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EXPLORING THE RELIABILITY AND VALIDITY OF THE HUMAN SPIRITUALITY SCALE SCORES WITH OLDER ADULTS IN INDEPENDENT LIVING FACILITIES

By

Charles Joseph Landrum

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Submitted to the Faculty of
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in the Department of Counseling,
Educational Psychology, and Special Education

Mississippi State University

May 2008

EXPLORING THE RELIABILITY VALIDITY OF THE HUMAN

SPIRITUALITY SCALE SCORES WITH OLDER ADULTS

IN INDEPENDENT LIVING FACILITIES

By

Charles Joseph Landrum

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This study sought to extend the findings of previous research about the construct of spirituality–as measured by the Human Spirituality Scale (HSS) developed by Wheat. To expand the research across the entire adult life span, the researcher pooled pre-existing data (Wheat) from middle-aged adults with data he obtained from 236 older adults living in independent living facilities. He analyzed the pooled data from 502 adults, with an age range of 25 to 98.

Using the pooled data set, the researcher divided the data into five age groupings. He conducted confirmatory factor analysis, of the model of spirituality developed by Wheat, with the two separate data sets along with the pooled data set. The researcher determined that the model was an adequate measure of spirituality across the 5 developmental age groups.

He also found the Wheat Model to be adequate when using data from either middle-aged or older-aged adults.

Conclusions included: (a) spirituality is a multifaceted concept; (b) the HSS is appropriate for use in the study of human spirituality across the adult lifespan; (c) older adults are more spiritual than middle-aged adults; and (d) women are more spiritual than men.

Practitioner recommendations included: (a) teach the dynamics of spirituality and aging in counselor preparation programs; and (b) assess clients' level of spirituality during intake. Research recommendations included: (a) expand the HSS data set to allow for the development of scale scores to measure the factors proposed by Wheat; (b) develop norm tables to allow for the comparison of total HSS scores and scale scores by age groupings, and by sex; and (c) explore the relationship between HSS scores and other corollary issues such as culture and wisdom.

Key Words: Aging, Counseling, Older Adults, Human Spirituality Scale, Spirituality

DEDICATION

This dissertation is dedicated to my wife, Vicki Watkins Landrum, for her long-suffering, patience, support, and encouragement. This one is for you, Babe.

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With deepest gratitude, I acknowledge Dr. Joe Ray Underwood, not only for his patience, time, guidance, and wisdom, but also for his deep friendship and advocacy. This dissertation would have never been completed without his commitment to the process.

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CHAPTER I

INTRODUCTION

Spirituality

Paul Pruyser, a staff clinical psychologist at the Menninger Foundation in Topeka, KS, was a very influential figure in the pastoral care and counseling community during the early formative years of that movement. As director of the Menninger Foundation's department of education, he exercised considerable influence over several pastoral theologians such as Seward Hiltner, Thomas Klink, and Kenneth Mitchell, and taught pastoral care and counseling to many of the students at Menninger who now serve as counselors and educators. Pruyser, an active elder in the Presbyterian church, frequently lectured in the field of religion and personality at the University of Chicago, Princeton Theological Seminary, and Boston University. He was strongly committed to educating ministers in the human sciences, but also dismayed at the frequency with which the clinically trained clergy abandoned their theological roots (Mitchell, 1990).

In response to that abandonment, Pruyser published *The Minister as Diagnostician (*1976), in which he argued that each professional discipline had its own particular perspective which contributed to the construction of a broader understanding of the human condition. Specifically, he suggested seven categories which help delineate spiritual factors from psychological factors. These categories were (a) awareness of the

holy, (b) providence, (c) faith, (d) grace, (e) repentance, (f) communion, and (g) sense of vocation. These categories reflected a Reformed Protestant concept of spirituality, but in application, Pruyser's interest was in describing how a person defined and related to the "holy" and how he or she found meaning in life (Pruyser). Subsequently, Pruyser's categories were adopted and incorporated into several models of spiritual assessment (Sackett, 1985; Stoddard & Burns-Haney, 1990; Weis, 1991), including Wheat's (1991) Human Spirituality Scale, which was central to this study.

In a move which furthered the cause of expanding professional understanding of human problems, the American Association of Pastoral Counseling (AAPC) created an alternate route to professional certification for persons who were licensed as Professional Counselors, Psychologists, and Clinical Social Workers in their respective states (American Association of Pastoral Counseling, n.d.). A broader base of theoretical perspectives concerning spirituality came with professionals from other therapeutic disciplines as they entered into the ranks of the American Association of Pastoral Counseling.

Within the secular community, the concept of spirituality was becoming a point of increasing professional interest. One specialty division of the American Counseling Association, the Association for Spiritual, Ethical, and Religious Value Issues in Counseling (ASERVIC), developed beyond its parochial roots by changing its name to the Association for Spiritual, Ethical, and Religious Values in Counseling (Miranti, n.d.). Subsequently, articles dealing with spirituality appeared with greater frequency in scholarly literature, and empirical research in the area of spirituality was

encouraged by annual research awards from organizations such as ASERVIC and the Council on Spiritual Practices' William James Awards
(Council on Spiritual Practices, n. d.).

In the field of heath care, the Joint Commission on Accreditation of Healthcare Organizations (JCAHO, 1999) provided for each patient's rights to spiritual counseling in the accreditation standards. The Mississippi State Department of Health (1995) provided for bereavement services to assist families in coping with patients' deaths through the first year after death and for inclusion of educationally qualified clergy to provide counseling services as a consulting and/or core member of hospice care teams. Additionally, in an *Appropriateness of Minimum Nurse Staffing Ratios in Nursing Homes Report to Congress*, an Assessing Care of Vulnerable Adults (ACOVE) panel of experts recommended that spirituality be included as one of the areas assessed and documented as a part of the resident's determination of the components of quality of life (U.S, Department of Human Services: Health Care Finance Administration, 2000). These developments suggested that spirituality was rapidly emerging as an important subject of interest in the field of counseling.

Burke and Miranti (1996) called for a better understanding of the relationship between spirituality and human development and adjustment. Young, Cashwell, and Woolington (1999) noted that little empirical research had been conducted that studied the interrelationships between spirituality and psychological traits of individuals who were not explicitly religious. In the statement of the problem for his doctoral dissertation, Wheat (1991) stated that the study of human spirituality as a psychological

phenomenon was limited by the lack of a generally accepted operational definition of human spirituality and by the absence of acceptable measures of human spirituality.

