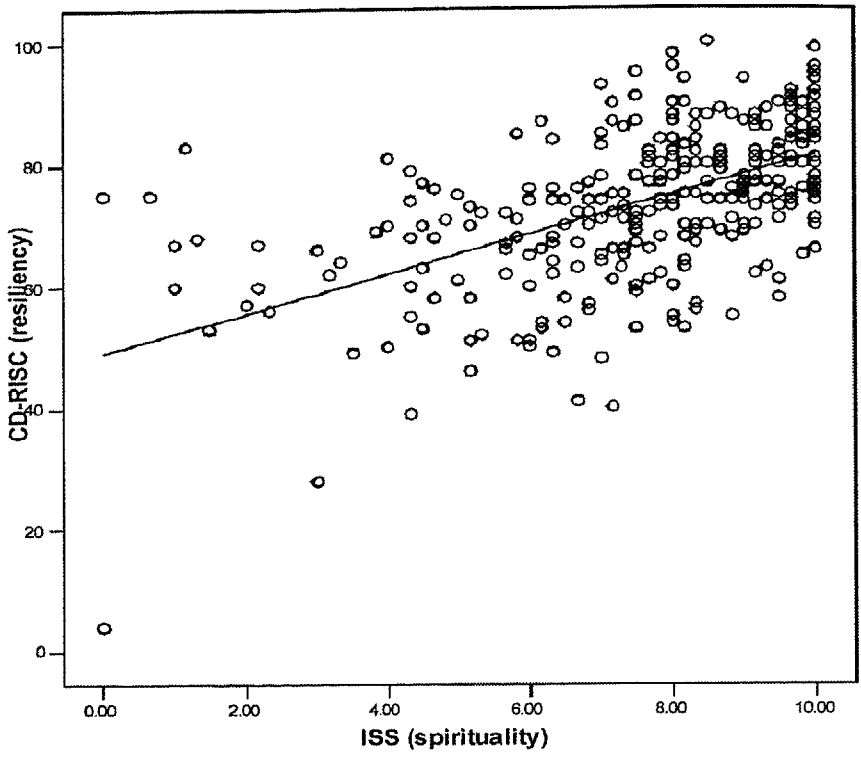
Table 3. Means and standard deviations of resiliency responses (n=303)

Variable/Label	M	SD	n
Gender			
Female	73.7	12.87	232
Male	72.5	14.92	71
Age			
Older adults (age 60+)	72.0	14.00	175
Younger adults (below age 60)	75.5	12.26	121
Ethnicity			
African American	76.4	13.45	40
Hispanic	67.5	9.19	2
White	72.9	13.34	260
Multi-ethnic	85.0	0.00	1
Marital status			
Single	68.0	16.11	14
Married	73.3	13.75	239
Divorced	75.2	10.11	31
Widowed	74.6	10.75	14
Single-cohabitating	77.3	9.29	4
Relationship to care recipient			
Spouse	71.6	12.9	131
Child	74.9	14.0	117
Friend	79.4	10.77	13
Other	73.0	13.21	42

Hypothesis Testing

A linear regression analysis was conducted to evaluate the prediction of ISS scores from scores on the CD-RISC scale. The regression line on the scatterplot for the two variables, as shown in Figure 2 below, illustrates that they are linearly related such that as the caregivers' intrinsic spirituality scores increase, resiliency scores increase.

Figure 2. Scatterplot of caregiver responses on the ISS and CD-RISC instruments



The regression equation for predicting the overall resiliency score was *Predicted CD-RISC score = 3.25(ISS score) + 49.042.* The bivariate correlation was as follows: *Pearson* r=.537, $F(1,296)$=119.885, p<.0001. Approximately 29% (R^2 = .288) of the variance in the resiliency scores was accounted for by its linear relationship to spirituality scores. Scores on the ISS were significantly related to perceived level of resiliency, indicating a positive relationship between extent of intrinsic spirituality and resiliency.

