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RELIGIOSITY, SOCIAL SUPPORT, AND SENSE OF COHERENCE AS PSYCHOSOCIAL RESOURCES FOR CAREGIVING SPOUSES OF TERMINALLY ILL CANCER PATIENTS

by

SHEINDY PRETTER

A dissertation submitted to the Graduate Faculty in Psychology in partial fulfillment of the requirements for the degree of Doctor of Philosophy, The City University of New York.

2002

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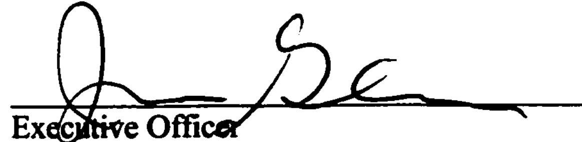
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Abstract

RELIGIOSITY, SOCIAL SUPPORT, AND SENSE OF COHERENCE AS PSYCHOSOCIAL RESOURCES FOR CAREGIVING SPOUSES OF TERMINALLY ILL CANCER PATIENTS

by

Sheindy Pretter

Adviser: Professor Suzanne C. Ouellette

This study examined 122 caregiving spouses (mean age = 63.7 years, SD = 7.4) of terminally ill cancer patients. It looked at whether and to what extent religiosity, social support, and sense of coherence were psychosocial resources for study participants as they faced impending widowhood. Participants reported high levels of depression. The relationships among the study variables were different for men and women. For women, higher levels of intrinsic religiosity and, marginally, of emotional social support engendered a greater sense of coherence, which, in turn, predicted less depression. For men as well, a higher level of intrinsic religiosity predicted higher coherence, in turn predicting less depression; however, in addition, higher levels of social support directly predicted increased depression. Results underscore the different ways in which men and women experience this life crisis.

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Dedicated to my husband, Yaakov,

and to my children, Chavi and Yitzie,

with love and deep appreciation

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Acknowledgements

First and foremost, I offer profound thanks to an exceptional mentor, Professor Suzanne Ouellette. For almost a decade she has supported and guided my development as a researcher. I have been tremendously inspired by the creativity and passion that lie behind her numerous writings and her research work – both theoretical and empirical. She has taught me many valuable lessons, among them the need to "listen to the data," to always respect the integrity of study participants, and to "murder my darlings" when too much wordiness obscures the underlying message of what I mean to say. She has always understood and respected the challenges I have faced in juggling my personal, cultural, religious, academic, and professional lives. In her capacity as chair of my dissertation committee, she has been extraordinarily helpful in bringing this project to fruition, and for this I am extremely grateful.

A special thanks to Professor Victoria Raveis of Columbia University for the generous spirit in which she allowed me access to her data for use in my study. The experience I have gained from being part of her research team at Memorial Sloan-Kettering and at Columbia has to set me on the course of a lifetime of research. As a member of my dissertation committee, she provided critical feedback regarding the study's findings and their interpretation. Most of all, she has been and continues to be a role model for me of how to balance professionalism and compassion.

I thank Professor Michelle Fine for her constant encouragement and support. She always pushed me to let the reader hear my "voice." In this way, she helped me to bring life to my work. Her insightful comments on both the initial dissertation proposal and the manuscript drafts were extremely valuable.

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The contributions made by my outside readers, Professors Vita Rabinowitz and David Rindskopf, are gratefully acknowledged. Their careful reading of my work and their subsequent critiques and comments are appreciated.

I am grateful to Professor Glen Hass of Brooklyn College, whose undergraduate class in Experimental Methodology first inspired me to enter the field of psychology research. It was through his encouragement and support that I went on to pursue a graduate career and I thank him for that.

To Chandra Mason I owe a debt of gratitude for offering guidance and direction regarding the data. Thank you for helping to make a daunting job do-able. To Dan Karus of Columbia University I offer my sincere gratitude for always being available as a sounding board for my questions and ideas about the data and for teaching me so much. Again and again, he was magnanimous in granting me the gifts of his time and expertise.

I acknowledge with appreciation the financial support I have received from several sources during my tenure as a graduate student. These include a fellowship from the Office of Mental Retardation and Developmental Disabilities (OMRDD) for my research at the Institute for Basic Research in Staten Island, NY; an NIMH predoctoral research training fellowship in health psychology; a Grants-In-Aid research award from SPSSCI; and a CUNY Alumni Dissertation Fellowship.

In the form of my close friend and GC colleague, Daisy Edmondson, I had my own personal cheering squad. Her friendship sustained me throughout the years and her unconditional support kept my spirit from flagging, especially when things got tough. I thank her and hope that we continue to share many more important milestones, both personally and professionally.

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I thank my husband, Yaakov, and my children, Chavi and Yitzie, to whom I have dedicated this dissertation. One of the greatest challenges of these years has been learning to balance the responsibilities of personal and professional life. My family has been with me every step of the way, from the day I returned to undergraduate college to complete my degree through my many years of graduate training. My husband has taken pride in my growth and success and in my doctoral achievement. There were times that my children paid a price for the juggling of my several roles, and it is with warm appreciation that I offer heartfelt thanks for their sacrifices.

I welcome to the family and embrace with love the most recent addition to our family, our first grandchild, David Dov Tyberg, son of my wonderful son-in-law, Shalom Zvi Tyberg, and my daughter, Chavi. Born just nine days after my dissertation defense, his arrival conferred upon me the title of "Dr. Grandma," which I accept with pride.

I thank my mother, Mrs. Malka Rennert, for always believing in me. Her own effervescent style, joi de vivre, and spirit of resilience have inspired me to try and take from life the pleasure it has to offer. Her celebration of my professional success has been heart-warming and extremely touching.

And finally, a special thanks to my dear friend, Esther Hauben, without whom this degree would never have been attained. Many years ago, I mentioned to Esther that I was thinking of switching my major to Psychology, and lamented "But you can't do anything in Psychology without a doctorate..." – never having considered this as an option. To which Esther immediately responded, "So, you'll go for your Ph.D.!" And so I did.

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Overview

The experience of widowhood is profoundly stressful (Holmes & Rahe, 1967), and renders the individual vulnerable to mortality (Jacobs & Ostfeld, 1977; Martikainen & Valkonen, 1996) and psychological and physical morbidity (Osterweis, Solomon, & Green, 1984; Wells & Kendig, 1997). The death of a spouse in later adulthood represents an especially difficult challenge to the bereaved spouse, who must not only come to accept the loss, but also deal with the emotional upset associated with the dissolution of long-standing bonds of attachment (Sable, 1991). Spouses of terminally ill patients begin to face many of these issues during the period of time that precedes their bereavement (Siegel, Karus, Raveis, Christ, & Mesagno, 1996). In addition, they are often burdened with arduous caregiving responsibilities engendered by the disease (Bass & Bowman, 1990). This places them in the difficult predicament of struggling to fulfill the physical and emotional needs of their ill spouses while simultaneously contending with feelings of anticipatory grief (Lindemann, 1944; Rando, 1986; Welch, 1982).

As a consequence of the stress of living with a terminally ill spouse and of the burdens they experience in providing support and assistance during the illness, caregiving spouses are at high risk for psychopathology and physical morbidity outcomes (Cantor, 1983; Gallagher, Wrabetz, Lovett, Del Maestro, & Rose, 1989; Kiecolt-Glaser et al., 1987; Stetz, 1987; Wallsten, 2000). Research on caregiving has documented that those providing care to family members may experience isolation and loneliness (Boland & Sims, 1996; Levine, 1999; Walsh & McGoldrick, 1991), low morale (Gilhooly, 1984; Walsh & McGoldrick, 1991), anger (Rabins, Mace, & Lucas, 1982), psychiatric impairment (Cohen et al., 1990), and poor physical health (Cahill & Shapiro, 1998).

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Compared to other caregiving groups, spouses exhibit higher rates of distress and lower rates of well-being, and are at increased risk for depression and anxiety (Rabins et al., 1982; Siegel et al., 1996) and for health problems and role overload (Barnes, Given, & Given, 1992). Spouses provide the most comprehensive care, maintain the caregiver role for a longer period of time, tolerate greater levels of disability, and experience more severe lifestyle adjustments (Cantor, 1983; Crossman, London, & Barry, 1981; Horowitz, Marmar, Weiss, DeWitt, & Rosenbaum, 1984; Soldo & Myllyluoma, 1983).

Elderly spousal caregivers, in particular, have been found to be more depressed, to have higher levels of negative affect, to be more likely to use psychotropic drugs, and to have more symptoms of psychological distress and poorer physical health than population controls matched for age and gender (Pruchno & Potashnik, 1989). Yet the stress experienced by caregiving spouses often is either minimized or overlooked (Davis-Ali, Chesler, & Chesney, 1993). Consequently, they may receive significantly less support for their ordeal than do their ill spouses and may be subject to neglect by the couple's family and friends. This is particularly unfortunate in light of findings that, for example, spouses have been found to worry more about the cancer patients' futures than the patients themselves (Davis-Ali et al., 1993), and that spouses have been found to exhibit significantly greater distress than patients themselves in both the presurgery and postsurgical periods (Keitel, Zevon, Rounds, Petrelli, & Karakousis, 1990). Indeed, spouse caregivers may be considered "the hidden patients" (Fengler & Goodrich, 1979).

As Keitel, Cramer, and Zevon (1990) have observed in their review of the literature on spouses of cancer patients, it is indeed surprising that in view of the litany of serious outcomes which caregiving spouses potentially endure, relatively little research

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has been done on the coping resources they employ as part of their adaptation to their spouse's cancer crisis. In an effort to address this concern, this study investigates older adult spouses of terminally ill cancer patients. It focuses specifically on the phenomena of *religiosity*, *social support*, and *sense of coherence*, examining whether and to what extent these are psychosocial resources for caregiving spouses dealing with the demands and stressors associated with living with a spouse who is dying of cancer. It looks at the interplay among the variables and tries to tease out the ways in which the variables express themselves in the lives of the caregiving spouses.

To this end, this study examines whether and to what extent religiosity is a resource for older adults facing a life crisis. Recognizing religiosity as a multi-faceted phenomenon (Batson, Schoenrade, & Ventis, 1993, Donahue, 1985a; Kirkpatrick & Hood, 1990), this investigation looks at several different aspects of religiosity in an attempt to tease out the aspects of the phenomenon that contribute to its value as a potential resource. It examines the following aspects of religion: the extent of caregiving spouses' *intrinsic religiosity* (Allport & Ross, 1967); the extent to which they view their religious beliefs as *important*; the extent to which they derive *comfort* from their religious beliefs; their *denominational affiliation*, and their *attendance at religious services*, as an indication of their immersion in religious practice.

Another aspect of religiosity that is examined in this study is its resonance with Antonovsky's (1979, 1987, 1990) conceptualization of a *sense of coherence*. Antonovsky described sense of coherence as a perspective from which to understand the world and one's place in it, to find meaning in one's lived experiences. He defined sense of coherence as "a global orientation that expresses the extent to which one has a

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pervasive, enduring though dynamic feeling of confidence that one's internal and external environments are predictable and that there is a high probability that things will work out as well as can reasonably be expected" (Antonovsky, 1979, p. 123). Sense of coherence is comprised of three components: *comprehensibility*, the extent to which individuals see an orderliness and predictability in the patterns of their lives so that they are able to make sense of life events; *manageability*, the extent to which individuals feel that they have the necessary resources available to them to be able to deal effectively with difficult situations, come what may; and *meaningfulness*, the motivational component, reflecting the ability to commit to the demands of living and to engage in life's challenges, i.e., the extent to which life's encounters are viewed as worthwhile and as making sense on an emotional level.

Along these lines, it has been proposed (Berger, 1967, 1970; Kotarba, 1983) that the comprehensive framework religion offers for understanding life events may provide an *existential coherence* or *existential certainty* (Ellison, 1991) that is helpful in dealing with life stress. That is, it has the capacity to afford the individual a sense of grounding in the midst of chaos. Religion may offer a perspective from which individuals can interpret and make sense of traumatic life events that "call into question established understandings of reality" (Ellison, p. 82). As noted by George, Larson, Koenig, and McCullough (2000) in their discussion of a "coherence hypothesis," whereby religion is beneficial to individuals, "[R]eligion benefits health by providing a sense of coherence and meaning so that people understand their role in the universe, the purpose of life, and develop the courage to endure suffering" (p. 111). In turn, this sense of orderliness and coherence may help individuals adjust to life stressors (Antonovsky, 1979, 1987). Thus,

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because religion is one of the avenues through which sense of coherence may be engendered (Bjarnason, 1998; Peterson & Roy, 1985; Pollner, 1989; George et al., 2000; see also Wong, 1998), this study will examine whether religiosity fosters a greater sense of coherence, which, in turn, helps caregiving spouses to cope with their ordeal.

However, individuals who are not connected with any form of institutionalized religion may also develop a strong sense of coherence over the course of their lifetimes, emerging out of something other than religion. For as Antonovsky (1994) has noted, "There are many roads to a strong sense of coherence" (p. 14). Therefore, in further investigation of these issues, the study will examine another possible precipitant of a strong sense of coherence: caregiving spouses' levels of *social support*. The literature has documented that social support is a psychosocial resource that can help alleviate some of the difficulties inherent in the caregiving endeavor (Pearlin, Mullan, Semple, & Skaff, 1990). A sense of emotional support and social engagement can help caregivers feel less despair. For example, in an examination of caregivers to the frail elderlys, results indicated that having the opportunity to socialize and interact with family and friends helped diminish caregiver burden (Thompson, Futterman, Gallagher-Thompson, Rose, & Lovett, 1993). In their study of HIV-infected adults, Linn, Lewis, Cain, and Kimbrough (1993) looked at social support in the context of sense of coherence. They found that a higher degree of social support was associated with a higher sense of coherence and a reduced level of anxiety. In a similar manner, the current study includes an examination of whether there is a relationship between the social support and sense of coherence variables, such that social support engenders a strong sense of coherence in caregiving spouses, which, in turn, contributes toward positive adjustment.

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Overall, in continued appreciation of the complexities of these phenomena, and in an effort to disentangle these concerns, the study will investigate (a) whether and to what extent religiosity engenders a stronger sense of coherence, which, in turn, contributes to positive adjustment; and (b) whether and to what extent social support engenders a stronger sense of coherence, which, in turn, contributes to positive adjustment. The study will also examine whether there are gender differences in the experience of caring for spouses during this pre-bereavement period. This gender distinction may be especially important, because various studies have demonstrated that women experience caregiving as more stressful than do men. For example, women caregivers tend to be more depressed than men (Schulz, Vistainer, & Williamson, 1990) and to report poorer mental and physical health than husband caregivers (Miller, 1987).

The paper now turns to a more detailed introduction of the research study.

Spousal bereavement

It has long been observed that widowhood is one of the most stressful life events (Holmes & Rahe, 1967). To a large extent, living with a spouse who is terminally ill is the beginning stage of the transition to widowhood (Bass & Bowman, 1990). Indeed, the experience may include much of the distress associated with eventual widowhood. Hays, Kasl, and Jacob (1994) concluded in a study of spouses of hospitalized patients that "the pre-mortem psychological symptoms detected in these spouses weeks to months prior to the death of the patient was not reliably distinguishable from the earliest and most intense experience of post-mortem grief (p. 924)." More specifically, depressive symptoms and feelings of hopelessness and helplessness occurred similarly in spouses confronting either the threat of death or its actuality. Interestingly, the authors found this same

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psychological distress in spouses of patients who survived as well. The authors submit that for spouses of the critically ill, the danger and uncertainty of the life-threatening situation is detrimental in itself, separate from whether the loss actually occurs. The current study of spouses living with terminally ill patients is perhaps best understood in the context of impending spousal bereavement, and the following discussion of the rigors of widowhood helps provide a fuller appreciation of the crisis in which the study participants are engaged.

Shuchter and Zisook (1987) have proposed a multidimensional model of spousal bereavement, as spousal bereavement has the potential to affect almost every aspect of the surviving spouse's life. These effects can be noted in survivors' emotional and mental health, their physical health, their relationships with others, and their changed sense of identity. Emotional reactions to widowhood often entail profound grief (Conway, 1988; Fasey, 1990; Rosenzweig, Prigerson, Miller, & Reynolds,1997). Although the current conceptualization of bereavement recognizes that not all individuals go through specified stages of grief (Wortman & Silver, 1989; 1990), many do experience the following: shock, including such psychophysiological symptoms as fainting spells, crying, denial; lamentations, i.e., a venting of resentment and anger; withdrawal, a pulling-back, in an attempt to work through the pain; and a potpourri of other emotions, including frustration, panic, depression, and detachment (Flatt, 1987). Intense grief reactions may precipitate problems in the survivors' mental health (Arbuckle & de Vries,1995). They may experience guilt in terms of feeling responsible for the death and/or suffering of their spouse, and overwhelming anxiety about being forced to contend with life circumstances on their own. They may also exhibit increased levels of clinical anxiety, such as panic

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disorder or generalized anxiety disorder (Jacobs et al., 1990) and increased rates of depressive episodes (Zisook & Shuchter, 1991).