The focus of Wheat's dissertation was the development of the Human Spirituality Scale (HSS) and the posing of an operational definition of spirituality which was undergirded by a substantive conceptual framework. That framework was based on a theoretical understanding of spirituality as being one of the four aspects of the "self," which were the (a) physical, (b) emotional, (c) behavioral, and (d) spiritual. Wheat's conceptual framework was based on the work of Daniel Levinson (1978), and was woven together in a well integrated paper which included the stage theories of Erickson, Piaget, Kohlberg, Fowler, and other developmental theorists. Wheat's (1991) three-factor definition was:

> The personal valuing, experiencing, or expression of (a) a larger context or structure in which to view one's life, (b) an awareness of and connection to life itself and other living things, and (c) a reverent compassion for the welfare of others. (p. 89)

The HSS, at the onset of this study, was one of only a few instruments measuring spirituality, which had supporting normative data and significant theoretical underpinnings. That scale was limited in that the normative data for the HSS was based on an adult population whose ages ranged from 23 to 65. Another complimentary instrument, The Spirituality Index of Well Being (SIWB), developed by Frey, Daaleman, and Peyton (2005) was designed to measure a dimension of spirituality, well-being, with patients in health care populations. Those authors reported a definition of spirituality

consisting of the components–life scheme and self-efficacy. Those researchers found the SIWB to be a valid and reliable research tool, and that SIWB scores correlated strongly with established measures of well-being. Frey, et al. (2005), recommended that the SIWB was best suited for the studies of chronic illness, aging, and end-of-life care.

Aging

A second rapidly emerging concern within the field of counseling is the increased graying of America. In *A Profile of Older Americans: 2005*, the Administration on Aging (2008) reported that the number of persons over the age of 65 living in America had increased by 3.3 million, or 9.7%, since 1996. Additionally, the number and proportion of Americans who were within the older population would continue to grow, with the most rapid increase in population growth following between the years 2010 and 2030 as the "baby boomers" reach age 65. Projections suggested that there would be approximately 71.5 million older adults in America by the year 2030.

A United Nations report on population aging in 1999 showed that by 2050, the number of people age 60 years old or older was projected at almost 2 billion, marking the first time in history that the 60-plus group would overtake the number of children age 14 years and under. Because of dramatic improvements in life expectancy, people age 80 and older were the fastest growing segment of the older population, expected to reach 19% of the 60-plus group by 2050 (United Nations, 1999).

Statement of the Problem

Spirituality and aging were two emerging areas of importance for the field of counseling. As previously noted, research in the broad area of spirituality was limited. The research in spirituality and aging was even more limited. While the amount of research was growing, there were few instruments which explicitly measured human spirituality. One instrument which did measure human spirituality was the Human Spirituality Scale (HSS; Wheat, 1991). However, this instrument was created on the basis of research conducted with adults whose ages ranged from 25, to an upper limit of 65. Moreover, Wheat's analyses were largely exploratory with no confirmatory follow up; therefore, his exploratory conception of spirituality had never been compared to alternative, competing theoretical models.

In summary, the problem that the researcher investigated was that there was limited research about spirituality of older adults. Hence, the purpose of this study was two-fold. First, the researcher set out to extend the findings of Wheat's previous research by an investigation of the construct of spirituality, as measured by the HSS, across the adult lifespan. To do so, Wheat's data were augmented with data collected from a specific sample of older adults. Second, the researcher conducted confirmatory factor analysis to determine if there was a goodness of fit with Wheat's model of spirituality and the data which spanned across the adult lifespan.

Research Questions

For purposes of the current study the following questions were addressed:

1. What is the estimated internal reliability of the HSS items when used with adults across the lifespan?

2. Is there a statistically significant difference in the overall mean HSS scores between this study's participants and Wheat's participants?

3. Are there statistically significant differences between the mean HSS scores of male and female participants?

4. Is there a statistically significant interaction between age and gender in the assessment of spirituality for the adults in the combined data sets of this study and Wheat's study?

5. How does the HSS factor structure computed with data from older adults compare with the HSS structure of data from Wheat's study with middle-aged adults?

6. How well does the Wheat's Model of Human Spirituality fit with the data from (a) middle-aged adults, (b) older adults, and (c) adults from a combination of both groups [middle-aged and older adults] and (d) adults in developmental age groups created from the pooled data sets?

Justification of the Study

A study of the validity for the Human Spirituality Scale can contribute to the further development of an operational definition of spirituality with older adults. Such an exploration of validity may foster possibilities of additional research across the entire adult life span, and may increase understanding of the role and influence of spirituality

in human growth and development throughout the life span. Additionally, the availability of valid and reliable assessment scores can contribute to more effective treatment planning in counseling and result in more positive measurable outcomes from the experience of counseling.

Specifically, this instrument can be of great value when employed in the assessment of spirituality in hospital and hospice settings as a part of a more holistic approach to medical treatment. The HSS could be used for assessment in nursing facilities, contributing to the baseline data used in defining the quality of life for the frail elderly. The normative data, the language, definitions, and categories resulting from this study could be effectively used in the training of non-professional and volunteer caregivers, and in contributing to the accreditation of hospitals and compliance of nursing and hospice facilities in meeting the Joint Association on Accreditation of Healthcare Organization's (1999) standard RI.1.3.5, which provides for the spiritual care of patients by clergy, certified chaplains, or other non-ordained individuals. The researcher found that services were unspecified and varied, and determined by the respective medical centers.

Limitations

One limitation to this study was related to varying degrees of physical health, mental health and alertness, abilities, gender, and personality attributes of the participants. These variables held the potential to affect the generalizability of the findings.

The ages of older adults who participated in this study ranged from 62 years of age to 98 years of age and experienced varying degrees of infirmity, mental acuity, and life experience. These older adults were no longer living at home, but living in close proximity to other residents, often experiencing loss of friends to personal care wings, skilled nursing units, or death. Some older adults maintained personal automobiles while others were dependent on scheduled transportation provided by United Methodist Senior Services of Mississippi (UMSSM), local churches, friends, neighbors, and family members.