Multiple regression was later conducted to evaluate how well ISS scores predicted CD-RISC scores with the inclusion of the demographic factors: gender, age, ethnicity, ms, and rcr. The linear combination of the six predictor variables was significantly related to the CD-RISC scores, $F(6,283)$=19.666, p<.0001. The multiple correlation coefficient was .542, indicating that approximately 30% (R^2 = .294) of the variance of the CD-RISC scores can be explained by the linear combination of the aforementioned six predictor variables. Table 4 presents the indices of the relative strength of the individual predictor variables.

Table 4. Bivariate, partial correlations of the predictors of resiliency

Predictor	Bivariate correlation	Partial correlation
ISS scores	.531 **	.525 **
Gender	-.063	.044
Ethinicity	-.070	.031
Marital Status	.058	.047
Age	-.127 *	- .116 *
Relation to care recipient	.058	-.018

*p<.05, **p<.001

Considering the full model, the data indicated only two significant bivariate correlations with resiliency: ISS scores and age. As expected, the association between ISS scores and resiliency scores was moderate and significant (r=.531, p<.001), while the strength of association between age and resiliency was slight but still significant (r=-.127, p<.05). Similarly, controlling for all other predictor variables, the same relationships were significant: the partial correlations between ISS scores and resiliency (r=.525, p<.001) and between the age of caregivers and resiliency (r = -.116, p<.05). Incidentally, because spirituality and caregivers' age were both significant factors of resiliency, analyses of variance (ANOVA) were conducted to determine any significant relationship between the two aforementioned factors. Relationships between (a) the I/R variable of age and spirituality, and (b) the categorical variable of age (older vs. younger adults) and spirituality, were analyzed. Neither ANOVA indicated any significance: I/R age and spirituality, F(57,233)=1.183, p=.196; categorical age and spirituality, F(1,289)=1.446, p=.230.

DISCUSSION

The study examined a measure of intrinsic spirituality and its ability to predict perceived level of resiliency among AD caregivers. Among the 430 caregivers who had the opportunity to participate in the study, 304 (70%) completed the questionnaires. According to the data, the average caregiver in the sample was a 63-year-old White female, who was married to the care recipient. The sample's mild-to-moderate level of burden parallels the degree of burden among caregivers in previous studies (Arai et al., 2002; Grunfeld et al., 2004). Almost 95% of the sample (288 caregivers) reported that they engage in private prayer, while more than three-fourths prayed on a daily basis. Because of such high prayer frequency, it was not surprising that the sample reported a moderately high level of intrinsic spirituality. According to scores on the CD-RISC, caregivers demonstrated a fairly high degree of perceived resiliency. This prominent level of resiliency was somewhat anticipated, given its correspondence to earlier published results (Ross et al., 2003; Schulz et al., 2003).

Findings from the regression analyses indicated that the greater the degree of intrinsic spirituality, the more likely the caregiver perceived a greater sense of resiliency. The only demographic factor exerting extraneous influence on the caregiver's level of resiliency was age; the older caregiver (above age 60) in the sample was more likely to perceive less resiliency compared to the younger caregiver. This should signal the social

worker to the possibility that the caregiver/client of an older age may sense a decreasing level of resiliency influenced by issues of aging. However, there is little previous research to support the notion that, as caregivers age, their resourcefulness declines (Grant & Whitell, 2000). It can be argued that age as a variable is irrelevant in any case since the real interest lies in experiential variables, as well as neuro-maturational factors and their interplay. This may justify, at least in part, why the inclusion of age, along with other demographic factors in the study, had minimal impact on the variance in resiliency compared to the initial effect size.

Implications for Social Work

The current study's analysis of literature and empirical results bear several implications among the social work professional community and its work with AD caregivers. The brief theoretical explication of coping versus resiliency bears reconsideration. Iterating from the literature review (Lazarus & Folkman, 1984; Margalit et al., 1992), coping denotes the evaluation of stressors and initiation of activities to manage its impact. By definition, coping is a *durational* strength; that is, the ability to alleviate or manage during burden. On the other hand, resiliency denotes phenomena characterized by positive outcomes despite serious threat to adaptation or development (Masten, 1999; 2001; Masten et al., 1990). By definition, resiliency is an *outcome* strength; that is, a characteristic of effect observed or perceived post-burden, usually resulting from successful coping. In the case of caregivers, post-burden does not necessarily mean beyond the totality of the burden, e.g., death of care recipient. Post-burden also represents the following of any periodic caregiving stressor, including a stage of AD, a particular financial difficulty, an episodic state of depression, etc. Clarification between coping and resiliency invites social workers to recognize the difference between the two concepts, including the consideration that coping and resiliency are not invariably linked. This distinction is vital in appreciating the findings of the current investigation as well as other related studies.