The physical health of the surviving spouse may also be impaired by the experience of bereavement, both in terms of morbidity (Windholz, Marmar, & Horowitz, 1985) and mortality (Jacobs & Ostfeld, 1977); for the bereaved have been found to exhibit higher rates of disability, increased utilization of health services and medications and hospitalization (Avis, Brambilla, Vass, & McKinlay, 1991; Joung, van der Meer, & Mackenbach, 1995). They are also more likely to report the development of a new illness or worsening of a preexisting condition compared to married individuals (Thompson, Breckenridge, Gallagher, & Peterson, 1984). In addition, numerous studies have found increased risk of mortality following spousal bereavement, relative to those not widowed (e.g., Jagger & Sutton, 1991; Schaefer, Quesenberry, & Wi, 1995; see review by Bowling, 1987).

The relationships that widowed spouses have shared with others prior to their spouses' death may be changed in the ensuing circumstances. As Shuchter and Zisook (1987) note, this is especially true with regard to dynamic relationships within both the nuclear and extended family. Young children of the couple may turn to the surviving parent for help in dealing with their grief. There is also the potential for tension in their relationships with their grown children, as the expectations of each may differ. Widowed spouses also may now find themselves responsible for helping to support their in-laws, who are, after all, the parents of the deceased. And whereas friends can be an important source of social support for the widowed, offering emotional sustenance and practical assistance, changes may transpire in those relationships as well. Constant demands and

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unrealistic expectations placed upon friendships may create undue strain, with the bereaved ending up disappointed at the inability of their friends to come through.

Finally, surviving spouses often undergo extreme changes in their identities. For wives who have gone through a recent period of concentrated caregiving, in which they may have experienced an intensification of their usual wifely duties, much of who they are may be tied into their view of themselves as the caregiving wife. In addition, the loss of their spouse may rob the bereaved of a mirror of themselves, a function that may have contributed to their sense of self. Bereft of this important partnership, they may go through a troublesome time, as they work towards developing a new and independent emerging identity.

For the elderly in particular, the experience of widowhood may have significant implications. As Jagger and Sutton (1991) point out, despite frequent findings that the younger widowed suffer greatly (Carey, 1977; Parkes, 1970), the elderly widowed may find the effects of widowhood devastating as well (Sable, 1991). The need for bereavement research in the elderly is actually very compelling, given that by age 65, over half of all women and over 10% of all men have been widowed at least once (Zisook, Schuchter, & Sledge, 1994).

Bereavement in later years often signifies the loss of a lifelong relationship, filled with shared experiences and a shared frame of reference. The deceased was likely to have been a confidant, a sexual partner, and a companion in important daily activities. In fact, the loss of a lifetime companion may signify losing the one individual who could be depended upon for daily necessities of life. Richter (1984) reports the words of a recently widowed woman, commenting on the depth and extent of her loss: "To lose a

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child is like losing the limb of a tree. To lose a mate is like losing the trunk of a tree" (p. 45).

Stress of caregiving

During the pre-death period, the dying spouse often experiences a time of poor health, with an increased number of illness-related problems. Providing care for an ill loved-one places an emotional, physical, social, and financial strain on the family caregiver (Kirschling, 1986). Caregiving may include restrictions on personal time and privacy; disrupted household routine; "cabin fever"; role strain, including difficulties in fulfilling job responsibilities; decreased social activities; strained relationships with other family members; increased financial concerns; and most importantly, deterioration in emotional and physical health (Chentsova-Dutton et al., 2000; Kiecolt-Glaser, Dura, Speicher, Trask, & Glaser, 1991; Poulshock & Deimling, 1984; Smith, Smith, & Toseland, 1991; Snyder & Keefe, 1985, Wilson, 1990). As proposed by Pearlin and his colleagues (e.g., Pearlin et al., 1990), the preceding include "primary stressors," those difficulties directly embedded in the care recipient's condition; and "secondary stressors," those representative of the strains experienced as a consequence of caregiving on outside aspects of the caregiver's life, i.e., other roles and activities, and the intrapsychic impact of caregiving upon the caregiver's physical and emotional well-being.

Spouses with terminal illness usually require an especially high degree of caretaking. Even with both a formal and informal network of help in place, the brunt of the caretaking burden is most apt to fall upon the shoulders of the spouse. Caretaking spouses are thus confronted with the potentially overwhelming responsibility of

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satisfying the unique needs of their dying spouses while beginning to prepare themselves for their own approaching state of widowhood.

Psychological effects of caregiving.

Results from a plethora of studies (see review by Schulz et al., 1990) indicate increased rates of depression experienced by caregivers (e.g., Cohen & Eisdorfer, 1988; Coppel, Burton, Becker, & Fiore, 1985; Fiore, Becker, & Coppel, 1983; Gallant & Connell, 1997; Gallagher et al., 1989; Harper, Manasse, James, & Newton, 1993; Yates, Tennstedt, & Chang, 1999). Other signs of distress have been reported as well, such as feeling chronic fatigue and anger in addition to depression (Rabins et al., 1982). The majority of studies conducted in this area pertain to caregivers of Alzheimer's patients; however, similarly elevated rates of depression have been found in caregivers of Parkinson's disease patients (Dura, Haywood-Niler, & Kiecolt-Glaser, 1990), cancer patients (Raveis, Karus, & Siegel, 1998; Toseland, Blanchard, & McCallion, 1995), and caregivers of physically impaired patients and patients with severe cardiac disease (Gallagher et al., 1989) as well.

In addition to depression, Mui (1995a) found in a study of frail, elderly individuals at risk for institutionalization that 91% of caregiver wives and 84% of caregiver husbands reported emotional strain related to their caregiving responsibilities. Furthermore, in the study of spouses of cancer patients cited above, Toseland et al. (1995) also found elevated rates of state anxiety in caregiver spouses. The psychological distress experienced by caregivers is evidenced as well by the increased rates of psychiatric impairment and psychotropic drug use reported in studies of caregiver

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distress (e.g., Chentsova-Dutton et al., 2000; Clipp & George, 1990; Cohen et al., 1990; George & Gwyther, 1986; Pruchno & Potashnik, 1989).

As Schulz et al. (1990) point out in their review, there is an association between the degree of impairment and the degree of depression, such that more severe impairment in the patient is associated with greater depressive symptomatology. With regard to patients who are terminally ill, then, depressive morbidity of caregivers can be expected to be of serious concern.

Physical effects of caregiving.

Investigations of the physical morbidity effects of caregiving indicate that caregivers experience physical effects to their health as well. Haley, Levine, Brown, Berry, and Hughes (1987) found that compared to matched noncaregivers, caregivers reported more chronic illness and poorer overall health. They reported more frequent physician visits and more prescription drug use. The number of doctor visits reported may actually have been smaller than warranted, because caregiving demands often preclude caregivers from seeking necessary professional health care. With regard to preventive health behaviors, being a high-level caregiver has been found to significantly increase the likelihood of not getting enough rest, not having sufficient time to exercise, not having adequate rest-time to recuperate from illness, and forgetting to take prescription medications (Burton, Newsom, Schulz, Hirsch, & German, 1997).

In addition, caregivers themselves perceive their health as poorer than do age peers in the general U. S. population (U. S. Committee on Aging, Select Committee on Aging, cited in Stone, Cafferata, & Sangle, 1987). Furthermore, many attribute their poor health to their caregiving responsibilities. In this regard, Snyder and Keefe (1985)

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found that almost 70% of the caregivers they polled reported a decline in their physical health specifically due to their provision of support. To some extent, this perception of a decline in health may be valid: In a study of caregivers of stroke patients, Silliman, Fletcher, Earp, and Wagner (1986) found that whereas prior to the patient's stroke, 10% of the caregivers rated their own health as poor, a year after the patient's discharge from the hospital, the number of poor ratings had risen to 24%.

Caregiving spouses.

Spouses constitute one-third to one-half of all informal caregivers (Stommel, Given, & Given, 1990). George and Gwyther (1986) found that compared to other types of caregivers (i.e., adult children, other relative, or friends) spouse caregivers reported lower well-being. Similarly, Zanetti et al. (1998) found that being a husband or wife to the patient, rather than a son or daughter, was associated with depressive symptoms. In a study of caregivers of older family members, Smerglia and Deimling (1997) similarly found that being a spouse rather than an adult child was related to less positive affect.

A caregiving spouse who is going through a serious health crisis with an ill spouse is so closely tied into the situation, that researchers have come to ask, "Who is the patient -- the husband or the wife?" (Baider & Kaplan De-Nour, 1988, p. 631). They note that the spouse of the ill patient is greatly affected by that experience. For as Pearlin et al. (1990) so poignantly observe, "...the sheer dramatic and involuntary transformation of a cherished relationship is itself a major source of stress" (p. 584).

Shanfield, Heiman, and Cope (1979) report that clinicians have commonly found significant correlations between the elevated levels of psychological distress experienced by patients with chronic pain and the distress reflected among their spouses. Baider and

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Kaplan De-Nour's (1988) propose that cancer is jointly rather than individually experienced; it is a marital issue. An example of this phenomenon was apparent in their study of cancer patients and their spouses, in which on most measures of adjustment there were significant correlations between patients and spouses -- what Keller et al. (1996) refer to as a "contagious" pattern -- such that either both coped very well together or experienced many problems together. In addition, they found that the caregiving spouses reported as nearly as many problems as the patients, and sometimes even more. Similarly, in a study of post-surgery breast cancer patients conducted by Northouse and Swain (1987), patients and their husbands also reported similar levels of distress, reflected in mood levels and amount of distress symptoms such as depression, hostility, and somatic complaints.

Other studies suggest that caregivers may be feeling even more distress than patient (Baider & DeNour, 1988; Keitel, Zevon et al., 1990; Kornblith, Herr, Offman, Scher, & Holland, 1994; Northouse, Mood, Templin, Mellon, & George, 2000, Oberst & Scott, 1988). For example, in a study of lung cancer patients and their spouses, Cooper (1984) found that spouses reported twice as many stress symptoms, especially sleeplessness and nervousness and Oberst and James (1985) found that during the hospital period, caregiver spouses of cancer patients were more anxious than the patients themselves.

Gender differences in caregiving.

Findings regarding gender differences in the effects of caregiving have not been consistent, although they have leaned toward the conclusion that women are more adversely affected by the caregiving experience. The implications of finding gender

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differences in caregiving are important, given that wives are approximately three times as likely to be caregivers than husbands (Hoffman & Mitchell, 1998; Stommel et al., 1990), and that among adult children, daughters are more likely to assume the caregiving role than sons (Horowitz, 1985; Stoller, 1994).

In their review of the psychological effects of caregiving, Schulz et al. (1990) note that whereas in most studies a high proportion of caregivers experienced increased levels of depressive symptomatology, women caregivers in particular tended to be more depressed than men. For example, in investigations of spouses of dementia patients, higher rates of depression have been found among female than male caregivers (Fitting, Rabins, Lucas, & Eastham, 1986; Gallant & Connell, 1997; Pruchno & Resch, 1989). Cohen et al. (1990) and Gallagher et al. (1989) found as well that twice as many wives as husbands reported high levels of depression. In a similar vein, Pruchno and Potashnik (1989) found that whereas 14% of husband caregivers took psychotropic medications, this was true for 31% of the caregiver wives. Contrastingly, Siegel et al. (1996) determined in their sample of spouses of terminally ill cancer patients that 58% of husbands and 42% of wives had scores for depressive distress in a clinically significant range.

Living with a terminally ill spouse: The beginning of the end

In the bereavement literature it is largely acknowledged that the process of grieving often begins upon receipt of the initial terminal diagnosis, continuing throughout the course of the disease and beyond (Brown & Stetz, 1999; Osterweis et al., 1984; Welch, 1982). The pre-bereavement period is thus a very difficult time; for aside from the extent of caregiving involved, spouses of cancer patients are faced with an

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extraordinary challenge: They are "midwifing the death" of their loved ones (Brown & Stetz, 1999; Stetz & Brown, 1997). In her study of the dying trajectory of adults with cancer and their primary caregivers (71% spouses), Holing (1986) found that from the perspective of the caregiver, included among the most stressful situations was witnessing the dying patient experience physical problems (e.g., endure pain) and deal with illness-related emotional problems (e.g., panic from fear of running out of oxygen).

From their interviews with recently bereaved adult caregivers of dying cancer patients, Yates and Stetz (1999) found that the pre-death time period, during which caregivers began to develop an awareness that their loved one would die, was characterized by uncertainty and agony. Family members endured intense emotional struggles as they tried to manage their awareness of their loved one's impending death by hoping (i.e., for a cure or a miracle), pretending that death was not impending, and/or making preparations for the death.

In addition, for spouses of terminally ill patients, the marital relationship is often restructured, "stripp[ed] it of its former reciprocities" (Pearlin et al., 1990, p. 587), perhaps similar to the sense of "relational deprivation" that is often experienced by caretakers of Alzheimer's patients, as described by Pearlin and his colleagues. In some respects, the ensuing relationship is also similar to the status of "quasi-widowhood" described by Rosenthal and Dawson (1991) in their study of wives of institutionalized elderly men, in the immediate postadmission period. They conceptualize the process whereby the husbands enter a long-term care facility as a life course transition to quasi-widowhood for the wives who remain behind. Athough still married, they have begun to

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experience many facets of widowhood, "...in many respects without the mate they once had" (p. 317).

Religiosity as a psychosocial resource

Recently, there has been increased interest in examining the extent to which religiosity is a potential resource for individuals struggling to overcome adversity (e.g., George et al., 2000; Harris et al., 1995; Jenkins & Pargament, 1995; Kilpatrick & McCullough, 1999; Pargament, Koenig, & Perez, 2000) This signifies an important change in the focus of psychosocial research, because historically psychologists have focused little attention on the role of religion in the lives of individuals and societies (Paloutzian & Kirkpatrick, 1995). Gorsuch (1988) points out that in those instances when religious variables have been examined in psychological research, they frequently have been background variables, secondary to the primary study variables. As Koenig, Kvale, and Ferrel (1988) note, "religion has been given a stepchild status" (p. 18). This is surprising, in light of the consistent finding that approximately 95% of Americans believe in G-d[1] (Gallup, 1995). In addition, 87% assert that religion is either very or fairly important in their lives -- 58% and an additional 29% respectively -- ("Who Considers Religion Important?", 1993), and 71% of Americans are members of a church or synagogue (Gallup Poll Monthly, 1993), with 42% attending worship on at least a weekly basis (Gallup, 1995).

Serious efforts are now being made to fill this gap, with researchers beginning to recognize that "religious beliefs and institutions matter in the real lives of real people" (Paloutzian & Kirkpatrick, 1995, p. 3) and journal and book editors beginning to see the

[1] For the purposes of this paper, the author uses the term "G-d" as an abbreviation of the full word.

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value of bringing both empirical accounts and theoretical discussions of religion into the realm of mainstream scientific publications. This increased focus on religiosity is especially true with regard to those individuals confronted with major negative life events. Thus, studies have examined the interface of religion and coping with regard to a wide range of stressful experiences such as chronic illness (Dein, 1997), disabilities (Idler & Kasl, 1997a, 1997b), cancer (Fehring, Miller, & Shaw, 1997; Meyer, Altmaier, & Burns, 1992; Musick, Koenig, Hays, & Cohen, 1998), HIV (Jenkins, 1995; Woods, Antoni, Ironson, & Kling, 1999), hypertension (Brown, 2000), recovery from cardiac surgery (Ai, Dunkle, Peterson, & Bolling, 1998), heart transplantation (Harris et al., 1995), kidney transplant surgery (Tix & Frazier, 1998), serious burns (Sherrill & Larson, 1988), the loss of a child (Cook & Wimberley, 1983; McIntosh, Silver, & Wortman), parental death (e.g., Angell, Dennis, & Dumain, 1998), the loss of a mate (Richter, 1984; Rosik, 1989), the death of a friend (Park & Cohen, 1993), and stressful life events (Tix & Frazier, 1998).

In addition, researchers have investigated the extent to which religion is a support for caregivers. They have looked at how religion is implicated in the well-being of those caring for disabled elders (Chang, Noonan, & Tennstedt, 1998), of spouses of ill husbands (Robinson & Kaye, 1994) and of spouses of women with breast cancer (Northouse, 1989). They have also examined the role of religion in the lives of caregivers of patients with dementia (Wright, Pratt, & Schmall, 1985), parents of children with cancer (Spilka, Zwartjes, & Zwartjes, 1991) and of disabled children (Leyser, 1994), and hospice professionals (Millison & Dudley, 1992).

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The present study responds to calls for continued empirical work in this area (Mattlin, Wetherington, & Kessler, 1990; Park & Cohen, 1993) and aims to build upon the growing body of research regarding the potential value of religiosity as a psychosocial resource. For certainly in the case of older adults confronted with the immutable situation of living with a terminally ill spouse and impending widowhood, religion could be a key part of their coping repertoire.