The second limitation was related to population validity. According to Bracht and Glass (1968, as cited in Gall et al., 1996), the population for this study was an experimentally accessible population. All older adults in the study were residents of independent living divisions of UMSSM. Data were collected at nine different facilities located in different cities and towns across the state. All facilities were within one day's driving distance of the experimenter's office.

The third limitation of the study was experimenter effect. The experimenter was an ordained United Methodist Minister who had several years of experience as a staff member of the Mississippi Annual Conference of the United Methodist Church. In that role, the experimenter had personal and/or working relationships with many residents, with many of the administrators of local facilities, and with the CEO of UMSSM. Hence, some older adults and administrators of UMSSM may have been more positively inclined to support the research due to their desire to be of assistance to the experimenter because of a personal relationship with him and his professional role in the church.

Definition of Terms

Spirituality - the personal valuing, experiencing, or expression of (a) a larger context or structure in which to view one's life, (b) an awareness of and connection to life itself and other living things, and (c) a reverent compassion for the welfare of others (Wheat, 1991). For the current study, spirituality was operationally defined as the total score on the HSS. Higher scores on the HSS represented higher spirituality.

Age - the self-reported age of older adults in whole years.

Older Adults - the age of 62 was considered the qualifying age for retirement housing in facilities owned and operated by UMSSM. For the purposes of this study, older adults were operationally defined as those individuals living in UMSSM facilities in the spring of 2000 who participated in the current research.

Gender - gender referred to the self-reported sex of older adults who participated in the current research as indicated by their response to an informational questionnaire.

Race - self-reported racial identity of older adults who participated in the current research as indicated by marking either (a) African-American, (b) Caucasian, or (c) Other on an informational questionnaire. Space was provided for elaboration of the category "Other."

CHAPTER II

REVIEW OF RELATED LITERATURE

Wheat (1991) suggested that part of the difficulty in studying human spirituality was due to the lack of an accepted operational definition of spirituality and to a lack of established measures. The purpose of his study was to develop a measure of spirituality for use with a general adult population and to draft such a definition. The purpose of the current study was to explore the validity of Wheat's (1991) instrument for use with an older adult population.

The topics included in this review of literature are (a) the evolution of construct spirituality; (b) spirituality in counseling; (c) spirituality and aging; (d) culture, gender, and spirituality; and (e) summary and implications.

Evolution of the Concept of Spirituality

Wheat created a table of specifications expressing both process and content dimensions of spirituality. The process dimension included (a) personal valuing, (b) inner experience, and (c) behavioral expressions, all of which frequently appeared in the literature prior to 1991. The content dimension was based on three themes found in the literature, including: (a) a sense of oneness or unity with the universe and its inhabitants,

(b) a larger context or structure in which to view the events of one's life, and (c) a sense of meaning and purpose in life.

From his study, Wheat (1991) concluded that the Human Spirituality Scale (HSS) is a valid and reliable measure of human spirituality. He used factor analysis to determine three factors. He inspected the content of items within each factor and assigned names to the factors. Using these three factors, Wheat (1991) defined human spirituality as the personal valuing, experiencing, or expression of (a) a larger context or structure in which to view one's life, (b) an awareness of and connection to life itself and other living things, and (c) a reverent compassion for the welfare of others.

However, defining spirituality continues to be complicated due to increased popularity and diversity of connotations assigned to the concept of spirituality. Kimble, McFadden, Ellor, and Seeber (1995) noted that until the 1960s, little research was conducted in the area of spirituality. They acknowledged the expanding scope of research and that the definitions of spirituality were diverse. That diversity was evident as there were differing accounts of the origin of the word "spirituality" in the literature. According to Coleman (1997), there was a "sheer and exponentially exploding panoply of various regimes, techniques, spiritual therapies, and groups available in any large or middle sized American city" (p. 9).

Elkins (1999) reported the origins of the word spirituality to be the Latin words *spirituals* and *spiritus,* which were translated respectively as "of the spirit" and "breath." In his doctoral dissertation, Zinnbauer (1999) referred to theologian Karl Rahner's

suggestion that the word spirituality had its origins in the Hebrew scriptures and in the New Testament of the Bible. According to Rahner (as cited in Zinnbauer, 1999), "Spirit" in the Hebrew Scriptures referred to "the life-force stemming from God," and gave way to the early Christian concept *spiritualis*, denoting the "core of Christian experience" (p. 1674).

Moberg (1967) stated that spirituality is of a transcendent nature that cuts across all of the dimensions of religiosity and is characteristic of religious and non-religious people. Many researchers considered spirituality to be inherent in all human beings (Hasse, Britt, Coward, Leidy, & Penn, 1992, as cited in Ingersoll, 1994), and an integral part of every human being (Benjamin & Looby, 1998). While researchers agreed on the importance of the concept spirituality, they did not use uniform definitions in their research.

Definition of Spirituality

Moberg's (1971) background paper for the White House Conference on Aging led to the formation of the National Interfaith Coalition on Aging (NICA) in 1972. NICA found tremendously diverse definitions of spiritual well-being. Subsequently, a separate interdisciplinary group was spawned in order to formulate an operational definition. Their work yielded the following: "Spiritual well-being is the affirmation of life in a relationship with God, self, community, and environment that nurtures and celebrates wholeness" (NICA, 1975).

Shafranske and Gorsuch (1984) defined spirituality as "the courage to look within and to trust. What is seen and trusted appears to be a deep sense of belonging, of wholeness, of connectedness, and of openness to the infinite" (p. 233). Elkins, Hedstram, Hughes, Leaf, and Saunders (1988) saw spirituality as "a way of being and experiencing that comes about through awareness of a transcendent dimension and that is characterized by certain identifiable values in regard to self, others, nature, life, and whatever one considers to be the Ultimate" (p. 10). McGinn (1993) identified 35 definitions of spirituality that he identified into three categories: (a) theological definitions, (b) anthropological definitions, and (c) historical-contextual definitions. For Kelly (1995), spirituality was "a personal affirmation of a transcendent connectedness in the universe" (p. 4).