Realizing the potential strength of intrinsic spirituality is critical in the worker-client (in this case, client = caregiver) relationship. This is predicated on the client's voluntary admission of spirituality as some integral aspect of her/his caregiving. The social work practitioner should recognize spirituality as an important coping resource if indeed the client recognizes and discloses it as such. Accounting for about 30% of the variance in resiliency in the study, the positive effect of intrinsic spirituality on the caregiver's self-perception of resiliency, is noteworthy to the social service practice community. Using a strengths approach, it is central for the social worker to assess the caregiver's coping resources, in this case, intrinsic spirituality or expression of such, in order to reinforce it as a valuable management tool amid the duration of burden. Based on current findings, the worker can raise further awareness and underscore the caregiver's resiliency as consequently, positively associated with said coping strategy. This is a significant step beyond strengthening the caregiver's sense of spirituality as a resource of daily mediation during challenging times, and moves toward mutually identifying and appreciating how spirituality influences the caregiver's resiliency, the

hardiness stemming from having already activated successful negotiation of burden. This process may be therapeutic for the caregiver by heightening her/his sense of accomplishment both in retrospect and in future perspectives: the relief or gratification of overcoming past caregiving burdens, influenced in part by her/his spiritual commitment; and upon this appraisal of resiliency, the knowledge that past successes can be indicative of impending ones.

The effective integration of the caregiver's spirituality into the assessment and strengths-promoting processes of practice is contingent upon social workers developing a degree of competence in this area (Hodge, Cardenas, & Montoya, 2001). Past surveys suggests, however, that social workers may not have the necessary education and training to address spiritual dimensions in a spiritually sensitive manner (Derezotes, 1995; Sheridan, Bullis, Adcock, Berlin, & Miller, 1992). Implications from the current study buttress this concern. A solution is to address explicitly in social work curricula the spiritual nature and expression among AD caregivers, along with education in methods of spiritual assessment and its integration within a strengths perspective, e.g., the Interpretive Anthropological Framework (Hodge, 2001). AD caregivers are a rapidly growing population, with five million families currently providing care for an afflicted family member (NAC/AARP, 1997). The efficacy of social work practice among caregivers may be influenced, in substantial part, by the commitment to spiritual understanding set forth in the social work classroom and field.

Limitations

Although support group facilitators were present during data collection, there was no guarantee of available assistance for every respondent. Bias to the results based on the participant's inability or partial inability to understand any particular questionnaire item poses a validity threat (Grinnell, 1997). Also, survey research can seldom deal with the *context* of social life (Rubin & Babbie, 2001, p. 381) and infrequently captures the total caregiving situation of the respondents that could be acquired through more qualitative, field observation.

The ISS is a recently created measure. Additional testing is desirable to assure internal consistency longitudinally. Further analysis of this measure is also needed to confirm validity, i.e., that it measures what it truly intends to measure. For example, a highest score indicating that spirituality answers absolutely all questions about life may be perceived by some (secular or otherwise) as fanaticism rather than an ultimate sense of intrinsic spirituality.

Another limitation to the study was the possibility of social desirability bias (Rubin & Babbie, 2001, p. 178). There was the potential for caregivers to respond in a manner that may reflect positively on themselves or care recipients. There was an additional threat of validity within the context of the support group setting, relating to its potential effect on the caregiver's emotional state at the time of data collection. The support group process may have skewed the results to reflect its positive effect on the caregiver (see AAFP, 2002; Cutler & Sramek, 1996; Zarit & Toseland, 1989), e.g., lower burden scores or higher level of resiliency.