Conceptualization of religiosity.

A rich conceptualization of the phenomenon of religiosity has developed, as researchers have begun to recognize its various aspects and dimensions. Early on, Adorno developed and amplified the concept of an *authoritarian personality* (Adorno, Frenkel-Brunswick, & Sanford, 1950, cited in Batson et al, 1993). Emerging from data collected by Adorno and his colleagues were depictions of two profiles of religion: *neutralized religion*, in which individuals "ma[d]e use of religious ideas in order to gain some immediate practical advantage or to aid in the manipulation of other people," and *personally experienced belief*, in which individuals "[took] religion seriously in a more internalized sense" (Adorno et al., p. 731).

These profiles were analogous to the contemporaneous work of Allport (1950) whose theorizing was also grounded in social psychology. Allport described religion as either *immature* (i.e., associated with self-gratification rather than introspection and viewed as separate from personality integration) or *mature* (i.e. associated with a sense of consistent morality and viewed as central to the organization of one's personality). Mature religion was seen as cognitively complex, allowing for flexible thought rather

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than narrow-mindedness or fanatical focus. Both religious orientations were regarded as transcending any particular religious denomination.

Allport's (1950) early conceptualization later evolved into his depiction of *extrinsic* and *intrinsic* orientations to religion (Allport & Ross, 1967), whereby *extrinsic* orientation -- similar in character to his concept of *immature* religion -- is representative of the strictly utilitarian aspect of religion as a way to achieve something, and *intrinsic* orientation --similar in character to his concept of *mature* religion --- is representative of experiencing religion as a central motivating force in one's life. In his classic distinction between these two orientations, Allport pointed out that "the extrinsically motivated individual *uses* his religion, whereas the intrinsically motivated *lives* his religion" (Allport & Ross, 1967, p. 434).

Discussion of this extrinsic-intrinsic typology continues to dominate the religion literature (e.g., Donahue, 1985b; Gorsuch & Mcpherson, 1989; Kirkpatrick & Hood, 1990). For the purposes of this study, the focus is on *intrinsic religiosity* because of its essence as a central motivating factor for the individual. It has been defined as "a meaning-endowed framework in terms of which all of life is understood" (Donahue, 1985b, p. 400). As the aspect of religiosity that is *lived* by the individual (Allport & Ross, 1967), the author sees it as holding the most promise as a psychosocial resource for coping with life stress. Indeed, the construct of intrinsic religiosity has been studied extensively in this regard (e.g., Jackson & Coursey, 1988; Park, Cohen, & Herb, 1990; Thorson & Powell, 1990).

Relationship between religiosity and psychological well-being.

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There is a growing body of literature demonstrating that higher levels of religiosity are associated with improved well-being (Levin & Chatters, 1998) and better mental health (Larson et al., 1992). Evidence of the salutary relationship between religion and well-being has been found with regard to both men (e.g., Koenig et al., 1992) and women (e.g., Crawford, Handal, & Wiener, 1989), and the young and the elderly (e.g., Koenig, Moberg, & Kvale, 1988).

For example, in a study examining the relationship between religious involvement and subjective well-being, Ellison (1991) found that those with strong religious faith reported higher levels of life satisfaction, greater personal happiness, and fewer negative psychosocial consequences of traumatic life events. Along the same lines, a lack of religion has been associated with symptoms of psychological disturbance (Schumaker, 1992), and low levels of religiosity have been associated with disorders of impulse control (Gartner, Larson, & Allen, 1991). Kennedy, Kelman, Thomas and Chen (1996) found in a study of older community residents that frequent religious attendance was related to lower rates of depression. In following the sample for a period of over two years, even when controlling for age, gender, health disability, and social support, they found that those who attended services more frequently were less likely to become depressed. In his review of six studies of varied populations, Gartner (1996) found that they all evidenced positive relationships between religious commitment and well-being; higher levels of religious participation were associated with reduced distress.

Religion and the elderly.

Research studies have shown that among older adults issues of religion are particularly meaningful (Moberg, 1990). Compared to other age groups, older adults

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exhibit the highest degree of religious participation (McFadden, 1995) and affiliation (Bergan & McConatha, 2000). In a survey of religious beliefs of Americans, 89% of those aged 55-64 and 96% of those aged 65 or over strongly or somewhat agreed that there is a G-d who watches over them and answers their prayers (Barna, 1991, cited in Koenig, 1993). In addition, 90% of older adults report that religion is very important to them (Koenig, George, Blazer, Pritchett, & Meador, 1993), with 52% of people over 65 attending religious services regularly (Princeton Religion Research Center, 1994).

As religion is so salient in the lives of older adults, the relationship between religiosity and well-being may be especially important. Since the 1940s, studies of the elderly have generally found a positive relationship between religiosity and various indicators of well-being (McFadden, 1995; Moberg, 1990). For example, in a study of older adults aged 55 and older, Nelson (1990) found that those with higher levels of intrinsic religiosity were less depressed and reported higher levels of self-esteem. In a community sample of older adults (mean age = 73.4 years), Koenig, Kvale and Ferrel (1988) found moderately strong correlations between morale/well-being and three religious measures: organizational religious activity (i.e., church attendance and other group activities such as Bible study groups), non-organizational religious activity (i.e., private prayer, devotional reading, and religious TV viewing or radio listening) and a measure of intrinsic religiosity. Higher levels of religiosity were associated with better well-being, particularly for women and for respondents age 75 and older. Similarly, in a study of individuals aged 65-88, Hunsberger (1985) found positive correlations between religiosity and happiness and adjustment (i.e., ranging from .18 to .45), with regard to five religious variables: Christian Orthodoxy scores, background religious information,

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agreement with beliefs taught, importance of beliefs, and church attendance. When elderly individuals were asked to specify the most important benefit they obtained from their religious activities, 23% mentioned the social interaction with other congregants, 23% said that religion gave their lives meaning, 25% named emotional support, and 29% referred to their continual growth in their faith (Pieper, 1981).

Older adults may be especially apt to turn to religion in their efforts to cope with emotional distress as part of their tendency in later life to engage in intrapsychic strategies of coping (Ellison, 1991). This may be a function of their interest in matters of "ultimate concern" (Koenig, George, & Siegler, 1988) as they approach their final years. For example, in a study intended to ascertain the variety of coping strategies used by older adults (aged 55-80), Koenig et al. (1988) found that religion was mentioned most often as a coping strategy for contending with the losses, failures, and disappointments inherent to difficult life events. Similarly, Rosen (1982) found that 40% of a sample of respondents aged 65 and over reported unprompted that religion was among their coping behaviors.

Religiosity has been found to be associated with better adjustment to life crises. For example, Pressman et al. (1990) determined in a group of elderly women recovering from surgical repair of a broken hip that patients with stronger religious beliefs and practices were less likely to be depressed at discharge, independent of the extent of their disability. In a study of elderly people coping with cancer, Fehring et al. (1997) found among their analyses a significant inverse association between intrinsic religiosity and negative mood states, such that higher levels of intrinsic religiosity were related to lower levels of depression, tension and anger.

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Religiosity and caregiving.

Studies have focused on the relationship between religion and caregiving in terms of the motivation to provide care (e.g., Caffrey, 1992; Guberman, Maheu, & Maille, 1992) and the perceived rewards of caregiving (e.g., Picot, Debanne, Namazi, & Wykle, 1997). Research has also examined the ways in which caregivers use religiosity as a coping resource. For example, in an investigation of family caregivers of the disabled elderly, the majority (74%) reported that prayer was their primary method of coping (Baines, 1984). Similarly, in a sample of caregiver wives of men with Alzheimer's disease, 94% of the caregivers engaged in private prayer once a day, with 88% indicating that spirituality is essential because it answers many questions about the meaning of life, and 94% indicating that their spiritual views have affected their lives (Kaye & Robinson, 1994). In a more recent study, Stolley, Buckwalter, and Koenig (1999) examined the extent to which caregivers of individuals with Alzheimer's disease and related disorders employ prayer and religious coping to deal with the stress of their situation. They found that a majority of caregivers (61%) reported turning to prayer and trust in G-d often and that this coping mechanism was perceived as effective.

Few have examined the extent to which religiosity is related specifically to caregiver distress outcomes. Exceptions include a study of informal caregivers to disabled elderly (55% children, 17% spouses), in which Chang et al. (1998) found that religious coping had an indirect effect on caregivers' well-being. Specifically, those caregivers who utilized religious/spiritual beliefs to cope with caregiving (i.e., their religious beliefs helped them make sense of the caregiving experience) had a better

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relationship with the care recipients. In turn, having a better-quality relationship was associated with lower levels of depression and role submersion in the caregiver.

In a study of the coping strategies employed by caregivers of patients with dementia, spiritual support (defined as seeking advice from clergy, attending church services, participating in church activities and expressing faith in G-d) was negatively correlated with burden, such that increased levels of spiritual support were associated with reduced levels of caregiver burden (Wright, Pratt, & Schmall, 1985). Rabins, Fitting, Eastham, and Zaborah (1990) conducted a study of caregivers of individuals with Alzheimer's disease and caregivers of individuals with recurrent metastatic cancer. Data indicated that in addition to a higher number of social contacts, strong religious faith contributed significantly towards positive affect.

Whereas numerous studies have focused on the overall impact of terminal illness upon caregiving spouses and the factors involved in its alleviation (e.g., Grobe, Ahmann, & Ilstrup; Siegel et al., 1996; Willert, Beckwith, Holm, & Beckwith, 1995), there have been only a limited number of studies examining the role of religiosity during this particularly stressful time. In addition, they generally include only an incidental focus on religiosity. For example, Kane, Klein, Bernstein, Rothenberg, and Wales (1985) examined the role of hospice in addressing the emotional needs of terminally ill patients and their families. Caregivers (mostly spouses and other relatives) were interviewed both before and after the deaths of their loved ones and asked about their own needs, with regard to caring for their dying relatives. Included within 9 specific caregiver needs was a need for religious support. All needs were rated by the caregivers as either very important or extremely important. Similarly, Garland, Bass, and Otto (1984) delineated 5

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categories of needs for caregivers of the terminally ill. They mailed a questionnaire to caregivers enrolled in home-based hospice programs. Caregivers identified their needs as related to: communication with professionals, assistance with patient care, legal matters, religious concerns, and household tasks.

Religion and meaning.

Religion is often the forum through which an individual can find meaning in life's difficulties (Wong, 1998). In a study of older adults (60+), Tellis-Nayak (1982) found that religiosity was strongly correlated with one's sense of meaning and purpose in life. Acklin, Brown and Mauger (1983) similarly found in their sample of hospitalized patients that intrinsic religiosity was significantly associated with life meaning. As Sorajjakool (1998) has observed on a more general level, spirituality can be understood as "an attempt to reframe worldviews to accommodate, explain, and cope with human suffering...an attempt to find meaning amid pain, suffering, aging, and dying" (p. 147).

Religion can provide the individual with a rationale for traumatic life events that seem random and senseless and in that way render a sense of being out-of-control. McIntosh and Spilka (1990) suggest that meaning may be understood as a form of control, because making sense of what goes on helps one feel more in charge of life circumstances. Spilka et al. (1985) note that one of the basic human motivations is to find meaning amidst the tumult, and that religion may be of help in such endeavors, for it can provide the individual with a sense of control in a world of uncertainty.

Religion can represent a broader context from which to view events that occur, suggesting that all that happens is part of a larger plan; it is often the forum through which individuals can make attributions about the world around them, in an effort to

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acquire some sense of cognitive mastery over their situations. (Spilka, Hood, & Gorsuch, 1985). Duii and Skokan (1995) explain that when difficult life events are reinterpreted through the eyes of religion, they can be understood, more comprehensively, as having deeper purposes than obvious at first. The new meanings which are assigned to the predicament can sustain the individual as he/she endures the pain and fallout of the experience. In this regard, for example, McIntosh et al. (1993) found in their study of couples coping with the loss of a child to Sudden Infant Death Syndrome that being able to find meaning in the loss was related to less distress and higher levels of well-being both immediately after the loss and 18 months later.

This view of religion as springing from a motive for attribution also speaks to the sense of comfort and relief people experience when they are able to assign to G-d the responsibility for both the suffering engendered by life's tragedies and the joys engendered by unexpected good. Thus, a devastating earthquake or an untimely death can be ascribed as "an act of G-d" or "G-d's will." Conversely, conception after years of infertility or recovery from serious illness may be perceived as a "blessing" or as "G-d's mercy." Worry and self-blame can be reduced, when attributions of events are more easily assigned to a G-d who is perceived as being in charge (Gorsuch & Smith, 1983). Indeed, Pargament (1996) notes that several research studies of various populations have demonstrated that attributing negative life events to "G-d's will, G-d's love, or G-d's purpose" (p. 223) has been associated with more positive outcomes (e.g., Jenkins & Pargament, 1988; Mickley, Pargament, Brant, & Hipp, 1998).

In addition, Jenkins and Pargament (1995) suggest that individuals are able to retain a sense of a just world (Lerner & Miller, 1978) through their religiosity, possibly

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based on beliefs that (a) each individual has a unique spiritual destiny; (b) no individual is ever confronted with more than he or she can handle and (c) life's tribulations are actually special opportunities for spiritual growth. Such attributions may contribute to their sense of well-being when confronted with life crises and may thus enhance coping abilities.

Along the same lines, in his discussion of religious methods of coping, Pargament (1996) expounds upon the concept of "religious reframing," whereby an individual may cognitively reframe a situation to make it more compatible with a religious perspective. Negative life events may be reinterpreted as challenges and as offering opportunities for growth. Peterson and Roy (1985) posit that those individuals for whom religion is more salient and more central to their lives are more likely to apply their religion's interpretive schemes to explain the significance of their life events. In this regard, in a sample drawn from the general population, they found that religious salience was a significant predictor of meaning and purpose (i.e., the extent to which participants assessed their lives as worthwhile and as having meaning and purpose).

For caregivers, finding religious meaning within their difficult situations may be particularly helpful. In a recent study of caregivers of terminally ill patients under hospice supervision, Mickley et al. (1998) found that seeing G-d as benevolent and viewing the situation as a function of G-d's will was associated with a more positive general outcome (i.e., learning from the event, handling the event and one's feelings well, and feeling better about oneself). Such religious appraisals were also associated with a more positive religious outcome (i.e., changes in perceived closeness to G-d and the church and experiencing spiritual growth as a result of dealing with the event).

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Contrastingly, the perception of the caregiving situation as signifying that G-d is uncaring or unfair was associated with higher levels of anxiety and depression.

Overall, then, the research suggests that the meaningfulness aspect of religiosity may be an important psychosocial resource for individuals faced with impending widowhood, as they care for their terminally ill spouses. And its resonance with Antonovsky's (1987) concept of sense of coherence further suggests that religiosity may engender a sense of coherence, in turn assisting spouses in their adjustment.

Gender differences in religiosity.

In studies with a focus on religiosity as a potential resource, women have been found to report higher levels of religiosity than men (Bensen, Donahue, & Erickson, 1989; Bergan & McConatha, 2000; Strawbridge, Shema, Cohen, Roberts, & Kaplan, 1998), in both religious participation and religious practice (Bergan & McConatha, 2000; Cornwall, 1989; Princeton Religious Research Center, 1990), with this gender difference seeming to hold true over the life course (Cornwall, 1989). McFadden (1995) reports that data collected over a period of 20 years from four large national samples of older Americans indicate that women display significantly higher religiosity than men (Levin, Taylor, & Chatters, 1994). This is true with regard to church/synagogue memership, frequency of prayer, and level of spiritual commitment (Gallup, 1985). For example, Koenig, Kvale and Ferrel (1988) found that women scored significantly higher than men on their study's religiosity measures. In this regard, in the study by Koenig et al. in which almost half (45%) spontaneously reported that they use religion to help them cope, women noted religious behaviors almost twice as often as did men (58% compared to 32%).

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Studies focusing specifically on women also highlight the importance of religiosity as a psychosocial resource for them. For example, in their study of elderly women recovering from hip surgery, Pressman, Lyons, Larson, and Strain (1990) found that religious belief was associated with lower levels of depression and better ambulation status. Similarly, Idler (1987) found an association between religious involvement and lower rates of depression for women but not for men. In a study of women with breast cancer conducted by Johnson and Spilka (1991), the question that elicited the most response from women was, "Was your religion any help in dealing with your breast cancer?" A recurrent theme evidenced in the data was that the women saw G-d as a supportive healer and as a companion in whom they could confide.

Sense of coherence

Antonovsky's (1979, 1987) *sense of coherence* presents a way of looking at the world and seeing one's place in it. Coming from a salutogenic perspective, in contrast to the pathogenic approach of the typical medical model, Antonovsky was interested in the factors that move the individual towards "ease" rather than "dis-ease" on the health continuum. That is, he promoted looking at the reasons that individuals remain healthy rather than become ill.