In a concerted effort to clarify the meaning of spirituality, the ASERVIC summit on spirituality produced the following working definition/description of spirituality:

> Spirituality may be defined as: the animating force in life, represented by such images as breath, wind, vigor, and courage. Spirituality is the infusion and drawing out of the spiritual in one's life. It is experienced as an active passive process. Spirituality is also described as a capacity and tendency that is innate and unique to all persons. This spiritual tendency moves the individual towards knowledge, love, meaning, hope, transcendence, connectedness, and compassion. Spirituality includes one's capacity for creativity, growth, and the development of

> a values system. Spirituality encompasses the religious, spiritual, and transpersonal. (Burke & Miranti, 1996, p. 2)

According to Koenig (1997):

> Almost every known human and mystical experience has been included under this term [spirituality]. Consequently, researchers have not been able to agree on a universal definition that can be operationalized and measured. This makes spirituality...difficult to study... so the vast majority of research today that talks about spirituality...examines only religion. (pp. 70-71)

Separation of Spirituality from Religiousness

Within the literature, there were differing opinions regarding the relationship between spirituality and religiousness. Maslow (1964), for example, was one of the early voices calling for the separation of spirituality and religiousness. He suggested that religious beliefs and experiences were no longer the exclusive property of traditional religious institutions. Values, ethics, spirituality, and morals were not to be held solely by institutionalized churches. For Maslow, most everything that was characteristic of religious experiences could benefit both religious and nonreligious persons. According to Wulff (1996), Maslow believed that seperating “peak” experiences from religion would enhance them by freeing them from the suppressive realm of organized religion.

In many definitions, religion was seperated into categories of religiousness and spirituality. Daniels (1994), seperated the terms by defining spirituality as the human

realization that life is lived in the incomparable presence of something greater than the self. Religion had more to do with organizational structures.

On the other side of the debate, Turner, Lukoff, Barnhouse, and Lu (1995) stated that spirituality and religiousness have not been historically distinguished from each other. Turner et al., and Spilka and McIntosh (1996) acknowledged that the terms religion and spirituality were used interchangeably. Both denoted a sense of meaning and purpose in life, thereby providing a source of love and relatedness, and were intended to keep believers relationship with that which is unknowable.

As Turner et al. (1995) acknowledged common elements between spirituality and religiousness, they also recognized differences between the constructs. In their attempt to distinguish between the two terms, Turner, et al., cited two definitions. First, according to Shafranske and Maloney (1990), religion was aligning oneself with the beliefs and practices of organized religious institutions. Secondly, Peterson and Nelson (as cited by Turner et al.,) described spirituality as a transcendent relationship and a Higher Being. It had nothing to do with religious affiliation. According to Stanard, Sandhu, and Painter (2000), these two definitions underscore the main differences between religion and spirituality.

Other indications of the separation were Ingersoll's (1997) definition of spirituality "as an organismic construct endemic to human beings and religion, a 'culturally flavored' framework that helps develop the organismic spiritual potential" (p. 226), and the increase in references to spirituality as a distinctive concept in the Religion

Index (Scott, 1997). Scott found 31 definitions of religiousness and 40 definitions of spirituality in a review of 20th century social science literature. Her analysis of the definitions suggested nine content categories: (a) experience of connectedness, (b) processes leading to increased connectedness, (c) behavioral responses to something sacred or secular, (d) systems of thought or beliefs, (e) traditional institutional or organizational structures, (f) pleasurable states of being, and (g) belief in the sacred/transcendent, (h) capacities for transcendence, and (i) concern with existential questions and issues.

In another study, Zinnbauer, Pargament, and Scott (1999) asked 305 individuals from diverse religious and professional backgrounds to write definitions of religiousness and spirituality. According to Zinnbauer, "both definitions shared features in common, but they differed in the focus of religiousness definitions on organizational and institutional beliefs and practices, and the focus of spirituality definitions on the personal qualities of connection or relationship with God or a Higher Power" (p. 14). The results of this study and additional policy capturing studies by Pargament, Sullivan, Balzer, Van Haisma, and Raymark (1995), and Zinnbauer (1997) led the researchers to conclude that clearly organized and coherent conceptions of religion and spirituality are evident. Congruent with other studies (e.g., Emblen, 1992; Perteet, 1994; Shafranske & Gorsuch, 1984), Zinnbauer stated that religiousness is more closely associated with formal /organizational religion, while spirituality was more often related to a sense of closeness with God and feeling of interconnectedness with the world and living things. Zinnbauer

et al. further concluded that broad and balanced definitions of religiousness and spirituality were yielding to narrow and more polarized understandings. Consequently, those authors concluded that research in spirituality and religiousness was losing its focus.

The demarcation of religion and spirituality is further illustrated by the increase in references to spirituality as a distinctive concept in the Religion Index (Scott, 1997), and the increasing attempts to develop measures of spirituality. There are several reviews of such measures in the literature (Hall, Tisdale, & Brokaw, 1994; MacDonald, Friedman, & Kuentzel, 1999; MacDonald, LeClair, Holland, Alter, & Friedman, 1995; Stanard, et al., 2000). Some instruments include the Spiritual Transcendence Scale (Piedmont, 1999), the NIA/Fetzner Multidimensional Measure of Religiousness and Sprituality (Fetzner Institute, 1999), the Expressions of Spirituality Inventory (MacDonald, 2000), and the Spiritual Gifts Inventory (Kehe, 2000).

Polarization Between Spirituality and Religiousness

Zinnbauer et al. (1999) noted two dilemmas in defining religiousness and spirituality. The first, was the need to distinguish between religiousness and spirituality without polarizing them. Second, there was a tension between remaining pluralistic enough to account for the varieties of religious and spiritual experiences, and the need for consensus among scholars leading to the generation of a significant research program.

In an effort to address the first dilemma, these researchers began by examining three ways in which religiousness and spirituality are polarized by contemporary

theorists: (a) organized religion versus personal spirituality, (b) substantive religion versus functional spirituality, and (c) negative religiousness versus positive spirituality.

Organized Religion Versus Personal Spirituality

According to Zinnbauer et al. (1999), religion was being defined in terms of "organized," "social," and "traditional" beliefs and practices. Spirituality was described by the terms "personal," "transcendent," and "relatedness" (p. 901).