The demographic composition of the sample suggests a lack of diversity. The sample was predominantly made up of White, female caregivers. Though the size of the sample is substantial, generalization of results to the larger caregiver population is somewhat limited due to the lack of gender and ethnic diversity in the sample. Also, no assessment was given to whether the care recipient was institutionalized or community-dwelling. The living arrangements of care recipients may have had some influence on responses to questionnaire items, though a previous study revealed that living arrangements had no significant influence on the caregivers' perceptions of burden or use of coping strategies (Pratt, Schmall, Wright, & Cleveland, 1985).

Future Research

The unit of analysis in the current study was the individual caregiver. Changing the focus to the family, and thus changing the operational strategy to reflect family spirituality (see Murphy, Johnson, Lohan, & Tapper, 2002) and family resiliency (see de Haan, Hawley, & Deal, 2002), may consider a more complete picture of the intra-systemic effect of caregiving on the entire family.

The frequency of prayer measure is somewhat singular focused in religious or spiritual perspective. Though prayer frequency was assessed because of its reported prevalence among caregivers and to further validate the ISS, the study did not address other forms of spiritual practice. It would be insightful and more comprehensive for future research to examine other forms of spiritual expression among caregivers such as meditation and ritual.

Issues relating to religious affiliation were not addressed in the current study. Instead, examination of the caregiver's sense of spiritual commitment to daily functioning, regardless its nature as faith-based or existential, was the intent. Inclusion of faith affiliation as an intervening variable on the caregiver's level of resiliency may be more suited for theologically driven studies. Lastly, future studies should explore the possible interaction effect between spirituality and the caregiver support group, both observed as coping resources, on caregiver resiliency. Effective community intervention programs, such as caregiver support groups, may engender information about AD and community resources, offer emotional support, and increase caregivers' confidence in problem solving and their ability to redefine problems (Pratt et al., 1985). In doing so, these programs may provide significant effect on the caregiver's sense of spirituality and self-efficacy.

CONCLUSION

Approaching the AD caregiving experience based on a risk paradigm often focuses on the "deficiencies" of the caregiver that result in negative outcomes. In contrast, and more appropriate to the strength-based focus of social work, addressing factors of resiliency is beneficial because they provide clues to the caregiver's strength and self-efficacy, even in times of burden (Hodge et al., 2001). The modern resiliency paradigm underscores the self-esteem and self-efficacy of the caregiver by converging on the different kinds of coping strengths, like personal knowledge and expertise of the illness;

support networks, e.g., caregiver support groups; and resources and coping strategies, such as spirituality and expressions of such.

In this article, the author has attempted to describe in some detail the Alzheimer's caregiver population, and the factors and behaviors that contribute to their perceived levels of resiliency. The model in the current study related that under the existence of burden, the coping resource of intrinsic spirituality influences the caregiver's self-perception of resiliency. It is hoped that information from this study will be of practical use to social workers who have contact with families and loved ones caring for persons living with Alzheimer's, and to educators who examine the complexities of caregiving with their students.

References

Allport, G. W., & Ross, M. J. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology, 5*, 432-443.

American Academy of Family Physicians (AAFP). (2002). *Caregiver stress.* Retrieved May 1, 2004, from World Wide Web, http://familydoctor.org/645.xml

Alzheimer's Association. (2004). *Statistics about Alzheimer's disease.* Retrieved June 1, 2004, from www.alz.org

Alzheimer's Association/National Alliance for Caregiving. (2004). *Who cares? Families caring for person's with Alzheimer's disease. A report of the Alzheimer's Association and the National Alliance for Caregiving.* Retrieved April 1, 2004, http://www.alz.org/Resources/FactSheets/Caregiver_report.pdf

Arai, Y., Zarit, S., Sugiura, M., & Washio, M. (2002). Patterns of outcome of caregiving for the impaired elderly. *Aging and Mental Health, 6*, 39-46.

Babbie, E., Halley, F., & Zaino, J. (2000). *Adventures in social research: Data analysis using SPSS for Windows 95/98.* Thousand Oaks, CA: Pine Forge Press.