Antonovsky's work in this area grew out of his analysis of a 1970 study, conducted in Israel, of women born in central Europe who had been ages 16-25 in 1939. Of those who had a history of incarceration in concentration camps, a substantial proportion of women (29%) exhibited good overall emotional health despite having gone through this traumatic experience. Antonovsky (1979, 1987) proposed that this ability to survive relatively intact emerged out of a sense of coherence:

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> a global orientation that expresses the extent to which one has a pervasive, enduring though dynamic feeling of confidence that (1) stimuli deriving from one's internal or external environment in the course of living are structured, predictable, and explicable; (2) the resources are available to one to meet the demands posed by these stimuli; and (3) the demands are worthy of investment and engagement (1987, p. 19).

The three components of which sense of coherence is comprised, *comprehensibility, manageability,* and *meaningfulness,* in tandem, are a reflection of the extent to which individuals find meaning in their lived experiences. Meaningfulness is the core component of sense of coherence, as it motivates individuals to make sense of their environment and to make order out of life's chaos. Without the meaningfulness component, comprehensibility and manageability would manifest themselves only temporarily (Antonovsky, 1987; Korotkov, 1998).

The benefits of operating from a sense of coherence framework may be especially valuable during times of extreme stress, for the search and finding of meaning may foster positive coping and consequently lead to increased hopefulness (Ersek & Ferrell, 1994; Steeves & Kahn, 1987; Taylor, 1983). Ersek and Ferrell note several ways in which individuals confronted with the travails of cancer and/or other life-threatening events may incorporate the process of meaning in their experiences: (a) They may make causal attributions regarding their situation, looking for the answer to the question, "Why me?" (Gotay, 1985; Taylor, 1983); (b) they may make social comparisons to others, to comfort themselves that others are worse off (Ersek, 1992; Taylor & Lobel, 1989); and (c) they

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may try to place their difficult experience within a larger context (Steeves, 1992), i.e., as part of a higher order.

Viktor Frankl (1959) purported that one of the primary motivational forces in life is to find meaning in one's existence and has written in great detail about individuals who turn to meaning-making as part of their coping efforts. In the course of his imprisonment in a World War II concentration camp, Frankl adopted the philosophy of existentialism in an attempt to make sense of this life-shattering experience. Observing that those who survived relatively intact had created their own individual meanings -- a practice which is emphasized by existential psychology -- he developed a technique of treatment called *logotherapy*, whose basis is to encourage the individual "to ferret out what is meaningful for him [sic] in a seemingly indifferent and meaningless world" (Kobasa & Maddi, 1977, p. 406). As Mullen, Smith, and Hill depict Frankl's theory, "[A] person who has discovered a 'why' for living can endure the 'how' of suffering" (p. 41).

The need to find meaning in one's life lasts a lifetime. In this regard, Payne (1994) cites Jung's observation of the need for an elderly man to derive some sense of meaning from having reached a mature age. "A human being would certainly not want to grow up to be seventy or eighty years old if this longevity had no meaning for the species to which he belongs. The afternoon of human life must have a significance of its own and cannot be merely a pitiful appendage to life's morning" (Jung, 1933, cited in Payne, pp. 85-86.)

Sense of coherence and well-being.

Research has examined the extent to which sense of coherence is associated with better well-being. For example, in a study of retirees, Sagy, Antonovsky, and Adler

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(1990) found a significant direct relationship between sense of coherence and life satisfaction, such that a high sense of coherence predicted greater life satisfaction. Brooks (1994) looked at older adult males (aged 55+) and similarly found that higher levels of sense of coherence predicted greater life satisfaction. In studies of younger samples as well, sense of coherence has been found to be associated with less distress, i.e., less anxiety, lower levels of depression, fewer physical symptoms (Hart, Hittner, & Paras, 1991; and Frenz, 1990; Holm, Edhe, Lamberty, Dix, & Thompson, 1988; and McSherry, Holm, & Popinga, 1991, all three cited in McSherry & Holm, 1994).

A strong sense of coherence has also been shown to be associated with better outcomes in coping with life's difficulties. For example, Frommberger et al. (1999) investigated a sample of traffic accident victims and found those with a stronger sense of coherence were less likely to develop symptoms of psychopathology (e.g., depression, somatization), posttraumatic stress disorder, and anxious cognitions. In their study of male patients with coronary heart disease, participating in a rehabilitation program, Kravetz, Drory and Floridan (1993) found strong associations between a higher sense of coherence and lower levels of anxiety and depression. In an investigation of single mothers, Gottlieb (1994) determined that mothers with high levels of sense of coherence were significantly less depressed, had fewer health problems, and experienced greater levels of parenting satisfaction and greater well-being than mothers with either low or moderate levels of sense of coherence.

Deriving meaningfulness from life's challenges.

Biegel, Sales, and Shulz (1991) have noted in their discussion of family reactions to cancer, that "central beliefs regarding life's priorities and meanings are challenged and

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often clarified by this existential crisis" (p. 72). From their work with terminal cancer patients and their families, Steeves and Kahn (1987) discuss the ways in which it is helpful for individuals to find meaning within their suffering. They note aesthetic experiences of hospice patients and their families, which resonate with Antonovsky's (1979) concept of a sense of coherence and with Frankl's (1959) understanding of meaning and its connection to coping. They describe a recurrent theme, whereby individuals undergo "critical incidents" during which they come to experience a special understanding of their personal situations. Through this mechanism, their suffering is somewhat assuaged. They present, for example, an incident in which the wife of a man dying with lung cancer found her gardening to represent a transformational experience, by bringing her "in touch with forces greater than herself." They recount how a man dying of metastatic prostate cancer found solace in listening to music, since "he felt as though he had joined with, was in communication with, something large and fine, something good and powerful enough to cause him to experience himself and his suffering in a new way" (p. 114). The authors propose that those who have experiences of meaning in their lives are more able to cope with suffering.

Antonovsky (1990) explained that meaningfulness is "a way of looking at life as worth living, of seeing stressors as perhaps painful and yet worthy of being coped with rather than anesthetized" (p. 79). In a similar fashion, Linn, Lewis, Cain and Kimbrough (1993) point out in their discussion of sense of coherence that even patients who endure painful symptoms can adjust to that condition if they derive meaning from their situation, if they have mentally processed their illness cognitively and emotionally, minimizing the extent of disruption. Sagy et al. (1990) have elaborated:

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> A tendency to expect the world to be ordered, or orderable, facilitates cognitive clarification of the nature of the problems stressors pose. A tendency to expect the demands posed by these problems to be manageable leads tone to search out the appropriate resources potentially available to one. And a tendency to see life as meaningful provides the motivational drive to engage in confrontation with the problems (p. 14).

Sense of coherence and caregiving.

In Stetz's (1987) descriptive study of caregiving demands during advanced cancer, 1/3 of the caregiving spouses stated that "standing by," or witnessing their ill partners' slow deterioration over the course of the illness was difficult to withstand. In the follow-up study post-death with almost half of the original sample, upon being asked to recall the demands of their caregiving, almost 2/3 of the sample retrospectively evaluated standing by as their most difficult demand (Stetz & Hanson, 1992).

Caregiving spouses must be able to make some sense of their situation in order to endure the wretchedness of the experience. Coe, Miller, and Flaherty (1992) conducted a study of caregivers of older individuals with the chronic condition of urinary incontinence (UI), recent fracture, inability to walk without assistance, confusion, or Alzheimer's disease. They found that compared to those with a weak sense of coherence, caregivers with a strong sense of coherence experienced less caregiver burden. Specifically, they reported significantly more often that the chronic conditions of the care recipients did not pose a burden. An exception to this was the case of UI, in which there was no significant difference between the caregivers, possibly due to the fact that efforts to prevent and/or control the UI problem may exact extra caregiver stress. Caregivers

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with a strong sense of coherence also scored significantly higher on morale and lower on depression.

In a study of caregivers and their cancer patient spouses, Mullen, Smith, and Hill (1993) similarly found that those patients and caregiving spouses with higher levels of sense of coherence reported less psychological distress. Also, the family strengths (i.e., family pride and accord) were associated with a greater sense of coherence, and, in turn, with less psychological distress.

Gender differences in sense of coherence.

Research with regard to gender differences in sense of coherence has revealed mixed results. In a study of spouse caregivers of patients with advanced cancer, Stetz (1989) investigated their purpose in life, defined as the sense of meaning the caregiving spouses attributed to the caregiving experiences, i.e., the sense of direction and aim in their lives. She found that husband caregivers reported a significantly lower sense of purpose than did wives. In contrast, in their investigation of caregivers of chronically ill older individuals, Coe et al. (1992) found that male caregivers had significantly higher scores of sense of coherence than female caregivers. In a study of adults with HIV, Linn, Lewis, Cain and Kimbrough (1993) similarly found that men had a higher sense of meaning and purpose (i.e., coherence) than did women. In their research of individuals living on a kibbutz in Israel (Carmel, Anson, Levenson, Bonneh, & Maoz, 1991) separate gender analyses revealed that only for men was there a significant relationship between sense of coherence and psychological and physical well-being, such that men with a higher sense of coherence reported better psychological well-being and physical health. For women the data indicated no such relationship between the variables.

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Kaslow, Hansson, and Lunblad (1994) investigated couples in "long term marriages," i.e., who had been married or cohabiting for 20 years or longer. Among study results were the findings that study participants reported a high sense of coherence; sense of coherence was significantly and positively associated with dyadic adjustment (satisfaction in the marital relationship); and there was no significant difference between men and women regarding sense of coherence.

Social Support

It is possible that a sense of coherence can develop and emerge out of something other than religion, for "[t]here are many roads to a strong sense of coherence" (Antonovsky, 1994, p. 14). Social support may represent an alternative road through which caregiver spouses' sense of coherence is strengthened, in turn leading to better adjustment. The experience of feeling supported during this difficult ordeal may help caregivers perceive of their lives as comprehensible, manageable, and meaningful.

Social support as a psychosocial resource.

It has been documented extensively in the stress and coping literature that social support can lead to better outcomes for individuals confronted with stressful life events (e.g., Cohen & Wills, 1985; Pistrang & Barker, 1995; Vachon, 1986; Wortman & Conway, 1985). In her conceptualization of social support as coping assistance, Thoits (1986) has suggested that social support is having others engage, with the individual, in the management of stress. The participation of others in such stress-management helps by "changing or eliminating the primary sources of threat to the individual" (p. 417). Abbey, Andrews and Halman (1991) contend that esteem, or emotional support, is usually viewed as the most crucial component of social support. Wills (1985) explains

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that a negative life event can precipitate a sense of failure and threaten self esteem. The emotional support aspect of social support provides its recipient with the message that he or she is valuable, and this affirmation of caring and respect can help lessen the effects of stress and somewhat restore psychological well-being.

Social support has been found to be of special value to caregivers (Haley, Levine, Brown, & Bartolucci, 1987; Knight, Devereux, & Godfrey, 1997; Pearlin et al., 1990; Thompson et al., 1993; see review by Vrabec, 1997). In a study of family caregivers of cancer patients receiving chemotherapy, for example, Schumacher, Dodd, and Paul (1993) found that perceived adequacy of social support was one of the variables that significantly predicted reduced caregiver depression. In her investigation of the phenomenon of suffering among family caregivers of patients with cancer, Hinds (1992) determined that one of the sources of suffering was lack of support. Similar results have been found in studies of patients with severe traumatic brain injury and their caregivers (Douglas & Spellacy, 2000); caregivers for the severely mentally ill (Kaufman, 1998; Well et al., 1998); spouses of individuals with spinal cord injuries (Chan, 2000); and caregiving spouses of patients with Alzheimer's disease (Mittelman et al., 1995).

Given the value of social support, it is unfortunate that caregivers are often unlikely to receive sufficient support (Davis-Ali et al., 1993; Kalayjian, 1989; Oberst & James, 1985). For example, Northouse et al. (2000) found in their study of couples' adjustment to colon cancer that although caregiving spouses experienced significantly more emotional distress than the patients themselves, in terms of symptoms of psychiatric symptomatology and in terms of problems with carrying out their various roles, they received less social support than did the patients. Similarly, in a postsurgery study of

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mastectomy patients and their husbands, Northouse (1988) found that husbands received significantly less support than their wives from friends, nurses, and physicians, and reported less total support than did the patients. In a study of older couples, Wallsten (2000) compared those involved in spousal caregiving to those who were not. She determined that although caregivers were in worse physical health than noncaregivers, there was no significant difference between the groups in terms of numbers of social supports; that is, caregivers did not have more social support to aid them in their caregiving role.

Spousal caregivers in particular have been found to have smaller social support networks than other caregivers (Miller & McFall, 1991). It is especially poignant that although they themselves frequently do not receive adequate social support, caregiving spouses often are concerned that they are not doing a good job of providing support for their ill spouses; they are critical of their own attempts to alleviate their ill spouses' emotional distress. In the study of cancer pain conducted by Dar et al. (1992) researchers found that spouses of cancer patients were less satisfied than the patients themselves with the amount of emotional support they provided to the patients and with their helpfulness in coping with the cancer pain. They underestimated the patients' experience of receiving spousal support. Specifically, patients ranked their spouses' supportiveness higher than did the spouses themselves.

Negative aspects of social support.

Increasingly, it has become evident from the social support literature that at times, certain aspects or types of social support may be experienced as negative (Coyne, Ellard, & Smith, 1990; Krause, 1995; Kuijer et al., 2000; Revenson, Schiaffino, Majerovitz, &

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Gibofsky, 1991; Rook & Pietromonaco, 1987; Wortman & Lehman, 1985). Negative social interactions may be seen as inducing stress rather than inducing well-being (Shinn, Lehmann, & Wong, 1984); that is, they are often experienced as stress rather than support.

Social support can be perceived of negatively at those times when there is a misfit between the individual's needs and the provision of support (Revenson, 1990). Emotional overinvolvement and "miscarried helping" (Coyne, Wortman, and Lehman, 1988) in interpersonal relationships can sometimes be a problem. For this can precipitate overprotectiveness, intrusiveness, overindulgence or excessive self-sacrifice in a manner that is burdensome to the recipient (Coyne & DeLongis, 1986; Kuijer et al., 2000).

Thus, social support can be characterized in terms of whether it is beneficial or problematic. Dakof and Taylor (1990) conducted a study in which cancer patients were asked to talk about the types of social support that they found to be either helpful or unhelpful. Examples of helpful support included family members "just being there;" expressing concern, empathy, or affection; and calmly accepting the illness and its consequences. Examples of unhelpful support included family members criticizing the patient's response to the illness; minimizing the impact of cancer on the patient; and either expressing too much worry and pessimism or expressing too little concern, empathy, or affection.

Reports of negative support are infrequent (Finch, Okun, Barrera, Zauta, & Reich, 1989; Rook, 1984); however, the potential effects of negative support are important to consider. In a study of patients with rheumatoid arthritis, Revenson et al. (1991) found that whereas positive or helpful support from close friends and family was associated

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with reduced depression, problematic support was associated with increased depression. In addition, there was an interaction effect between the two types of support, such that for those patients who received higher levels of positive support, problematic support had no affect on their levels of depression. However, for those patients who received lower levels of positive support, problematic support was related to higher levels of depression. Results suggest that whereas positive support can act as a buffer, minimizing the negative effect of problematic support, for those who have little positive support, negative support has the potential to be a serious problem.

Gender differences in social support.

Gender differences in social support have been found in the caregiving literature. For example, in the study of older couples mentioned earlier, in which caregiving couples were examined in comparison to noncaregiving couples, Wallsten (2000) found that women had a significantly greater number of social network members than did men. Contrastingly, in their study of couples' adjustment to colon cancer Northouse et al. (2000) looked at the influence of gender (male versus female) and role (patient versus caregiving spouse) and found a gender by role interaction, such that caregiving wives reported less support than caregiving husbands.

A growing number of studies have looked at gender differences in various circumstances (e.g., Lev-Wiesel, 1999; Lu, 1995; Rosario, Shinn, Morch, & Huckabee, 1988) and study results have generally demonstrated that women tend to have much broader support networks than do men (Flaherty & Richman, 1989; Barker, Morrow, & Mitteness, 1998) and to receive more emotional support (Belle, 1987; Gaugler, Zarit, & Pearlin, 1999; Matthews, Stansfeld, & Power, 1999; Vaux, 1985). They are also more

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likely to mobilize social support for themselves in times of stress (McMullen & Gross, 1983) and are involved in relationships that are more emotionally intimate (Belle, 1987). Barker et al. (1998) cite Wright's (1982) characterization of this gender difference, and note, "Women's relationships with one another have been characterized as 'face to face' whereas men's same sex friendships have a quality of being 'side by side' " (Barker et al., p. 217). Wright posits that whereas in men's side-by-side relationships, the partners are oriented together towards some outside task and activity, in women's face-to-face relationships, they are oriented together towards an intimate knowledge and concern for one another.