Substantive Religion Versus Functional Spirituality

The substantive approach focused on the beliefs, emotions, practices, and relationships of individuals that are related to a higher power (Bruce, 1996). In contrast, the functional approach focused on how beliefs, emotions, practices, and experiences are employed to deal with the problems of meaning, death, isolation, suffering, and injustice (Bruce; Pargament, 1997). Some definitions of spirituality are substantive, while others are functional.

Negative Religiousness Versus Positive Spirituality

Tart (1975), suggested that the term "religious" indirectly referred to matters of social structure as opposed to dealing with spiritual experience. Spirituality, for Tart, had more to do with issues of meaning, God, and practical ways of living.

For Elkins (1995), religion was institutional and dogmatic. He defined spirituality, on the other hand, as "a way of being that comes about through awareness of

a transcendent dimension and that is characterized by certain identifiable values in regard to self, others, nature, life, and whatever one considers to be the Ultimate" (p. 10).

Critique

In critique of these categories of definitions, Pargament (as cited in Zinnbauer et al., 1999) did note that the polarization of religiousness and spirituality could limit perspicacity. Placing institutional religion in opposition to personal spirituality, for example, discounts the central concern of major religious institutions with spirituality. Conversely, defining spirituality as being expressly personal fails to recognize the importance of the context from which it has emerged.

Similarly, substantive definitions abate religiousness into to a state of inertia, describing what religion is without taking into account what it does or how it works. Hence, the dynamic character of religion is lost, leaving religion suspended in time (Zinnbauer et al., 1999). Likewise, limiting spirituality to functional definitions leads to boundary issues (Bruce, 1996, as cited in Zinnbauer et al.). Spirituality becomes undifferentiated from other entities struggling with existential issues. When functional spiritualities lose their spiritual core and encompass too many philosophical perspectives and questions, they become "flattened out ...absorbed into a night in which all cats are grey" (Berger, 1974, p. 129, as cited in Zinnbauer et al.).

Finally, to set up religion and spirituality in a negative versus positive dichotomy may obscure important aspects of both constructs. Labeling as such may cause one to overlook potentially destructive aspects of one or the other. Suggesting that the religious

aspects of spirituality are responsible for destructive consequences and that only the spiritual aspects of religion are of value, is misleading (Zinnbauer et al., 1999).

Pluralism

In response to the second dilemma, remaining pluralistic enough to account for the varieties of religious and spiritual experiences, Zinnbauer et al. (1999) offered Pargament's earlier definition of religiousness and of spirituality. According to Pargament (1997, as cited in Zinnbauer), religion is "a search for significance in ways that are related to the sacred" while spirituality is "a search for the sacred" (p. 32). Along with these definitions, Zinnbauer et al. presented detailed explication and concluded by stating, "we have suggested an alternative to the emerging meanings of religion and spirituality: one that integrates rather than polarizes these constructs, and one that sets boundaries to the discipline, while acknowledging the diverse ways people express their religiousness and spirituality" (p. 911).

Spirituality in Counseling

Elkins (1999) noted the field of counseling's long interest in spirituality. Spirituality was exigent to the work of many respected theorists in the history of psychology (i.e., William James, Gordon Allport, Erich Fromm, Viktor Frankl, Abraham Maslow and Rollo May). However, there were within the literature, both evidentiary effects of the exclusion of spirituality from counseling practice and the inherent possibilities offered by integration of spirituality into the practice of counseling.

In regard to the exclusion of spirituality from practice, Kelly (1995) highlighted Albert Ellis' contempt for religions and spirituality. In *Psychotherapy and Atheistic Values*, Ellis (1980) stated that "Religiosity is in many respects equivalent to irrational thinking and emotional disturbance . . . and the elegant therapeutic solution to emotional problems is to be quite unreligious . . . the less religious they are, the more emotionally healthy they are" (p. 637). Kung (1981, as cited in Kelly, 1995) commented that "Freud uncompromisingly rejects religion as such . . . Adler benevolently tolerates it . . . and Jung's attitude is in principle friendly toward it" (pp. 292-293).

Exclusion of spirituality from counseling practice was indicated by the work of several authors. Worthington (1986) suggested that clients with conservative religious and spiritual values may be hesitant to seek counseling because counselors may: (a) fail to consider religious concerns, (b) pathologize or psychologically interpret religious beliefs and events, (c) fail to ascertain religious terminology and ideas, (d) differentiate between religious and non-religious norms, (e) prescribe conduct that may be incongruent with clients' own particular moral code, or (f) discount clients' interpretation of religious/spiritual experiences as being invalid. Hinterkopf (1994) addressed the risks of insensitivity of counselors to the religious concerns of clients. Still others noted the paucity of cooperation between counselors and religious caregivers (Frevert & Miranti, 1998; Garzon & Tan, 1992; Kelly, 1995; Lemacher, 1997; McMinn, Chaddock, Edwards, Lim, & Campbell 1998; Richards & Bergin, 2000; Thorsen, 1999;). Zinnbauer and Pargament (2000) noted that counselors tended to be detached from the spirituality of

clients, avoiding issues that deal with spirituality and religious practices and neglecting spirituality as part of the counseling process. The dissonance between counselors who were not attentive to spiritual issues of clients fostered ineffectiveness as clients potentially perceived conflict with their religious values (Miller, 1995).

Other sources explored the possibilities offered by the inclusion of spirituality in practice. For example, Koenig and Pritchett (1988) suggested that integrating spirituality into counseling helps counselors: (a) understand client's psychological conflict, (b) design appropriate and acceptable interventions, (c) identify healthy religious resources, (d) recognize obstacles that prevent clients from utilizing spiritual resources, and (e) strengthen the therapeutic relationship. Heise and Steitz (1991) also expressed the need for counselors to attend to spiritual resources when a client's personal beliefs reflect unhealthy spirituality.

Similarly, Burke, et al. (1999) affirmed that spirituality and religion are very significant in the lives of many average people who seek the services of counselors. Citing Kelly (1995), they reported that two thirds of respondents to a national survey, indicated a preference for a counselor who holds similar spiritual values. While advocating inclusion of spiritual and religious issues in counselor education, Burke et al. presented five major assumptions relating to counselor education. Those assumptions include: (a) definitions of religion and spirituality, (b) assertion of the diverse nature of these constructs, and of counselor sensitivity to the spiritual and religious issues of clients, (c) acknowledgment that spirituality and religion have negative and positive

effects on client behavior, (d) inclusion of spirituality and religion in the counseling curriculum to enhance counselor educators' self-awareness, (e) the legitimacy of spirituality and religion as legitimate topics for counseling in secular settings. Having stated those underlying assumptions, the authors offered a rationale for including spiritual and religious issues into each of the core areas outlined by the Council for Accreditation of Counseling and Related Educational Programs (CACREP) and presented illustrations of how spiritual and religious issues can be incorporated into those areas.