Bedard, M., Malloy, D., Squire, L., Dubois, S., Lever, J., & O'Donnell, M. (2001). The Zarit Burden Interview: A new short version and screening version. *The Gerontologist, 41*, 652-657.

Bradley, F., Smith, M., Long, J., & O'Dowd, T. (2002). Reported frequency of domestic violence: Cross-sectional survey of women attending general practice. *British Medical Journal, 324*, 271-274.

Burris, C. T. (1999). Religious orientation scale. In P. C. Hill & R. W. Hood Jr. (Eds.), *Measures of religiosity* (pp. 144-154). Birmingham, AL: Religious Education Press.

Cohen, S., Kamarck, T., & Mermelstein, R. (1983). A global measure of perceived stress. *Journal of Health and Social Behavior, 24*, 386-396.

Connor, K. M., & Davidson, J. R. T. (2003). Development of a new resilience scale: The Connor-Davidson Resilience Scale (CD-RISC). *Depression and Anxiety, 18*, 76-82.

Cook, K. V. (2000). You have to have somebody watching over your back, and if that's God, then that's mighty big: The church's role in the resilience of inner-city youth. *Adolescence, 35*, 717-730.

Coon, D., Ory, M., & Schulz, R. (2003). Family caregivers: Enduring and emergent themes. In D. Coon, D. Gallagher-Thompson, & L. Thompson (Eds.), *Innovative interventions to reduce dementia caregiver stress: A clinical guide* (pp. 3-27). New York: Springer.

Cutler, N. R., & Sramek, J. J. (1996). *Understanding Alzheimer's disease.* Jackson, MS: University Press of Mississippi.

de Haan, L., Hawley, D., & Deal, J. (2002). Operationalizing family resiliency: A methodological strategy. *American Journal of Family Therapy, 30,* 275-291.

Derezotes, D. S. (1995). Spirituality and religiosity: Neglected factors in social work practice. *Arete, 20*(1), 1-15.

Fredman, L., Daly, M., & Lazur, A. (1995). Burden among white and black caregivers to elderly adults. *Journal of Gerontology Series A: Biological Sciences & Medical Sciences, 50,* S110-S118.

Gardner, J., & Harmon, T. (2002). Exploring resilience from a parent's perspective: A qualitative study of six resilient mothers of children with an intellectual disability. *Australian Social Work, 55,* 60-68.

Gottlieb, B., Thompson, L., & Bourgeois, M. (2003). Monitoring and evaluating interventions. In D. Coon, D. Gallagher-Thompson, & L. Thompson (Eds.), *Innovative interventions to reduce dementia caregiver distress: A clinical guide* (pp. 28-49). New York: Springer.

Grant, G., & Whitell, B. (2000). Differentiated coping strategies in families with children or adults with intellectual disabilities: The relevance of gender, family composition, and the life span. *Journal of Applied Research in Intellectual Disabilities, 13,* 256-275.

Greene, R. (2002). Holocaust survivors: A study in resilience. *Journal of Gerontological Social Work, 37,* 3-18.

Grinnell, Jr., R. M. (1997). *Social work research and evaluation: Quantitative and qualitative approaches* (5th ed.). Itasca, IL: F. E. Peacock Publishers, Inc.

Grunfeld, E., Coyle, D., Whelan, T., Clinch, J., Reyno, L., Earle, C., Willan, A., Viola, R., Coristine, M., Janz, T., & Glossop, R. (2004). Family caregiver burden: Results of a longitudinal study of breast cancer patients and their caregivers. *Canadian Medical Association Journal, 170,* 1795-1801.

Gwyther, L. P. (1990). Clinician and family: A partnership for support. In N. L. Mace (Ed.), *Dementia care: Patient, family and community* (pp. 194-230). Baltimore: The Johns Hopkins University Press.

Haley, W., Roth, D., Coleton, M., Ford, G., West, C., Collins, R., & Isobe, T. (1996). Appraisal, coping and social support as mediators of well-being in Black and White family caregivers of patients with Alzheimer's disease. *Journal of Consulting and Clinical Psychology, 64,* 121-129.