There are several explanations for these gender differences. Belle (1987) has noted that social norms for male behavior usually include self-reliance and keeping to a minimum any engagement in emotional expressiveness, self-disclosure, and help-seeking. In contrast, norms for female behavior include participating in intimate relationships and to some extent defining oneself in terms of those relationships. Along the same lines, Sabo (1990) has suggested that as men are generally socialized to ignore, disregard, and/or conceal their fears, they may see asking for support as a show of dependency. This may also render them less open to offers of social support. Another explanation is based on women's tendency to seek social support as a means of coping with stress (Lev-Wiesel, 1999).

Social support and sense of coherence.

There is a small body of research that has included both social support and sense of coherence as variables of interest. In a study of patients recovering from a first acute myocardial infarction, Drory, Kravetz, and Florian (1999) found that patients with higher

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levels of sense of coherence at time of discharge exhibited better psychosocial adjustment 3 to 6 months later. Specifically, they did better in four of seven domains related to psychosocial adjustment to illness, i.e., health care orientation, extended family relationships, social environment (the extent to which illness interferes with social and leisure activities), and psychological distress associated with the illness. They found as well that patients with higher levels of perceived social support at time of discharge exhibited better psychosocial adjustment 3 to 6 months later. Specifically, they did better in the following three domains: domestic (the extent to which the present illness produced difficulties in the home or usual family environment), extended family relationships, and social environment. Both sense of coherence and perceived social support were significantly and negatively correlated with the depression, such that patients with higher levels of each were less depressed. Finally, there was a significant correlation between sense of coherence and perceived social support, such that higher levels of sense of coherence were associated with higher levels of perceived social support.

In a study of adults with HIV, Linn, Lewis, Cain and Kimbrough (1993) determined that a greater sense of coherence (i.e., purpose and meaning derived from their situation) and higher levels of social support (i.e., more confidants) predicted higher levels of self-esteem and less anxiety. In addition, they found that a greater level of social support predicted a greater sense of coherence. In her study of single mothers, Gottlieb (1994) found that those with low levels of sense of coherence had significantly smaller size support networks, fewer people in their lives to provide emotional support, and fewer informal supports (i.e., friends, coworkers, support-group associates).

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In contrast, in their study of college students, Hart et al. (1991), found no association between sense of coherence and social support. They examined whether individuals with higher levels of sense of coherence perceive social support to be more readily available than those with lower levels of sense of coherence and found that sense of coherence was unrelated to the perceived availability of four different types of social support (tangible support, appraisal support, self-esteem support, and belongingness support).

In conclusion

Spouses of terminally ill cancer patients are living through a complicated experience, in which many of these issues are intertwined and overlap. Indeed, even in quantitative terms, the significant statistical intercorrelations that will be discussed below demonstrate the extent to which one study variable intersects with another. In this regard, for example, in trying to understand the richness of the participants' experiences, the reader is encouraged to listen to the resonance with which the meaning-making aspect of religiosity responds to the meaningfulness aspect of sense of coherence.

The various facets of the caregiving spouses' ordeal cannot be divided up into distinct, neat little boxes. For the potpourri of lived experiences of which their lives are comprised is fluid. Though it is tempting to look for a clean, uncomplicated understanding of things, in an effort to make sense of what is happening and clear away the "mess," we do not want to sacrifice the richness and complexity that is more true to the overall phenomenon.

In addition, given the study's recognition of the importance of gender, it is possible -- and perhaps likely -- that two separate stories will emerge, one for men and

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one for women. For as has been delineated throughout the review, gender differences have been found in the literature between the ways in which men and women encounter the experience of caregiving itself, and in the ways in which they relate to several key study variables.

Hypotheses

This study specifically proposes the following hypotheses:

Hypothesis 1: Caregiving spouses of terminally ill cancer patients will report high levels of depression.

It is expected that given the difficulties of their situation, in which they are caring for terminally ill spouses while simultaneously anticipating impending widowhood, caregiving spouses will have high scores on the measure of depression.

Hypothesis 2: Caregiving wives will report higher levels of depression than caregiving husbands.

It is expected that given that women have been shown to be more adversely affected by the caregiving experience, caregiving wives will have higher scores on the measure of depression than caregiving husbands.

Hypothesis 3: Higher levels of intrinsic religiosity will be associated with less depression.

It is expected that higher scores on the measure of intrinsic religiosity will be associated with lower scores on the measure of depression. Increased religiosity is expected to be a psychosocial resource that helps them better adjust to the crisis of living with a terminally ill spouse.

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<u>Hypothesis 4</u>: Viewing one's religious beliefs as important will be associated less depression.

It is expected that rating one's religious beliefs as more important will be associated with lower scores on the measure of depression. The perception of religious beliefs as important is expected to render religiosity a psychosocial resource for them during this crisis.

<u>Hypothesis 5</u>: Viewing one's religious beliefs as a source of comfort will be associated with less depression.

It is expected that rating one's religious beliefs as more of a source of comfort will be associated with lower scores on the measure of depression. The perception of their religious beliefs as a source of comfort is expected to render religiosity a psychosocial resource for them during this crisis.

<u>Hypothesis 6</u>: Women will exhibit higher levels of intrinsic religiosity than men.

It is expected that caregiving wives will report higher scores on the measure of intrinsic religiosity than caregiving husbands. This is based on extensive literature demonstrating that women of all ages are more religious than men in both religious participation and religious practice, and that with particular regard to older individuals, women have been found consistently to display significantly higher religiosity than men.

<u>Hypothesis 7</u>: Higher levels of sense of coherence will be associated with less depression.

It is expected that higher scores on the measure of sense of coherence will be associated with lower scores on the measure of depression. An increased sense of

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coherence is expected to be a psychosocial resource that helps them by providing a framework through which to understand their crisis experience.

Hypothesis 8: higher levels of social support will be associated with less depression.

It is expected that higher scores on the measure of social support will be associated with lower scores on the measure of depression. Social support is expected to be a psychosocial resource for them during this difficult time.

Hypothesis 9: Women will exhibit higher levels of social support than men.

It is expected that caregiving wives will report higher scores on the measure of social support than caregiving husbands. This is based on extensive literature demonstrating that women have broader support networks than men and receive more emotional support.

Hypothesis 10a: High levels of intrinsic religiosity and/or social support will render a high sense of coherence.

Hypothesis 10b: In turn, a high sense of coherence will lead to less depression.

It is expected that sense of coherence will be engendered by intrinsic religiosity and/or social support, in turn leading to less depression. Higher levels of intrinsic religiosity may engender higher levels of a sense of coherence by enabling the individual to see the world as more comprehensible and meaningful. High levels of social support may engender higher levels of sense of coherence by enabling the individual to see the world as more manageable and meaningful. In turn, an enhanced sense of coherence,

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engendered by either one or both of these two factors, is expected to lead to less depression.

Method

Participants

Study participants were 122 caregiving spouses with a mean age of 63.7 years (SD = 7.4). Forty-eight (39.3%) were men and 72 (60.7%) were women. They were recruited from two large metropolitan cancer centers in New York City, as part of a five-year longitudinal study. The goal of the larger study was to carry out a comprehensive preventive mental health intervention for older married adults facing the impending cancer-related death of their spouse and evaluate the efficacy of the program.

Participants were older adults between the ages of 50 and 80 who met the following criteria for inclusion upon entry into the study: (a) Their ill spouses had been diagnosed with cancer at least 6 months prior to accrual into the study and had a life expectancy of 6 months or less; (b) they were married to and living with the patient; (c) they self-identified as the patient's caregiver and provided, on average, more than 8 hours of illness-related practical or instrumental assistance per week; and (d) they themselves had a chronic health condition or activity-limiting condition of 6 months or longer in duration. The reason for including this last criterion was to target for intervention a sample at high-risk for negative bereavement outcomes, as spouses with pre-existing health conditions are 1.5 times more likely to be depressed upon bereavement (McHorney & Mor, 1988) and the grief of bereavement has been found to exacerbate pre-existing mental or physical health problems (Sanders, 1988).

Procedure

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Upon entry into the study, approximately 6 months before the anticipated deaths of the spouse, each participant took part in an extensive baseline face-to-face psychosocial interview that assessed the various study variables. Standard sociodemographic data were collected, including: gender, age, ethnicity, education, work status, length of marriage, parental status, and religious denomination. In addition, the measures described below were administered as part of the research protocol. Approval from an Institutional Review Board was obtained for the implementation of the overall study and written informed consent was received from all participants before the commencement of the research interviews.

Measures

Religiosity.

Intrinsic religiosity was assessed with Hoge's (1972) Intrinsic Religious Motivation Scale (IRM), derived from Allport and Ross' 1967 measure of intrinsic-extrinsic religious orientation. The measure focuses on the motivation for religious behavior and depth of belief, i.e., religious commitment. The IRM is a 10-item measure whose response choices range from "strongly agree" to "strongly disagree" on a 5-point Likert scale. A sample item is: My faith involves all of my life. For the study sample, the alpha coefficient of the measure was .92.

Also included was an individual item asking about how important participants consider their religious beliefs. Response choices ranged from "very important" to "not at all important" on a 4-point Likert scale. The item was worded: How important would you say your religious or spiritual beliefs are to you?

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A second individual item asked about the extent to which participants have found their religious beliefs to be a comfort to them during their spouses' illness. Response choices ranged from "a great deal of comfort" to "no comfort at all" on a 4-point Likert scale. The item was worded: How much comfort have your religious or spiritual beliefs been to you in your spouse's illness since the diagnosis?

Attendance at religious services was used as a proxy for religious immersion rather than attendance per se, for often elderly caregivers cannot attend services despite their wish to do so, due to their caregiving responsibilities, advanced age, and/or age-related poor health. For example, in Baines' (1984) study of family caregivers of the elderly, more than half (54%) reported that they did not have the opportunity to attend religious services. Response choices ranged from "never" to "every day" on a 7-point Likert scale.

Social Support.

Emotional social support was assessed with an emotional support subscale of a modified version of the Inventory of Socially Supportive Behaviors ([ISSB], Barrera, Sandler, & Ramsey, 1981), as revised by Krause and Markides (1990). The ISSB measures the frequency with which the participant has been the recipient of supportive behaviors within the preceding month. The emotional support subscale has 10 items, whose response choices range from "never" to "very often" on a 4-point Likert scale. A sample item is: Within the last month, how often has anyone expressed interest and concern in your well-being? For the study sample, the reliability of the measure was .83.

Sense of Coherence.

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Sense of coherence was assessed with the 8-item "coherence" dimension of Reker's (1992) Life Attitude Profile -Revised (LAP-R), a multidimensional measure based on the existentialist philosophy of Frankl (1959). Response choices for the items range from "strongly agree" to "strongly disagree" on a 7-point Likert scale. A sample item is: I have a framework that allows me to understand or make sense of my life. For the study sample, the reliability of the measure was .90.

Psychological Symptomatology.

The dependent variable for adjustment was the 6-item depression dimension of the Brief Symptom Inventory ([BSI], Derogatis & Spencer, 1982), a 53-item symptoms inventory that is a shortened version of the Symptom Check List 90-R (Derogatis & Melisaratos, 1983). The BSI assesses the intensity of distress within the preceding week with regard to 9 symptom subscales and a summary severity index. Response choices range from "not at all" to "extremely" on a 5-point Likert scale. A sample item of the depression subscale is: During the past week, how much were you distressed by feeling lonely even when you are with people? For the study sample, the reliability of the depression dimension was .77.

Results

In this section, results are first presented for the overall sample. With regard to the key study variables (i.e., religiosity, social support, sense of coherence, depression), results include mention of gender differences. In the same vein, intercorrelations among study variables are first presented in terms of the overall sample and then are presented separately for each gender. Finally, path analyses results are presented first for the overall sample and then for each gender.

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Sociodemographics

Sociodemographics for the study sample are depicted in Table 1. About three-fifths of the sample was female (60.7%), and a majority was White (89.3%). Almost half of the sample (47.5%) was in the 61-70 years age range (mean age = 63.7 years, SD = 7.4), with about a third of the sample younger (30.3%) and a fifth older (22.1%). This was a relatively well-educated group, with about a quarter of the sample having graduated high school (23%), an additional 39.4% having either attended some college or obtained a college degree, and about a third (33.6%) having either attended some graduate school or completed graduate or professional training. Almost half the well-spouses (47.5%) were employed either full or part-time. The couples had been married, on average, 36 years (SD = 11.9), with an average of 2.6 children (SD = 1.2).

Religiosity

Table 2 presents the religious sociodemographics of the sample. About two-fifth of the sample self-identified as Roman Catholic (43.8%), a little more than a third as Jewish (36.4%), 13.3% as Protestant, and 1.7% as Greek/Russian Orthodox. The remainder of the sample (5.8%) reported either belonging to another religion, or having no religious affiliation.

With regard to the individual item asking about the importance of religious beliefs, more than half of the participants (52.1%) rated their religious beliefs as very important and about a fifth of the sample (21.5%), rated their religious beliefs as fairly important. About a quarter of the sample (26.4%) rated their beliefs as either not at all important or a little important.

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There was a greater range of responses with regard to the perception of religious beliefs as a source of comfort, with almost two-fifths of participants (39.7%) rating their religious beliefs as a source of a great deal of comfort, about a quarter (24%) rating them as somewhat of a comfort, and about the remaining third (36.3%) rating them as either no comfort at all or only a little comfort.

About one-third (33.8%) of participants reported attending religious services at least once a week, with 6.6% attending several times a week. An additional 13.4% reported attending religious services at least once a month, about a third (32.2%) reported attending only several times a year and about a remaining fifth of the sample (20.7%) reported that they never attend religious services.

On the Intrinsic Religious Motivation Scale, the range of possible scores was 10 to 50. With a total scale mean score of 30.42 (SD = 10.02), the group as a whole scored approximately at the midpoint in terms of intrinsic religiosity (see Table 3). This group mean is higher than that found by Thorson and Powell (1990) in their mixed sample (mean age = 43.6 years [SD = 23.4], in which the group mean was 25.87 (SD = 8.44). However, in that study, when the sample was divided into age categories, those 37-67 years of age reported a mean of 29.21 (SD = 7.53) and those 68-88 years of age reported a mean of 27.61 (SD = 7.16), both of these more in line with the group mean of this study. Participants in Thorson and Powell's younger categories reported lower means.

There was no significant difference between men and women on intrinsic religiosity, $F(1, .74) = .79$, $p = .387$, despite the study hypothesis that women would be found to exhibit higher levels of this variable. There were also no significant gender

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differences with regard to the importance of religion, F(1, .26) = .12, p = .73, or comfort from religion, F(1, 2.98) = 2.02, p = .16.

Social support

Item means and standard deviations for social support are presented in Table 4. The range of possible scores was 10 to 40. With a total scale mean score of 21.84 (SD = 6.16), the group as a whole was on the low side of emotional social support (see Table 4). In support of the study hypothesis, that women experience more social support than men, a significant difference was found between men and women on emotional social support, F(1, 741.48) = 23.35, p = .000, with women reporting significantly higher levels of emotional support (M = 23.89 [SD = 5.99] versus M = 18.72 [SD = 5.04]). This is similar to the findings of Stokes and Wilson (1984), in their exploration of gender differences in social support as measured by the ISSB. They found as well that women reported more emotional social support than men (t(177) = -3.378, p < .001.

In order to determine whether levels of social support could be associated with employment status (i.e., participants who were employed may have received more social support from their social networks at work), employment status was examined in terms of gender. Results of statistical crosstabulations indicated no differences in employment status between men and women (x^2 [1, N = 122] = 1.39, p = .238).

Sense of coherence

Item means and standard deviations for sense of coherence are presented in Table 5. With the range of possible scores being 8 to 56, the total scale mean score of 40.04 (SD = 10.05) is on the high end. This group mean is somewhat higher than the total group mean of 38.40 (SD = 8.30) found by Reker (1992) in his normative sample.

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However, it is similar to the means found by Reker in his normative sample, when divided into age categories. Those in the age group of 45-59 years reported a mean for the coherence dimension of 40.51 ($\underline{SD}$ = 8.33) and those in the age group of 60-89 years reported a mean of 41.24 ($\underline{SD}$ = 7.31).

A significant difference was found between men and women on sense of coherence, $\underline{F}(1, 380.53) = 3.86$, $\underline{p} = .05$., with men reporting significantly higher levels of sense of coherence ($\underline{M}$ = 42.25 [$\underline{SD}$ = 8.00] versus $\underline{M}$ = 38.60 [$\underline{SD}$ = 10.0]. This stands in contrast to what was found by Reker (1992) when he divided his normative sample by gender. He found that women were higher on coherence than men, with women reporting a mean of 39.07 ($\underline{SD}$ = 8.01) and men reporting a mean of 37.14 ($\underline{SD}$ = 8.70), $p \leq .05$.