Spirituality and Aging

McFadden and Gerl (1990) presented a review of theory directed specifically toward aging. These authors proposed that role transformation, the death of loved ones, physical changes, and other outcomes of aging, push toward a reassessment and restructuring of the self as individuals age. According to Labouvie-Vief , DeVoe, and Bulka (1989, as cited in McFadden & Gerl, 1990), cognitive and emotional growth facilitate such reassessment and restructuring. Some aspects of cognitive and emotional development enable aging adults to think abstractly, tolerate ambiguity and paradox, experience emotional flexibility, and commit to value systems which "transcend the conventional and encompass more general dimensions of the human condition" (Labouvie-Vief et al., 1989, p. 428). Such wisdom is manifested, as Erickson and Kivnick stated (1986, as cited in McFadden& Gerl, 1990), in persons who accept their own mortality, and view the world objectively and with perspective, and who maintain

empathy and involvement. Losses and gains produce opportunities for spiritual integration in the second half of life.

McFadden and Gerl (1990) provided descriptions of both mechanistic and organismic models of human development, concluding that organismic models dominated developmental psychology for most of the 20th century. Focusing on Fowler's six stages of faith, they stated that organismic theories have been criticized because of assumptions of universality and presumed ideal end states. Kwilecki (1988, as cited in McFadden & Gerl,1990) further argued that Fowler's theory cannot explain "the growth in piety in a Jehovah's Witness, a primitive shaman, or an Islamic fundamentalist" (p. 308). As a final critique, McFadden and Gerl asserted that because Fowler's model was so dependent upon verbal ability, his approach was unable to address the processes of spiritual integration in cognitively impaired elders

As an alternative to the mechanistic and organismic models of development, McFadden and Gerl (1990) held the life-span contextual model, combining elements from both mechanistic and organismic models, over and against each of those models. The life-span contextual model as posited by these authors was a complex model. One concept detailed by the model was the role of normative age-grade influences on development. According to Baltes (1979, as cited by McFadden & Gerl), that meant certain biological and environmental events affect nearly all persons at approximately the same age. A second concept considered by the model was the impact of normative physical changes of aging. Some questions posed by this second aspect of contextualism

were: “What challenges to a sense of spiritual integration are presented when disability severely limits mobility?” and “What is the impact of the deaths of friends and relatives on spirituality in late life” (p. 37). The third concept presented by contextualism affirmed that non-normative events, whether biological or environmental, affect individual lives (Baltes, 1979, as cited in McFadden & Gerl, 1990). Fourth, the contextual model asserted that normative history-graded influences experienced by most persons of the same age and cultural cohort have significant effects on development (Baltes, as cited in McFadden & Gerl). The terms “Embeddedness” and “Dynamic Interactionism” combined comprised the fifth concept espoused in the contextual approach to development (Lerner, 1984, as cited in McFadden & Gerl). In the elucidation of these terms, McFadden and Gerl wrote:

> Embeddedness means that the most important aspects of human life are experienced at many different levels–the biological, the psychological, the social, the cultural and the historical for example. These levels do not function independently but rather in dynamic interaction with one another. The life-span view urges us to see how the dimensions of spirituality can influence and be influenced by one’s physical condition, psychological well-being, interactions with others, and changing cultural beliefs about aging and spirituality. (p. 37)

Three implications for spirituality and aging were explicated by these authors. First, the contextual approach emphasized plasticity. Lerner (1984, as cited by McFadden & Gerl, 1990) defined plasticity as the potential for change. As for aging,

McFadden and Gerl stated that “as a result of the many interacting influences on development, reorganization can occur even in late life . . . no one should assume that an older person’s sense of spirituality is immutable” (p. 38). The second implication was that aging persons can actively choose to engage in the process of spiritual growth. Third, was that because of plasticity, interventions can occur to enhance spiritual growth for aging persons.

Moberg (2004), reported in his investigation of the research in spirituality, religion, and aging, concluded, not only that spirituality tends to increase with aging, but that, spirituality is positively related to the life satisfaction, well-being, and physical and mental health of older adults. He further concluded that spirituality positively affects recovery from physical and mental illness, and aids in the reduction of psychological stress and death anxiety.

Wisdom

The researcher found another dimension of spirituality and aging in the literature on conventional wisdom. The development of the concept of wisdom as it relates to spirituality was grounded in eastern cultures which focused on the conscious mind as a path to inner spiritual growth, rather than rationality and knowledge (Atchley, 1991).

Investigators who were influenced by eastern philosophies believed that wisdom based spirituality developed late in life. Achenbaum and Orwoll (1991) stated that wisdom was comprised of three interrelated facets: (a) intrapersonal wisdom, i.e. self-examination, self-knowledge, and integrity; (b) interpersonal wisdom, i.e. empathy,

understanding, and maturity in human relationships; and (c) transpersonal wisdom, i.e. capacity to transcend the self and strive for spiritual growth. Achenbaum and Orwoll believed that transpersonal wisdom was the key to understanding intrapersonal wisdom and interpersonal wisdom in that it provided a view of the self and of one's relationships from a position beyond the self.

The meaning of the wisdom has changed, as it has been subjected to different historical periods and contexts (Baltes, 2004). Yet, knowledge and exemplary behavior have consistently been integral components of wisdom (Baltes). Therefore, wisdom may remain more constant than other types of knowledge insofar as it is based on an understanding of self and others (Baltes).

Two basic approaches to the study of wisdom were explicit studies and implicit studies. Researchers who used explicit approaches explored wisdom from a theory based psychological perspective, while researchers who employed implicit approaches investigated wisdom as defined from the perceptions of lay persons.