Harris, P. B., & Durkin, C. (2002). Building resilience though coping and adapting. In P. Harris (Ed.), *The person with Alzheimer's disease: Pathways to understanding the experience* (pp. 164-184). Baltimore: The Johns Hopkins University Press.

Hebert, L., Scherr, P., Bienias, J., Bennett, D., & Evans, D. (2003). Alzheimer's disease in the U.S. population. *Archives of Neurology, 60,* 1119-1122.

Hodge, D. (2001). Spiritual Assessment: A review of major qualitative methods and a new framework for assessing spirituality. *Social Work, 46*(3), 203-215.

Hodge, D. R. (2003). The instrinsic spirituality scale: A new six-item instrument for assessing the salience of spirituality as a motivational construct. *Journal of Social Service Research, 30*(1), 41-61.

Hodge, D. R., Cardenas, P., & Montoya, H. (2001). Spirituality and religious as protective factors participation among rural youths. *Social Work Research, 25,* 153-161.

Hugen, B. (2001). Spirituality and religion in social work practice. In M. Van Hook, B. Hugen, & M. Aguilar (Eds.), *Spirituality within religious traditions in social work practice* (pp. 9-17).

Pacific Grove, CA: Brooks/Cole.

Kobasa, S. C. (1979). Stressful life events, personality, and health: An inquiry into hardiness. *Journal of Personality and Social Psychology, 37*, 1-11.

Larson, N. C., & Dearmont, M. (2002). Strengths in farm communities in fostering resiliency in children. *Child Welfare, 81*, 821-835.

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

Lifton, R. J. (1968). *Death in life: Survivors of Hiroshima.* New York: Random House.

Margalit, M., Raviv, A., & Ankonina, D. B. (1992). *Coping* and coherence among parents with disabled children. *Journal of Clinical Psychology, 21*, 202-209.

Martindale-Adams, J., Nichols, L., Burns, R., & Malone, C. (2002). Telephone support groups: A lifeline for isolated Alzheimer's disease caregivers. *Alzheimer's Care Quarterly, 3*, 181-189.

Masten, A. S. (1999). Resilience comes of age: Reflections on the past and outlook for the next generation of research. In M. D. Glantz, J. Johnson, & L. Huffman (Eds.), *Resilience and development: Positive life adaptations* (pp. 282-296). New York: Plenum.

Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist, 56*, 227-238.

Masten, A.S., Best, K.M., & Garmezy, N. (1990) Resilience and development: Contributions from the study of children who overcome adversity. *Development and Psychopathology, 2*, 425-444.

McCubbin, M. A., & McCubbin, H. I. (1993). Families coping with health crisis: The resiliency model of family stress, adjustment, and adaptation. In C. Danielson, B. Hamel-Bissell, & P. Winstead-Fry (Eds.), *Families health and illness* (pp. 21-63). St. Louis: Mosby.

McDaniel, S., Hepworth, J., & Doherty, W. (1992). *Medical family therapy: A biopsychosocial approach to families with health problems.* New York: Basic Books.

Meisenhelder, J. B., & Chandler, E. N. (2001). Frequency of prayer and functional health in Presbyterian pastors. *Journal for the Scientific Study of Religion, 40*, 323-330.

Miller, W. R. (1998). Researching the spiritual dimensions of alcohol and other drug problems. *Addiction, 93*, 979-990.

Mittelman, M., Roth, D., Coon, D., & Haley, W. (2004). Sustained benefit of supportive intervention for depressive symptoms in caregivers of patients with Alzheimer's disease. *American Journal of Psychiatry, 161*, 850-856.

Murphy, S., Johnson, L., Lohan, J., & Tapper, V. (2002). Bereaved parents' use of individual, family, and community resources 4 to 60 months after a child's violent death. *Family and Community Health, 25*, 71-82.

National Alliance for Caregiving/AARP. (1997). *Family caregiving in the US: Findings from a national survey.* Report presented at the Third International Conference on Family Care, Washington, DC. Retrieved February 1, 2004, from http://www.caregiving.org/National%20Alliance%20for%20Caregiving%20-%20Reports.htm

Ory, M., Hoffman, R., Yee, J., Tennstedt, S., & Shulz, R. (1999). Prevalence and impact on caregiving. *The Gerontologist, 39*, 177-185.