Depression

Item means and standard deviations for the depression dimension of the Brief Symptom Inventory are presented in Table 6. Raw scores were converted into sex-specific T-scores to control for the tendency of women to report more depressive symptoms than men. The mean T-score for the sample was 58.15 ($\underline{SD}$ = 9.29), almost one standard deviation above the mean reported for a normative sample of non-patient "normal" adults. A T-score of 63 or higher has been defined by the developers of the measure as contributing to caseness for the overall Brief Symptom Inventory. According to this cut-off point, more than a third of the participants (36.7%) were at a high level of depressive distress. This is in line with the study hypothesis that caregiving spouses would report high levels of depression. In contrast to the study hypothesis, that caregiving wives would report higher levels of depression than caregiving husbands, no

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significant difference was found between men and women on depression, $F(1, 147.036) = 1.71$, $p = .19$.

Intercorrelations among study variables for overall sample

Table 7 presents the intercorrelations among study variables for the overall sample. In contrast to the study hypothesis, that high levels of intrinsic religiosity would be associated with better adjustment, no association was found between the extent of intrinsic religiosity and psychological adjustment, i.e., level of depression. There were also no associations between the degree to which study participants viewed their religious beliefs as important and their levels of depression, and the degree to which study participants derived comfort from their beliefs and their levels of depression. This again was in contrast to study hypotheses that viewing one's religious beliefs as important and/or a source of comfort would be associated with better adjustment.

The two individual religiosity variables were strongly related to each other: a significant association was found between the importance of religious beliefs and the extent to which participants derived comfort from their beliefs ($r = .770$, $p \leq .01$), such that those who evaluated their religious beliefs as more important were more likely to find comfort in them. In addition, both individual religiosity items (importance of religious beliefs and comfort derived from religious beliefs) were strongly related to the intrinsic religiosity variable ($r = .788$, $p \leq .01$ and $r = .781$, $p \leq .01$, respectively).

In support of what was hypothesized, that higher levels of sense of coherence would be associated with better adjustment, sense of coherence was found to be significantly and inversely related to depression ($r = -.249$, $p \leq .01$). In addition, again in line with study hypotheses, intrinsic religiosity and sense of coherence, were found to be

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significantly and positively related with each other ($\underline{r}$ = .424, $\underline{p} \leq .01$), such that higher levels of intrinsic religiosity were associated with higher levels of sense of coherence. Similarly, sense of coherence was significantly related to the individual religiosity variables as well: With regard to the association between sense of coherence and the importance of religious beliefs, the *pearson r* was .373 ($\underline{p} \leq .001$) and with regard to the association between sense of coherence and comfort from beliefs, it was .471 ($\underline{p} \leq .01$).

In contrast to the study hypothesis that higher levels of social support would be associated with better adjustment, no association was found between social support and the outcome variable of depression. Social support also was not significantly associated with any of the religiosity variables, although there was a trend toward an association between social support and comfort from religion ($\underline{r}$ = .174, $\underline{p} \leq .063$). Finally, social support also was not associated with sense of coherence.

Given that earlier analyses revealed gender differences regarding some of the study variables (i.e., men reporting higher levels of sense of coherence and women reporting greater social support), the decision was made to examine the intercorrelations among the variables separately for men and women.

<u>Intercorrelations among study variables for women</u>

Table 8 presents the intercorrelations among study variables for the women in the sample. In this subsample as well, in contrast to the study hypothesis that high levels of intrinsic religiosity would be associated with better adjustment, no association was found between the extent of intrinsic religiosity and level of depression. There were also no association between the degree to which study participants viewed their religious or spiritual beliefs as important and their levels of depression. However, in contrast to the

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findings in the overall sample, there was a significant inverse correlation between the degree to which women participants derived comfort from their beliefs and their levels of depression (r = -.231. $p \leq .05$), such that women who derived comfort from their beliefs reported lower levels of depression. As in the overall sample, there was again a strong significant association between the two individual religiosity items (r = .818, $p \leq .01$), such that those who evaluated their religious beliefs as more important were more likely to find comfort in them. Again, with regard to women, both individual religiosity items (importance of religious beliefs and comfort derived from religious beliefs) were strongly related to the intrinsic religiosity variable (r = .803, $p \leq .01$ and r= .799, $p \leq .01$, respectively).

In support of what was hypothesized, that higher levels of sense of coherence would be associated with better adjustment, sense of coherence again was found to be significantly and inversely related to depression (r = -.276, $p \leq .05$), such that higher levels of sense of coherence were associated with lower levels of depression. And as hypothesized, intrinsic religiosity and sense of coherence, again were found to be significantly and positively related to each other (r = .473, $p \leq .01$), such that higher levels of intrinsic religiosity were associated with higher levels of sense of coherence. Similarly, sense of coherence was significantly related to the other religiosity variables as well, although the effect sizes of these correlations were smaller than with the overall sample: With regard to the association between sense of coherence and the importance of religious beliefs, the *pearson r* was .399 ($p \leq .01$) and with regard to the association between sense of coherence and comfort from beliefs, it was .534 ($p \leq 01$).

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Social support again was not associated with the outcome variable of depression, despite the study hypothesis that higher levels of social support would be associated with better adjustment. It also was not significantly associated with any of the religiosity variables. However, in contrast to the findings in the overall sample, with regard specifically to women, there was a significant association between social support and sense of coherence ($r = .254$, $p \leq .05$), such that those women with higher levels of social support had a higher sense of coherence.

Intercorrelations among study variables for men

Table 9 presents the intercorrelations among study variables for the men in the sample. In this subsample as well, in contrast to the study hypothesis that high levels of intrinsic religiosity would be associated with better adjustment, no association was found between the extent of intrinsic religiosity and level of depression. There were also no associations between the degree to which study participants viewed their religious or spiritual beliefs as important and their levels of depression, and the degree to which study participants derived comfort from their beliefs and their levels of depression. There again was a strong significant association between the two individual religiosity variables ($r = .718$, $p \leq .01$), such that those who evaluated their religious beliefs as more important were more likely to find comfort in them. In addition, both individual religiosity items (importance of religious beliefs and comfort derived from religious beliefs) were strongly related to the intrinsic religiosity variable ($r = .758$, $p \leq .01$ and $r = .813$, $p \leq .01$, respectively).

In support of what was hypothesized, that higher levels of sense of coherence would be associated with better adjustment, sense of coherence again was found to be

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significantly and inversely related to depression (r = -.298, $p \leq .05$), such that higher levels of sense of coherence were associated with lower levels of depression. With regard to the association between intrinsic religiosity and sense of coherence, in contrast to the findings in the overall sample and in the subsample of women, only a trend towards significance was found (r = .275, $p \leq .06$) in this subsample of men. However, sense of coherence was significantly related to the other religiosity variables: With regard to the association between sense of coherence and the importance of religious beliefs, the *pearson r* was .306 ($p \leq .05$) and with regard to the association between sense of coherence and comfort from beliefs, it was .451 ($p \leq .01$).

In contrast to findings in both the overall sample and the women subsample, with specific regard to the men, social support was significantly associated with the outcome variable of depression (r = .325, $p \leq .05$); however, this was in the opposite direction from the study hypothesis that higher levels of social support would be associated with better adjustment, i.e., less depression. Rather, higher levels of social support were associated with *higher* levels of depression.

Similar to what was found in earlier analyses, social support was not significantly associated with any of the religiosity variables, although there was a trend toward an association between social support and comfort from religion (r = .282, $p \leq .057$). However, in contrast to the findings with regard to women, there was no significant association between social support and sense of coherence.

Differences in religious affiliation

Study variables were examined with respect to differences in affiliation. Analyses of variance revealed no significant differences between groups with regard to

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sense of coherence, social support or depression. With regard to depression, this no-difference finding contrasts with McCullough and Larson's (1999) literature review of the association between religious affiliation and depressive symptoms. They found that Jews had about a twofold higher risk for depression compared to members of other religions (Kennedy, Kelman, Thomas, & Chen, 1996), possibly as a function of generally reduced rates among Jews of alcohol abuse and dependence. That is, Jews have been found to be less likely to turn to alcohol in an attempt to deal with stress, i.e., to dull the pain of distressing emotions, thus rendering them more likely to experience and report higher levels of depression. Studies comparing members of Pentecostal faiths with non-Pentecostals found that the former had rates of depression three times higher than the latter (Meador et al., 1992). There was also a suggestion that those with no religious affiliation were at an elevated risk for depression compared to those who were religiously affiliated (Koenig et al., 1992). A significant difference was found on an observer-administered rating scale, but not on a self-report measure of depression.

However, significant group differences were found with regard to intrinsic religiosity ($F(4,8.959) = 13.577$, $p = .000$. Specific multiple comparisons among the groups indicated that those identifying themselves as having no religious affiliation (N = 3, $M = 1.60$ [$SD = 1.04$]) were significantly lower in intrinsic religiosity than Protestants (N = 15, $M = 3.58$ [$SD = .79$]) and Catholics (N = 55, $M = 3.49$ [$SD = .72$]), although not significantly different from Jewish participants (N = 44, $M = 2.47$ [$SD = .91$]) or those identifying with other religions (N = 3, $M = 3.13$ [$SD = .91$]). Similarly, Jewish participants also significantly differed from Protestant and Catholic participants, such that they reported significantly lower rates of intrinsic religiosity; they did not differ from

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those identifying with other religions or, as mentioned above, with those identifying themselves as having no religious affiliation. There were no significant differences between Protestants and Catholics in mean levels of intrinsic religiosity.

Differences in attendance at religious services / religious immersion

Study variables were also examined with respect to differences in attendance at religious services as a proxy for religious immersion, as discussed above. The groups were divided into those who attended services often, intermittently, or not at all. Analyses of variance revealed no significant differences between groups with regard to social support or depression. The no-difference finding between groups regarding depression controverts the finding of Kennedy et al. (1996) in their study of older community residents; they determined that frequent religious attendance was related to lower rates of depression. Idler and Kasl's (1997) study of older adults similarly found that attending religious services was related to fewer depressive symptoms.

Significant group differences were found with regard to intrinsic religiosity ($F(2,20.044) = 32.739$, $p = .000$ and sense of coherence ($F(2,740.163) = 8.426$, $p = .000$). Specific multiple comparisons among the groups indicated that with regard to intrinsic religiosity, all three groups were significantly different from each other, with those who attended religious services often reporting highest levels of intrinsic religiosity ($N = 41$, $M = 3.80$ [$SD = .56$]), those who attended intermittently reporting lower levels of intrinsic religiosity ($N = 54$, $M = 2.90$ [$SD = .79$]), and those who never attended ($N = 25$, $M = 2.25$ [$SD = 1.04$]), reporting lowest levels of intrinsic religiosity. With regard to sense of coherence, analyses revealed that those who attended often ($N = 40$, $M = 44.95$ [$SD = 8.01$]) were significantly higher in sense of coherence than both those who

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attended intermittently (N = 54, M = 38.56 [SD = 9.48]) or not at all (N = 24, M = 35.96 [SD = .11.11); there was no significant difference in sense of coherence between those who attended services intermittently and those who never attended.

Testing models

The next step of analysis examined whether the data fit a mediational model, whereby the independent variables (religiosity and/or social support) affect the dependent variable (depression) through a mediator variable (sense of coherence). The data did not fit a mediational model because to establish mediation, one of the three conditions that must be met is that "the independent variable must be shown to affect the dependent variable" in a regression equation (Baron & Kenny, 1986, p. 1177). This condition was not met by the data.

LISREL path analysis next was used to test whether intrinsic religiosity and/or social support predicted sense of coherence, which, in turn, predicted depression. Results indicated that the model provided a good fit to the data, with a x^2 of 1.62 ($p = .44$), a Root Mean Square Residual (RMR) of 0.038, an Adjusted Goodness of Fit Index (AGFI) of 0.96, a Comparative Fit Index (CFI) of 1.00, and an R^2 of .21.

With regard to the significance of specific paths, analyses indicated that whereas the path between intrinsic religiosity and sense of coherence was significant ($z = 4.51$, $p =\leq .001$), the path between social support and sense of coherence was not ($z = .57$, $p = .569$). The path between sense of coherence and depression was significant as well ($z = -.239$, $p = .017$). Thus, for the overall sample, the data indicated that a greater level of intrinsic religiosity predicted a greater sense of coherence, which, in turn, predicted less depression. (See Diagram 1a.)

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As gender differences were found in several of the intercorrelations, the decision was made to next examine men and women separately in order to determine whether and to what extent the data fit the model for each group. Thus, LISREL path analysis next again was used for the subsample of women to test whether intrinsic religiosity and/or social support predicted sense of coherence, which, in turn, predicted depression. Results indicated again that the model provided a good fit to the data, with a x^2 of 1.35 (p= .51), an RMR of 0.043, an AGFI of 0.95, a CFI of 1.00, and an R^2 of .31.

With regard to the significance of specific paths, analyses indicated that the path between intrinsic religiosity and sense of coherence was significant (z = 3.94, p = ≤ .001) and the path between social support and sense of coherence was marginally significant (z = 1.90, p = ≤ .057). In addition, for the women as well, the path between sense of coherence and depression was significant (z = -1.95, p=.051). Thus, for the women's subsample, the data indicated that higher levels of intrinsic religiosity *and,* marginally, of social support predicted a greater sense of coherence, which, in turn, predicted less depression. (See Diagram 1b.)

LISREL path analysis next again was used to test for the subsample of men whether intrinsic religiosity and/or social support predicted sense of coherence, which, in turn, predicted depression. Results indicated that the model did not provide a good fit for the data, with a x^2 of 5.57 (p= .062), an RMR of 0.11, an AGFI of 0.70, a CFI of .62.

In post hoc analyses, multiple regression was used for men, to examine whether intrinsic religiosity, social support, and/or sense of coherence were direct predictors of depression. Results indicated that the overall model for men was significant (F = 3,41) = 3.50, p = .024, with an adjusted R^2 of .15. Specifically, greater levels of social support

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and lower levels of sense of coherence predicted more depression. However, intrinsic religiosity was not a significant predictor of depression.

Based on these results, the path model for men was respecified to include an additional direct path between social support and depression. Results indicated that the model provided a better fit for the data, with a x^2 of .20 (p= .65), an RMR of .018, an AGFI of 0.98, a CFI of 1.00, and an R^2 of .28.

With regard to the significance of specific paths, analyses indicated that the path between intrinsic religiosity and sense of coherence was marginally significant (z = 1.90, p = .057) and the path between social support and sense of coherence was not significant (z = .-0.27, p = .787). In addition, the path between sense of coherence and depression was significant (z = -2.23, p=.026). The direct path from social support to depression that was included in this respecified model was also significant (z = 2.42, p=.016). Thus, for the men's subsample, the data indicated that higher levels of intrinsic religiosity marginally predicted a greater sense of coherence, which, in turn, predicted less depression, and higher levels of social support directly predicted more depression. (See Diagram 1c.)

Discussion

This study examined spouses of terminally ill cancer patients. Participants represented a particularly distressed population, dealing not only with the travails of constant caregiving, but with the prospect of impending widowhood as well, with the concomitant vulnerabilities of that major life event (Holmes & Rahe, 1967). The study built upon the existing literature regarding the difficulties of caregiving (Raveis et al., 1998; Toseland et al., 1995; Yates et al., 1999) and broadened the discussion of potential

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psychosocial resources for spouses confronted with the challenges of living with the terminally ill (Brown & Stetz, 1999; Siegel et al., 1996, Vachon et al., 1982). Several points raised in this discussion perhaps are best illustrated by verbatim quotes from the study participants themselves, drawn from intervention sessions that were conducted as part of the larger study. The remainder of the paper will be sprinkled with a sample of quotes specifically related to the issues under discussion. The format of the discussion is to first restate the results and to compare them to previous research findings in the literature. Next, the implications of the study results are elaborated, study limitations delineated, and suggestions made for future research.

As a whole, study participants were quite distressed: They scored almost one standard deviation above the mean reported for a normative sample of non-patient normative adults. Specifically, more than a third of participants were at a high level of depressive distress. This high level of distress can be understood in terms of the context of the participants' crisis situation: They have been subjected simultaneously to the psychological rigors of extensive caregiving and to the anticipatory distress of impending widowhood. Much has been written about the psychological toll exacted from caregiving spouses, as they carry out their caregiving obligations. Numerous studies have found that caregivers experience increased rates of depression (Cohen & Eisdorfer, 1988; Coppel et al., 1985; Gallant & Connell, 1997; Harper et al., 1993; Rosenthal, Sulman, & Marshall, 1993;Yates et al., 1999); including those with a specific focus on caregivers to cancer patients (Raveis et al., 1998; Siegel, et al., 1996; Toseland et al., 1995).

Participants in the current study had good reasons to be distressed. Chief among them was their sense of enormous caregiver strain. As one caregiving spouse explained,

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"I feel so overwhelmed right now, as though everything is going to just snatch me up, you know?...and it's so exhausting, too. ...--the more his needs increase, is the more I feel that, I just can't, can't cope." Partnered with feeling overburdened was the pain of being overlooked. As one spouse noted, "There is a gap -- the caregiver is forgotten. It is a tough role and not one which is recognized." Echoed another, "People don't consider the spouse. Only on one or two occasions do others ask me how I am. ...People don't consider the guy behind the gun."