The explicit theories can be traced along two pathways. The first pathway of explicit theories concentrated on the cognitive aspects of wisdom (Baltes & Straudinger, 2000; Horn & Masunaga, 2000; Labouvie-Vief, 1990a, Sternberg, 1998). Three categories of cognitive theories were: (a) theories based on specific characteristics (McKee & Barber, 1999), (b) Neo-Piagetian theories (Kramer, 2000; Labouvie-Vief, 1990b), and (c) cognitive theories based on the organization of wisdom knowledge within knowledge systems (Baltes & Kunzmann, 2004; Sternberg, 1998).

The second group of theorists based their research on the personal characteristics of wise men and women. These personality theorists emphasized the relationship between wisdom and the integration of affective, cognitive, and social processes (Achenbaum & Orwell, 1991; Ardelt, 2000; 2003; 2004; Helson & Srivastava, 2001; Orwoll & Permutter, 1990; Webster; 2003).

The researcher noted several definitions of explicit wisdom in the literature. Taranto (1989), defined wisdom in terms of one's ability to assess and to respond to human limitations. Birren and Fisher (1990) saw wisdom as balance between three opposing entities: (a) emotion and detachment, (b) action and inaction, and (c) knowledge and doubt. Labouvie-Vief (1990a), in a similar way, defined wisdom as a matter of integrating two dichotomous modes of knowing: mythos (subjective, experiential, and emotional) and logos (objective, analytic, rational). For Labouvie-Vief, "one mode [mythos] provides experiential richness and fluidity, the other [logos] logical cohesion and stability" (1990a, p.53). Sternberg (1990) proposed six antecedent components of the development of wisdom: (a) understanding the presuppositions, meanings, and limitations of knowledge, (b) processes and decisions involved in problem solving (c) a strong desire for the in-depth judgment and evaluation of things, (d) the ability to tolerate ambiguity and obstacles (e) motivation to understand what is known and to extricate its meaning, and (f) the effects of contextual factors on thoughts and action actions.

Baltes (1993), saw wisdom as “an expert knowledge system concerning the fundamental pragmatics of life” (p. 586). Smith and Baltes (1990), specified five criteria of wisdom which were: (a) rich factual knowledge, (b) procedural knowledge, (c) life-span contextualism, (d) relativism, and (e) the recognition and management of uncertainty. Achenbaum (1997), offered a model of wisdom that developed out of study and dialogue with Orwoll. Based on their findings, they theorized that there were three basic dimensions of wisdom: (a) the affective dimension, (b) the cognitive dimension, and (c) the conational dimension. The qualities contained within the affective dimension were self-development, empathy, and self-transcendence. The qualities within the cognitive dimension were self-knowledge, understanding, and knowledge of limits. The qualities within the conational dimension were integrity, maturity in relationships, and commitment. Wise persons possessed all nine qualities, but the dynamic configuration of those qualities varied depending on individual and contextual variables.

Staudinger, Maciel, Smith, & Baltes (1998) suggested that in addition to personal characteristics, certain types of experience facilitate wisdom-related performance. Training and practice in psychology was the strongest predictor of wisdom. The second predictor was related to intelligence and personality. The personality variables, openness to experience, and a mid-rang score on introversion/extroversion scales were stronger predictors of wisdom-related performance than intelligence.

For McKee and Barber (1999), wisdom referred to the ability to see through illusion. Brugman (2000), posited that wisdom is comprised of cognitive, affective, and

behavioral constituent elements. Wisdom was best understood as doubt and uncertainty in juxtaposition with the ability to comprehend reality. Ardelt (2000) postulated that wisdom contained three components: (a) the ability to see truth as it really is, (b) having the ability to recognize and transcend one's own subjective realities, and (c) compassion and empathy.

Kunzmann & Baltes (2003), found that individuals higher on wisdom knowledge reported: (a) higher affective involvement (e.g. interested, attentive, inspired) combined with lower negative feelings (angry, sad, disappointed) and pleasant feelings (e.g., happy, cheerful, proud, (b) a value orientation that focused on other enhancing values and personal growth combined with a lesser tendency toward values revolving around a pleasurable life, and (c) a preference for cooperative conflict management combined with a lower tendency toward adopting submissive, avoidant, or dominant strategies.

Sternberg (2005), set forth his balance theory of wisdom, defining wisdom as:

> The application of intelligence, creativity, and knowledge as mediated by values toward the achievement of a common good through a balance among (a) intrapersonal, (b) interpersonal, and (c) extrapersonal interests, over the (a) short- and (b) long-terms, in order to achieve a balance among (a) adaptation to existing environments, (b) shaping of existing environments, and (c) selection of new environments (p. 5).

Sternberg (2005), noted that the goal of implicit-theoretical studies is to provide an account of wisdom based on people's beliefs. One type of implicit study was the

verbal or lexical study. Researchers utilizing lexical studies chart verbal descriptors that characterize wise individuals. Accordingly, those researchers used the descriptors to ascertain the degree of wisdom demonstrated by persons in the categories of cognition, expressed behavior, and experience (Hershey & Farrell 1997; Holliday & Chandler, 1986; Montgomery, Barber, & McKee, 2002; Staudinger, Lopez, & Baltes, 1997; Sternberg, 1985, 1990; Takahashi & Bordia, 2000).

In nominational studies, as the name implies, researchers elicited the nomination of persons who were deemed to be wise (Defilippo, 1996; Denny, Dew, & Kroupa, 1995; Farrell, 1999; Paulhus, Wehr, Harms, & Strausser, 2002; Perlmutter, Adams, Nyquist, & Kaplan, as cited in Orwoll & Permutter, 1990). The researchers found that the variables of age, gender, educational level, listening skills, and good advice giving were significant in the nomination of wise persons (Baltes, Straudinger, Maercker, and Smith, 1995; Denny et al., 1995; Hira & Faulkender, 1997; Jason, et al., 2001)

Sternberg (2005), conducted a comprehensive review of literature dealing with the relationship between wisdom and age. After examining five views of the relationship between wisdom and age, he concluded that: (a) there was no clear consensus as to the relationship of wisdom and age; (b) there seemed to be consensus that wisdom declines in later old age at a rate commensurate with the level of decline in mental health; (c) because of individual differences in the development of fluid and crystallized abilities and personality attributes that were relevant to the development of wisdom, there was no universal trajectory of the development of wisdom; (d) the circumstances in which people

lived, such as isolation, could affect the development of wisdom, just as personal variables did, (e) due to the wide variation in the operationalization of wisdom and differences in measurement, it was necessary for researchers to understand how research methodology affected outcome.