Pargament, K. I., Smith, B. W., Koenig, H. G., & Perez, L. (1998). Patterns of positive and negative religious coping with major life stressors. *Journal for the Scientific Study of Religion, 37*(4), 710-724.

Patterson, M. B., & Whitehouse, P. J. (1990). The diagnostic assessment of patients with dementia. In N. L. Mace (Ed.), *Dementia care: Patient, family and community* (pp. 3-21). Baltimore: The Johns Hopkins University Press.

Pratt, C., Schmall, V., Wright, S., & Cleveland, M. (1985). Burden and coping strategies of caregivers to Alzheimer's patients. *Family Relations, 34*, 27-33.

Rolland, J. S. (1994). *Families, illness & disability: An integrative treatment model.* New York: Basic Books.

Ross, L., Holliman, D., and Dixon, D. (2003). Resiliency in caregivers: Implications for social work practice. *Journal of Gerontological Social Work, 40*, 81-96.

Rubin, A., & Babbie, E. (2001). *Research methods for social work* (4th ed.). Belmont, CA: Wadsworth.

Rutter, M. (1990). Psychosocial resilience and protective mechanisms. In J. Rolf, A. Masten, D. Cicchetti, K. Neuchterlein & S. Weintraub (Eds.), *Risk and protective factors in the development of psychopathology.* New York: Cambridge University Press.

Schulz, R., Mendelsohn, A., Haley, W., Mahoney, D., Allen, R., Zhang, S., Thompson, L., & Belle, S. (2003). End-of-life care and the effects of bereavement on family caregivers of persons with dementia. *New England Journal of Medicine, 349*, 1936-1942.

Sheehan, D. V. (1993). *The anxiety disease.* New York: Simon and Schuster.

Sheehan, D. V., Raj, A. B., & Sheehan, K. (1990). Is buspirone effective for panic disorder? *Journal of Clinical Psychopharmacology, 10*, 3-11.

Sheridan, M. J., Bullis, R. K., Adcock, C. R., Berlin, S. D., & Miller, P. C. (1992). Practitioners' personal and professional attitudes and behaviors toward religion and spirituality: Issues for social work education and practice. *Journal of Social Work Education, 28*, 190-203.

Stolley, J., Buckwalter, K., & Koenig, H. (1999). Prayer and religious coping for caregivers of persons with Alzheimer's disease and related disorders. *American Journal of Alzheimer's Disease, 14*, 181-191.

Stuckey, J. C. (2002). Connecting with the spirit. In P. Harris (Ed.), *The person with Alzheimer's disease: Pathways to understanding the experience* (pp. 151-164). Baltimore: The Johns Hopkins University Press.

Tak, Y. R., & McCubbin, M. (2002). Family stress, perceived social support, and coping following the diagnosis of a child's congenital heart disease. *Journal of Advanced Nursing, 39*, 190-198.

U.S. Congress Office of Technology Assessment. (1987). *Losing a million minds: Confronting the tragedy of Alzheimer's disease and other dementias.* Washington, DC: U.S. Government Printing Office.

Weinstein-Shr, G. (1995). *Literacy and older adults in the United States.* Philadelphia, PA: National Center on Adult Literacy.

West, D. J. (1982) *Delinquency: Its roots, careers and prospects.* London: Heinemann Publishers.

Zarit, S., Reever, K., & Bach-Peterson, J. (1980). Relatives of the impaired elderly: Correlates of feelings of burden. *The Gerontologist, 20*, 649-655.

Zarit, S., & Toseland, R. (1989). Current and future directions in family caregiving research. *Gerontologist, 29*, 481-483.

Zgola, J. M. (1990). Therapeutic activity. In N. Mace (Ed.), *Dementia care: Patient, family and community* (pp. 148-172). Baltimore: The Johns Hopkins University Press.

Author's Note:

Address correspondence to: Scott E. Wilks, Ph.D., Assistant Professor, School of Social Work, Louisiana State University, 203 Huey P. Long Field House, Baton Rouge, LA 70803. E-mail: swilks@lsu.edu.