The period of anticipating widowhood may include a sense of apprehension about the loss of a life-mate and concern about being able to carry on alone. Regarding the former, study participants have shared, "I'll tell you -- I'm losing -- I'm going to lose my best friend." "So, I'm going to miss this man. And that's why I'm grieving now, because he's not going to be there. ...I don't -- I can't even en-envision this. I can't. Not, not having -- him." Regarding the latter, they've confessed, "It's going to be hard, you know, living by myself. I never slept by myself...to tell you the truth, I don't know myself how I'm going to live without him." "...I'm just heartbroken, and I'm frightened of, uh, you know, being without her and being alone."

No significant gender differences were found between men and women on depression, indicating that the specific trauma of this situation did not differentially affect men and women in terms of sadness and distress. The finding of no gender difference is in contrast to results from a series of studies in which women caregivers in particular tended to be more depressed than men (see Schultz et al., 1990 for review). This was true in several earlier studies of spouse caregivers as well (Fitting et al, 1986; Gallant & Connel, 1997; Pruchno & Resch, 1989). However, bear in mind that although the levels

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of depression were not significantly different for men and women, results did indicate gender differences in terms of how the study variables affected the caregivers' depression. Indeed, as reported above, two distinct models emerged with respect to the factors predicting depression in men and women.

Religiosity was an important aspect of the participants' life experience, as almost three-fourth of the sample reported that their religious beliefs were either very or fairly important to them. As one caregiving spouse commented, "Spirituality has taken me through this whole thing. I could not have done this without G-d." This is in line with earlier findings in this regard (Koenig et al., 1993; "Who Considers Religion Important?", 1993) and echoes as well the results of studies of older adults in particular, who have found religion to represent a significant element of their lives (McFadden, 1995; Moberg, 1990).

Two-thirds of the sample rated their religious beliefs as either a great deal or somewhat of a comfort to them, underscoring its importance as a psychosocial resource. Several caregiving spouses remarked, "Yeah, I feel like I'm sharing it with the Lord." "...You know that through it all, G-d is there, with us. So that helps us to keep going along." This resonates with earlier studies of both patients and their caregivers, in which comfort from religious faith has been cited as a central coping factor (Hawley and Irurita, 1998), again, particularly for the elderly (Barna, 1991, cited in Koenig, 1993).

Approximately one-third of participants reported attending religious services at least once a week. This figure is lower than the 42% of Americans reported to attend worship at least weekly (Gallup, 1995) and the 52% of adults over 65 who attend religious service regularly (Princeton Religion Research Center, 1994); however, this

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reduced number was anticipated, due to the potential conflict of caregiving responsibilities with attendance at religious services and due to the caregiving spouses' advanced age and/or age-related poor health. Indeed, Kaye and Robison found in their study of caregiver wives of men with Alzheimer's disease that 94% engaged in private prayer once a day. Thus, although they may not attend organized religious services, caregivers may engage in personal at-home dialogue with G-d.

As a whole, the group scored at around the midpoint with regard to intrinsic religiosity, i.e., religious commitment, in accord with scores on this measure reported by Thorson and Powell (1990) with similar age groups. However, it is surprising that the mean score was not higher, given that nationwide approximately 95% of Americans believe in G-d (Gallup, 1995) and 71% are members of a church or synagogue, indicating strong levels of religious commitment (Gallup Poll Monthly, 1993), and given that in this sample in particular, a relatively high proportion of study participants reported that their religious beliefs were important to them and a source of comfort. It is possible that although participants reported viewing their religious beliefs as important and as a source of comfort, at the present time their religious commitment is less salient. That is, just as was the case with regard to the comparatively reduced levels of attendance at religious services, caregiving obligations may preclude them as well from experiencing other aspects of religious commitment. And they may experience other things as currently more important than serving G-d, such as negotiating the constant barrage of medical appointments/tests and dealing with the complexities of insurance forms. At this particular time, rather than agreeing overwhelmingly with the statement that "My religious beliefs are what really lie behind my whole approach to life," study participants

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are likely to be directed by arduous, all-consuming caregiving responsibilities in their perspective on life.

In addition, feelings of anger towards G-d for rendering their spouse ill with cancer may make it difficult for some caregiving spouses to answer in the affirmative to religious commitment items such as, "In my life I experience the presence of the Divine," and/or "Nothing is as important to me as serving G-d as best I know how." For in the throes of this life crisis, participants may feel that they do *not* see G-d in their lives; that He has forsaken them. As one study participant lamented, "Do I deserve this? Why is He doing this to me? I can't say that, why he's doing -- I'm no different than anybody else. But why so much? Why so much?" Observed another caregiving spouse, "...I think it's a cruel trick that G-d played on us."

The study found no gender difference between men and women with regard to levels of intrinsic religiosity. This no-difference finding stands in contrast to other research studies documenting that women have been found to report higher levels of religiosity than men (Bensen et al., 1989; Bergan & McConatha, 2000; Strawbridge et al., 1998), in both religious participation and religious practice (Bergan & McConatha, 2000; Cornwall, 1989).

With regard to emotional social support, participants scored on the low end of the measure's possible range of scores. This finding is in accord with results of earlier studies documenting that caregiving spouses often do not receive sufficient support (Davis-Ali et al., 1993; Northouse et al., 2000). As Miller and McFall (1991) have noted, caregiving spouses in particular have been found to have smaller social support networks than other caregivers. Perhaps this can be understood in light of several studies showing

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that for caregivers, the care recipients themselves often represent an important source of social support. For example, in a study by Keller et al. (1996) of cancer patients and their spouses, caregiving spouses considered the patients to be their main source of emotional support. It is likely that given their declining physical and psychological states, the care recipients in this study were not able to provide emotional support to the caregiving spouses, rendering the caregivers bereft of a key potential source of emotional social support.

The study found a significant gender difference between men and women with regard to emotional social support, such that women reported significantly higher levels of support. This is in keeping with other studies demonstrating that women tend to have much broader support networks than do men (Barker et al., 1998; Flaherty & Richman, 1989; Wallsten, 2000) and to receive more emotional support (Belle, 1987; Gaugler, Zarit, & Pearlin, 1999; Matthews, Stansfeld, & Power, 1999; Vaux, 1985). Women participants in this study reported having a strong social network. A caregiving wife described her relationship with a girlfriend: "She's great. I don't know what I'd do without her. I could call her any time of the day or night, and she's here within five minutes." Said another of her support system, "Family and our friends -- you know, [I] have very close friends, you know, that are there all the time with us. Which helps a lot. ...Otherwise, I wouldn't make it. ...There is not one person that I can say, okay, this person does not understand. They're all ready to help anytime I need help."

It is possible that both men and women would not gain comfort from "war stories," i.e, from being regaled with the specific details of the difficulties and problems endured by others who have gone through a similar situation. It is likely, though, that

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women are more open to shared experiences. Couple this as well with men's greater need to be self-reliant. Another caregiving husband explained that although he does have some very good friends, he'd rather deal with his problems himself than worry his friends with his concerns. "...I know I feel terror. I know I feel panic. I know I feel despair. But I'm certainly not going to communicate that. ...If I, if I had my druthers, if I could be whatever I wanted to be, at this point, you know, with this situation, I would want to be , uh, um, you know, Superman. Uh, Arnold Schwartzaneger, you know, the -- ....Hero -- yeah. Just leave it to me and I'll take care of it, you know. ....I mean, that's the way I grew up. This is the culture that, you know, the head of the family would, you know, solve all the problems." He has been acculturated to be independent, to withstand life crises on his own.

With regard to sense of coherence, participants scored on the high end of this variable. Much research has demonstrated that sense of coherence is an important psychosocial resource, associated with better outcome variables (Brooks, 1994; Gottlieb, 1994; Hart et al., 1991; Sagy et al., 1990). This has been found with regard to those coping with stressful events (e.g., Frommberger et al., 1999) and illness (Kravetz et al., 1993), and for those engaged in caregiving (e.g., Coe et al., 1992; Mullen et al., 1993). The study found a significant gender difference between men and women with regard to sense of coherence, in line with some studies by Coe et al. (1992) and Antonovsky and Sagy (1986); and contrasting with others (e.g., Gibson & Cook, 1997; Reker, 1992).

It is perhaps not surprising that in this study, men reported a higher sense of coherence. Certainly the generation of men in this age cohort have been socialized to find that their lives are manageable and comprehensible, two components of sense of

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coherence. That is, they have spent the bulk of their lives in an America that was biased towards men being privileged, in contrast to women. In addition, as mentioned above with regard to the participant who rejected peer support and instead wished he were Superman, many men in this cohort feel the need to be in charge and manage their own lives, to make sense of things on their own. Indeed, perhaps *because* they experience a greater sense of coherence, they do not welcome social support.

With regard to differences in religious affiliation, the significant group differences between Protestants, Catholics, Jews, and those of no religious affiliation, in terms of levels of intrinsic religiosity, are noteworthy. While it is understandable that those identifying themselves as having no religious affiliation would be significantly lower in intrinsic religiosity than Protestants and Catholics, it is surprising that they were not significantly different from Jewish participants. In addition, Jewish participants significantly differed from Protestant and Catholic participants, such that they reported significantly lower rates of intrinsic religiosity; indeed, as mentioned above, these lower rates of religiosity did not differ from the rates of those identifying themselves as having no religious affiliation at all. Perhaps Jewish respondents view their religiosity as a cultural variable; that is, their Jewishness may provide them with a cultural or ethnic identity rather than one based on religious practices or beliefs.

Attendance at religious services did significantly distinguish between those at various levels of intrinsic religiosity. Specifically, those who attended religious services often reported highest levels of intrinsic religiosity, those who attended intermittently reported lower levels of intrinsic religiosity, and those who never attended, reported lowest levels of intrinsic religiosity. These results seem to indicate that religious

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attendance was a function of religious commitment. It is possible that those who made the effort to attend religious services despite arduous and potentially conflicting caregiving obligations experienced were driven by a strong level of religious commitment. It is also possible that those who attended religious services more frequently had a more manageable caseload of caregiving responsibilities that allowed them to do so and also rendered them more free psychologically to experience a fuller religious commitment.

Attendance at religious services did significantly distinguish between various levels of sense of coherence as well, such that those who attended religious services often were significantly higher in sense of coherence than those who attended intermittently or not at all. It may be that those who were highest in terms of a perspective from which to see life as comprehensible, meaningful, and manageable (i.e., sense of coherence) felt the most pulled toward attendance at religious services which is comprised of aspects that may resonate strongly with a high sense of coherence. Recall the significant correlations between sense of coherence and the religiosity variables. Conversely, as correlations do not imply causality, it may be that attending services more frequently rendered participants more likely to see life as comprehensible, meaningful, and manageable.

Attendance at religious services did not significantly distinguish those at various levels of depression. This may be due to attendance itself being a potential source of tension for participants. That is, the extent to which caregiving spouses were able to attend religious services may have been a source of conflict for them. On one hand, attendance at services would be comforting and provide a source of fellowship during this time of crisis. On the other hand, the demands of caregiving and/or the desire to

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remain at the side of an ailing spouse may have precluded caregivers from pursuing the very religious fellowship they value. That is, some caregivers may have wanted or needed to attend services, but were prevented by circumstances from doing so. At the same time, those who did attend may have felt burdened by feelings of guilt for "abandoning" their spouses at home during periods of attendance.

It was surprising to find that contrary to the study hypothesis, with one exception, there were no direct relationships between any of the religiosity variables and the outcome variable of psychological adjustment, i.e., depression. The only significant direct relationship between religiosity and depression was in the subsample of women: There was an inverse correlation between the degree to which women participants derived comfort from their beliefs and their levels of depression, such that women who derived comfort from their beliefs reported lower levels of depression. In the study mentioned earlier, by Johnson and Spilka (1991) of women with breast cancer, women saw G-d as a supportive healer and as a companion in whom they could confide. Perhaps they and the women in this study experienced comfort from G-d as they endured living with their terminally ill spouse, i.e., a comfort associated with reduced depression.

The absence of other direct relationships between the religiosity variables and the outcome variable counters numerous findings in the literature demonstrating that higher levels of religiosity are associated with better mental health (Larson et al., 1992) and well-being (Levin & Chatters, 1998). However, although the salutary effect of religiosity on depression was not directly evident, it was indirectly significant, as seen in the models further discussed below.

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In keeping with the study hypothesis, higher levels of sense of coherence were related to lower levels of depression. This supports previous literature in which sense of coherence has been shown to be related to greater well-being (Brooks, 1994; Gottlieb, 1994; Hart et al., 1991; McSherry & Holm, 1994; Sagy et al., 1990). That this was true for spouses of terminal cancer patients underscores findings of other studies in which a strong sense of coherence was associated with better outcomes for individuals coping with difficult times (e.g., Drory et al., 1999; Frommberger et al., 1999; Kravetz et al., 1993).

In the overall sample and in the subsample of women the two key study variables, intrinsic religiosity and sense of coherence, were found to be significantly and positively related with each other such that higher levels of intrinsic religiosity were associated with higher levels of sense of coherence. This is in keeping with what has been proposed by several individuals (Berger, 1967, 1970; Kotarba, 1983), i.e., that religion can provide a comprehensive framework from which to understand life events. It is one of the avenues through which sense of coherence may be brought about (Bjarnason, 1998; Peterson & Roy, 1985; Pollner, 1989).

In the subsample of men, however, the association between intrinsic religiosity and sense of coherence was only marginally significant. Men experience the connection between religious commitment and/or sense of coherence differently than do women. That is, the aspects of religiosity that resonate with sense of coherence for women may not be experienced in the same way by men. With regard to the association between sense of coherence and the two individual religiosity variables, these were significantly related in all samples of analysis (i.e., sense of coherence was positively associated with

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both the importance of religious beliefs and with comfort from religious beliefs). Thus, with regard to the relationship between *these* aspects of religiosity and sense of coherence, the men's experience was similar to that of the women.

Contrastingly, only for men was social support significantly correlated with the outcome variable of depression. There was no association between these two variables for the overall sample or for the subsample of women. However, the association was not in the expected direction. That is, it was positive, such that higher levels of emotional social support were associated with higher levels of depression. These findings go against a preponderance of research indicating that higher levels of social support are related to better well-being (e.g., Cohen & Wills, 1985; Pistrang & Barker, 1995; Vachon, 1986; Wortman & Conway, 1985), for caregivers as well (Douglas and Spellacy, 2000; 1987; Knight et al., 1997; Schumacher et al., 1993; Thompson et al., 1993; Webb et al., 1998). In contrast, for the women in this study, social support did have a salutary impact on their adjustment, by helping to engender a greater sense of coherence, which, in turn, predicted better adjustment.

Perhaps the finding that for men greater levels of social support were associated with more depression can be explained in the context of men's socialization experience. Rather than mobilizing social support for themselves during difficult times or becoming involved in emotionally intimate relationships, men are more apt to rely on themselves and to ignore or disregard their fears, seeing them as expressions of dependency (Sabo, 1990). They have not been socialized to be open to social support and may be neither accustomed nor happy to be at its receiving end. Recall the comments of the caregiving

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husband who preferred to handle this difficult situation on his own. Indeed, for men, offers of support may potentially threaten their sense of who they are.

It is likely that because of this, the men in the study perceived their social support as unsupportive. Much has been written about the circumstances under which certain aspects or types of social support may be experienced as negative (Coyne et al., 1988; Krause, 1995; Kuijer et al., 2000; Revenson et al., 1991). Several of the social support items in the study asked about the extent to which someone in the caregiving spouse's network has "been right there with you (physically) in a stressful situation," "told you they felt very close to you," and "expressed interest and concern in your well-being." Perhaps these interactions were experienced as intrusive by the men, echoing the writings of Coyne et al. (1988) with regard to emotional overinvolvement and "miscarried helping," which can be viewed as problematic. Emotional support that is perceived as excessive, intrusive, or overprotective should be discouraged, as research has shown it may be both unwanted and detrimental (Coyne et al., 1988). In addition, for many men, their wives have been their sole source of emotional support. Receiving support from others may remind them of the reduction or absence of social support from their wives, rendering them more depressed. A resource that could have been helpful may instead represent a vehicle of pain, by its reminder of what has been lost.

A final point related to the finding that greater levels of social support were associated with more depression in men is that perhaps the direction may lie in the reverse: those men who were more depressed were more likely to receive more social support. Thus, the relationship between social support and depression may be spurious,

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such that a separate consideration both made it more likely for them to be more depressed and, in addition, to receive more social support.

Only for women was a relationship found between social support and sense of coherence. It may be that for women, the sense of feeling supported and emotionally connected is associated with seeing the world as more comprehensible, manageable, and meaningful. Among the small body of research that has included both social support and sense of coherence among its variables, both the presence (Linn et al., 1993) and absence (Hart et al., 1991) of a relationship between these two variables have been found. However, in the study finding such an association, participants were adults with HIV, and in the study finding no such association, participants were college students. Note the difference in circumstances between these two studies: In the former study, participants were dealing with a life-threatening situation; the latter study focuses on students engaged in everyday life. Perhaps the relationship between sense of coherence and social support becomes evident and emerges in response to stress. Individuals tend to strive for meaning and support when they are stressed; this association may be less salient during non-stressful periods.

With regard to path analysis models explaining the data, because analyses determined that different models fit the data when men and women were looked at separately, interpretations are offered for the separate models. At the onset of this discussion, though, it is emphasized that a very weak link was found between religion and depression; the effect was indirect.

With regard specifically to women, the finding that greater intrinsic religiosity and, marginally, greater social support engendered a greater sense of coherence, which,

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in turn, engendered less depression explained 31% of the variability in the model. The fact that when broken down, the R^2 leading to coherence (.25) was greater than that leading to depression (.06) indicates that there was more variability explained by the predictors of coherence than by the predictor of depression. Thus, more future research needs to focus on factors other than sense of coherence that may contribute to depression for caregiving wives of terminally ill cancer patients. However, given the scarcity of research focusing on caregiving spouses of terminally ill cancer patients, it is encouraging to have determined that greater religious commitment and greater social support are important in rendering one more able to see the world as comprehensible, meaningful, and manageable, in turn leading to less distress. With regard specifically to men, greater intrinsic religiosity engendered an increased sense of coherence, in turn engendering less depression. In addition, higher levels of emotional social support (as discussed above, probably of the unwelcome and unhelpful kind) directly predicted more depression. This model explained only a small amount of the variability (the adjusted R^2 was only .28) in men. Thus, more research needs to be aimed at determining other possible predictors of a greater sense of coherence and other possible predictors of less depression. The different findings between the genders seem to justify future research aimed at delineating the mechanisms that explain these differences.

Study findings have several implications. First, they suggest that fostering ways in which an individual's religiosity can engender a higher sense of coherence may be beneficial. For this, in turn, may make it possible to adjust more easily to stressful life events. Aspects of religiosity that resonate with making a situation more comprehensible may be helpful. For example, the sense that G-d may have an overall plan for the

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individual that at this point is not yet clear (Dull & Skokan, 1995), that each individual has a unique spiritual destiny, may enhance the comprehensibility of the situation (Jenkins & Pargament, 1995). Indeed, much has been said about religion providing individuals with a "cognitive schema" (McIntosh, 1995) with which to view the world and adapt to life stressors. As Pargament (1996) has explained in his discussion of "religious reframing," when individuals reinterpret situations from a religious perspective, at times they can be understood as challenges and opportunities for growth.

Thus, religiosity may be a form of meaning-making, i.e., of making sense of the crisis with which one is confronted. And this may be the most important aspect of religiosity, in terms of its effectiveness as a psychosocial resource to caregivers. This might be helpful to consider with regard to the caregiver-health professional relationship. For those who are interested, the meaning-making aspect of religiosity should not be extracted from the dialogue; rather, conversations of religiosity should be invited into the forum. Thankfully, changes have already begun to be implemented in this direction. For although until quite recently little attention has been focused by medical and/or mental health professionals on the role that religion plays in people's lives (Paloutzian & Kirkpatrick, 1995; Sarason, 1993), there is a transition taking place. For example, recently several hospitals and health care centers have begun to integrate religious perspectives into their standard treatment protocols and several medical and nursing schools have begun to include topics related to religion and spirituality in their curricula (Chatters, 2000). These concerns may also relate to clergy who are approached by the caregiving population. Research has shown that for nearly 40% of the population, the clergy is a primary source for seeking help (Meylink & Gorsuch, 1988). Again, it is

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likely that it is the meaning-making aspect of religiosity that should be introduced into dialogue.

It is also possible that other forms of religiosity should be considered for future study, in particular prayer and engaging in ritual. For those who are ritually observant, the use of scripture, theologies, liturgy, and ceremony may also be helpful in the face of life crises. Maldonado (1994) learned the importance of prayer from his study of elderly Hispanics, in which 88% reported that compared to other personal responses to stress, prayer and meditation were their most common forms of coping strategies. The benefit of prayer was also evident in studies of patients about to undergo cardiac surgery (Saudia, Kinney, Brown, & Young-Ward, 1991), those receiving hemodyalisis (Gurklis and Menke, 1988) and those undergoing coronary artery bypass graft surgery (Hawley & Irurita, 1998). Indeed, participants in this study related that they turned to prayer in the midst of their ordeal. Said one, "Like, I give the Lord more credit, I mean, more whatchacallit, than I give the doctors, though they, they're doing all the heavy work and everything, but the, the prayers and everything, I think that's what's pulling her through." Said another caregiver, "And sometimes I am walking down the street and I'm -- people would see me murmuring and think I'm Oh, she's losing it. But I was asking G-d to give me the strength because it's not easy to have a loved one sick this many years."

A second implication of study findings is that as sense of coherence has been shown to predict less depression, it may be worthwhile to enhance the individual's sense of coherence. With regard to women, in particular, this study has already determined that social support is an additional predictor of sense of coherence. It is less clear what it is about social support that can engender a sense of coherence, as little has been written in

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the literature about this affiliation. Perhaps when one feels grounded and secure in a supportive social network, this leads to the sense that the world is a meaningful place. Perhaps with respect to difficulties inherent in the caregiving endeavor, a sense of social engagement can contribute towards caregivers feeling less despair and can diminish caregiver burden (Thompson et al., 1993). This may help them feel that the illness situation is more manageable.

Thus, some aspects of sense of coherence may important in treatment implementation. Indeed, Frankenhoff (1998) suggests that the sense of coherence concept may be useful for social workers interested in primary prevention. When forming or moderating caregiver support groups, they can use our current understanding of sense of coherence to suggest types of interventions along the lines of increasing caregivers' comprehension, management capacity, and commitment to their situations. It is likely that those with a lower sense of coherence require more support in dealing with difficulties. For example, in a study of patients with oral and pharyngeal cancer, Langius (1995, cited in Soderberg, Lundman, & Norberg, 1997) found that those with a weaker sense of coherence needed more support in coping with their disease.

A third implication concerns the importance of tailoring social support interventions to recognize possible gender differences. Care must be taken to administer support in ways that work uniquely best for men and women. That is, offers of support should be cognizant of the wishes specifically expressed by the caregiving husband or wife, to best match that spouse's needs. This is important for physicians and nurses, aiming to be helpful to the caregivers of their patients. It is also vital to mental health professionals and for clergy implementing treatment and/or offering supportive services

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for caregivers. Such considerations are necessary as well for lay family and friends of caregivers, who wish to be supportive in ways that are most beneficial. Future research of gender differences in the impact of various types of social support on adjustment to life crises could be informative in that regard.

It may be, for example, that instrumental support is needed and preferred by men in this situation, and that emotional support is offered instead. Or there may be a discrepancy between the amount of help needed and that provided. The timing of support may be off as well, with support given when it is not needed and withheld when its value is most opportune. Recall the study of patients with rheumatoid arthritis (Revenson et al., 1991), in which there was an interaction effect, such that for those patients who received higher levels of positive support, problematic support had no affect on their levels of depression and for those patients who received lower levels of positive support, problematic support was related to higher levels of depression. In this study, men reported receiving low levels of social support; this may have rendered them particularly susceptible to the ill-effects of problematic support. Nonetheless, given the relatively small subgroup of men, these findings need to be interpreted with caution.

Among the study's limitations is its cross-sectional design, which made it more difficult to determine with certainty the temporal directionality of the effects. For example, as mentioned in earlier discussion, the significant correlation for men between higher levels of social support and depression could have been interpreted in two ways, depending upon the temporal directionality of the phenomenon: Either excessive and unwanted levels of higher social support rendered the men more depressed *or* men with

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greater levels of depression elicted higher levels of social support. Such issues could be looked at more conclusively with a longitudinal design.

In addition, it may have been that at the particular point in time captured in the baseline interview, religion did not have a beneficial effect as a psychosocial resource, but at a different point in time the benefit of religiosity would manifest itself. The caregiving spouses in the study have been living with the stressor of cancer and its impending stress for months or years. The potentially protective effect that religion may engender may have benefited caregivers in earlier times, before the situation became excessively difficult; for as suggested earlier, maybe spouses have become too consumed with the travails of day-to-day coping to make effective use of religiosity at this point. Finally, religion may be helpful for spouses at a later point of this crisis, e.g., in dealing with the aftermath of loss. The cross-sectional design of this study did not allow an exploration of this point.

Another drawback was the homogeneity of the sample, limiting the generalizability of study results. That is, given that the sample was comprised of mostly white participants, results may not be generalizable to caregivers from other ethnic/racial backgrounds. Future research could include participants from more varied backgrounds. Furthermore, as some of the study findings were marginal, perhaps a greater sample size -- especially with regard to the subsamples of men and women -- with the greater power engendered by increased sample size, could more effectively illuminate the phenomena under study.

Another point to consider is whether more than one outcome should have been used to test the model. It is possible that too narrow a definition of adjustment was

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implemented. Indeed, when Batson et al. (1993) conducted their own extensive review of the literature in an attempt to summarize research findings of studies looking at the relationship between religiosity and mental health, they used seven criteria to signify mental health: (a) absence of mental illness; (b) appropriate social behavior; (c) freedom from worry and guilt; (d) personal competence and control; (e) self-acceptance and self-actualization; (f) unification and organization of personality; and (g) open-mindedness and flexibility. Perhaps additional outcome variables may have better informed study findings.

In attempts to flesh out the complexities of the models, future research could examine additional aspects of caregiving situation. For example, it may be helpful to investigate the extent to which the nature of the marital relationship itself influences adjustment and the extent to which help from others involved in the spouse's caregiving made a difference. The "one-shot" assessment that is the very nature of a cross-sectional study may not have obtained sufficient information to accurately depict the caregiving situation -- in terms of both its difficulties and its possible rewards.

One final point worth keeping in mind is that depression is a natural part of the grieving process. So that to the extent that the caregiving spouses in the study have already begun that process, depression may not represent pathology, i.e., may may not be an appropriate indicator of the spouses' adjustment. For some spouses, increased rates of depression may be a function of normative grieving. Therefore, although psychosocial resources such as intrinsic religiosity may indeed be helpful to spouses and may portend better adjustment, this may not be evidenced by reduced depression.

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Table 1
Sociodemographic Characteristics of Caregiving Spouses (N = 122)

Characteristics	%
Sex	
Male (N = 48)	39.3
Female(N = 72)	60.7
Age (mean age = 63.7 years, SD = 7.4)	
50-60	30.3
61-70	47.5
71-80	22.1
Ethnicity	
White	89.3
Black	3.3
Hispanic	4.9
Other	2.5
Education	
<High school	4.1
High school graduate	23.0
Some college	24.6
College graduate	14.8
Some graduate school	6.6
Graduate/professional school	27.0
Employed	47.5
Length of marriage = 36.0 years (SD = 11.9)	
Number of children = 2.6 children (SD = 1.2)	

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Table 2

Religious Sociodemographics of Caregiving Spouses (N = 122)

Religious characteristics	%
Religious denomination	
Roman Catholic	43.8
Jewish	36.4
Protestant	13.3
Greek/Russian Orthodox	1.7
Other	2.5
No religion	3.3
Importance of religious beliefs	
Not at all important	13.2
A little important	13.2
Fairly important	21.5
Very important	52.1
Comfort from Religious Beliefs	
No comfort at all	25.6
Only a little comfort	10.7
Somewhat of a comfort	24.0
A great deal of comfort	39.7
Attend services	
Never	20.7
Several times a year	32.2
About once a month	7.4
Two/three times a month	5.8
About once a week	26.4
Several times a week	6.6
Every day	.8

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Table 3
Means and Standard Deviations for Intrinsic Religious Motivation Scale

Item	M	SD
My faith involves all of my life.	3.63	1.26
In my life I experience the presence of the Divine.	3.50	1.31
One should seek G-d's guidance when making every important decision.	3.18	1.36
My faith sometimes restricts my actions.	2.36	1.18
Nothing is as important to me as serving G-d as best as I know how.	3.05	1.40
I try hard to carry my religion over into all my other dealings in life.	3.19	1.31
My religious beliefs are what really lie behind my whole approach to life.	3.16	1.36
It doesn't matter so much what I believe as long as I lead a moral life.	2.04	1.07
I refuse to let religious considerations influence my everyday affairs.	3.01	1.33
I feel there are many more important things in life than religion.	3.30	1.30
Total Scale Score	30.42	10.02

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Table 4
Means and Standard Deviations for Inventory of Socially Supportive Behaviors (modified)

Item	M	SD
Within the last month, how often has anyone...		
Been right there with you (physically) in a stressful situation	2.33	1.06
Told you you were okay just the way you are	2.27	1.06
Listened to you talk about your private feelings	2.39	.97
Told you they felt very close to you	2.48	1.10
Joked and kidded to try to cheer you up	2.47	1.02
Expressed interest and concern in your well-being	3.02	.92
Went with you to see someone who helped you with a problem that you were having	1.32	.67
Told you that they would keep the thing you talked about privately between the two of you	1.75	.98
Did some activity together with you to help you to get your mind off things	1.90	.89
Told you how they felt in a situation that was similar to yours	1.81	.85
Total Scale Score	21.84	6.16

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Table 5
Means and Standard Deviations for Life Attitude Profile -Revised (Coherence Dimension)

Item	M	SD
The meaning of life is evident in the world around us.	5.17	1.73
I have been aware of an all powerful and consuming purpose towards which my life has been directed.	4.70	1.77
I have a philosophy of life that gives my existence significance.	5.45	1.30
In thinking of my life, I see a reason for my being here.	5.39	1.58
I have a framework that allows me to understand or make sense of my life.	5.12	1.64
I have a sense that parts of my life fit together in a unified pattern.	4.83	1.61
I have a clear understanding of the ultimate meaning of life.	4.75	1.74
My personal existence is orderly and coherent.	4.64	1.71
Total Scale Score	40.04	10.05

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Table 6

Means and Standard Deviations for Brief Symptom Inventory (Depression Dimension)

Item	M	SD
During the past week including today, how much have you been distressed by...		
Thoughts of ending your life	.11	.36
Feeling lonely	.88	1.14
Feeling blue	1.29	1.10
Feeling no interest in things	.68	.92
Feeling hopeless about the future	.94	1.18
Feelings of worthlessness	.26	.67
Total Scale Score (converted to T scores)	58.15	9.29

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Table 7
Intercorrelations Among Study Variables for Overall Sample (N ≤ 122)

Variable	1	2	3	4	5	6
1. Depression	--	-.062	-.073	-.174	-.249**	.089
2. Intrinsic religiosity	--	--	.788**	.781**	.424**	.084
3. Importance of beliefs	--	--	--	.770**	.373**	.112
4. Comfort from beliefs	--	--	--	--	.471**	.174
5. Sense of coherence	--	--	--	--	--	.096
6. Social support	--	--	--	--	--	--

Note. * $p \leq .05$. ** $p \leq .01$.

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Table 8
Intercorrelations Among Study Variables for Women ($N \leq 72$)

Variable	1	2	3	4	5	6
1. Depression	--	-.146	-.168	-.231*	-.276*	.067
2. Intrinsic religiosity	--	--	.803**	.799**	.473**	.070
3. Importance of beliefs	--	--	--	.818**	399**	.102
4. Comfort from beliefs	--	--	--	--	.534**	.056
5. Sense of coherence	--	--	--	--	--	.254*
6. Social support	--	--	--	--	--	--

Note. *$p \leq .05$. **$p \leq .01$.

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Table 9
Intercorrelations Among Study Variables for Men ($N \leq 48$)

Variable	1	2	3	4	5	6
1. Depression	--	.047	.061	.-061	-.298*	.325*
2. Intrinsic religiosity	--	--	.758**	.813**	.275	.265
3. Importance of beliefs	--	--	--	.718**	.306*	.233
4. Comfort from beliefs	--	--	--	--	.451**	.282
5. Sense of coherence	--	--	--	--	--	.027
6. Social support	--	--	--	--	--	--

Note. $^*p \leq .05$. $^{**}p \leq .01$.

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Diagram 1a: Path Analysis Model for Overall Sample

Religiosity (0.40) → Sense of Coherence (-0.22) → Depression

Diagram 1b: Path Analysis Model for Women

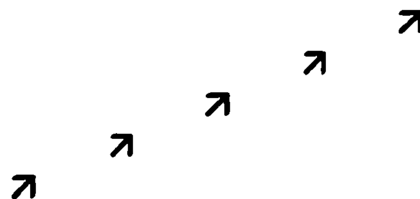
Religiosity (0.43) ↘

Sense of Coherence (-0.24) → Depression

Social Support (0.21) ↗

Diagram 1c: Path Analysis Model for Men

Religiosity (0.29) → Sense of Coherence (-0.31) → Depression



Social Support (0.33)

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