Achtemeir (1996), presented Old Testament wisdom in terms of the technical skills of the artisan (Exodus 36:8), the practical skill of coping with life (Proverbs 1-5, 11, 14), and the pursuit of a lifestyle of proper ethical conduct (Proverbs 2: 9-11). In the Hellenistic world, "Sophia" – the personification of wisdom – was suggestive of Philo's logos, the rationality of God, and was found to be in a counter role of the god Isis in that world. These descriptions of Wisdom paralleled many aspects of the theories of Balte's, Labouvie-Vief, Sternberg, as well as others who have published research in the field of wisdom. The researcher found many of the aspects of Wheat's (1991) model – sacredness of life, connection with other life, personal growth and wholeness, altruism, awareness of pain and suffering, morality, meaning, purpose, personal valuing, inner experience, and behavioral expression – in the literature of wisdom.

Coping

Lazarus and Folkman (1984) defined coping as "constantly changing cognitive and behavioral efforts to manage stress" (p. 141). Reframing and coping activities were central to the process of coping for these authors. According to Pargament (1997), reframing was evaluative in that an individual made a value judgment about the significance of a situation and his/her ability to manage it. Coping activities were those

activities which enabled individuals to understand and deal with situations in ways that conserved the significant, or transformed the nature of significant goals and values. One function of spirituality was to facilitate the letting go of old goals and values and to seek new ones, attaching to a new source of significance as opposed to maintenance of the old.

Several articles addressed the ways in which people utilize spirituality in coping with adversities in life such as cancer (Gibbs & Achterberg-Lawlis, 1978; Yates, Chalmer, St. James, Follansbee, & McKegney, 1981), loss of a spouse (Harvey, Barnes, & Greenwood, 1987; Siegel & Kuykendall, 1990), heart disease (Saudia, Kinney, Brown, & Young-Ward, 1991), depression (Koenig , 1992), AIDS (Kaldjian, Jekel, & Freidland, 1998), end-stage kidney disease (Tix & Frazier, 1998), and problems with daily living activities. Other studies indicated that people rely on spirituality in coping in different ways and that different ways of coping have different implications for adjustment (Gass, 1987Park & Cohen, 1993; Pargament et al., 1990; 1994). Koenig (1990) suggested that, regardless of whether they have followed a life-long path of religiousness, or move toward religion late in life, a large majority of older adults incorporate religion and/or spirituality into their repertoire for coping. Other researchers suggested that spirituality buffers the effects of stressful life events insofar as one's spiritual beliefs affect the interpretations of those experiences by promoting perceptions that help one cope (Sorajjakool, 1998; Pargament, 1997; Ferraro & Koch, 1994; Hettler & Cohen, 1991; Maton, 1989).

Three types of religious coping were: (a) deferring religious coping, which viewed religion as passive; (b) self-directing religious coping, which reflected the empowerment of the individual to participate in active coping strategies; (c) collaborative coping was the forming of a partnership with God for problem solving (Pargament, K. I., Kennell, J., Hathaway, W., Grevengoed, N., Newman, J., & Jones, W., 1988).

Bowlby's (1969) attachment theory contributed to one hypothesis questioning why people choose some coping strategies while rejecting others. Subscribing to attachment theory, Ainsworth, Blehar, Waters, and Wall (1978) established three categories of relationships between infants and primary care-givers: (a) secure, (b) avoidant, and (c) anxious and/or ambivalent. In a secure primary relationship, the infant plays and explores in a care-giver's presence. Should the care-giver leave, the infant becomes distressed and seeks closeness until that person's return. Avoidant infants do not express a need to be in proximity with the primary care-giver. Anxious/ambivalent infants, rather than avoiding care-givers, cling to them upon their return and remain distressed for considerable periods of time. Following that line of thought, Kirkpatrick (1992, 1994, 1999; Kirkpatrick & Shaver, 1990) developed a theory of spiritual attachment based on Bowlby's work, wherein God becomes the attachment figure. According to Kirkpatrick (1994), the God-person relationship was a one-way care-giver relationship. He employed the concept of attachment to God to predict adjustment. Persons with avoidant or anxious attachments to God reported greater incidence of anxiety, loneliness, depression, poor health, and lower levels of life satisfaction.

Spirituality, Culture, and Gender

The researcher found two additional areas of literature that related to the development of spirituality. Culture, especially as expressed in the context of world religion was one area of literature. Difference in the development of spirituality between males and females was the other area of literature.

Culture

It has been well established that the therapeutic relationship is a cross-cultural experience (Bergin & Jensen, 1990) and that the counseling experience and process are enhanced as clients perceive that counselors are similar to themselves. According to Frevert and Miranda (1998), spirituality and ethnic and cultural experience were intricately intertwined. Ramos-Sanchez, Atkinson, and Fraga (1999), likewise asserted that there had to be similarity in values between client and counselor for counseling to be effective. Studies with members of minority cultural and ethnic groups found that clients preferred someone who was like them (Abreu, 2000).

Yet, the preponderance of research on spirituality had been conducted in the context of cultures which are heavily biased toward Christianity (Miki, 1999). Of the 282 studies relating to spirituality and aging abstracted by Koenig (1995), only five considered other religious/spiritual orientations. Diversity of definitions of spirituality was not limited to secular literature. There were significant differences in opinions about the nature of spirituality expressed across major world religions as found in Halverson's

(1996) *Compact Guide to World Religions.* Differing opinions as to the definition of true spirituality were held across world religions.

Islamic spirituality was based on "the experience and knowledge of Unity and its realization in thoughts, words, acts, and deeds, through the will, the soul, and the intelligence" (Nasr, 1991, p. xiii). Living and acting in accord with God's will as embodied in the Shari'ah, or divine law of Islam, was the focus.

Hindu practices involved the surrender of worldly concern and a focus on nothingness as a "renunciation of the everyday world in the name of a higher, transcendent power" (Thomas, 1994, p. 62). For Sundararajan and Mukerji (1997, p. xiii), Hindu spirituality was a "matter of winning an orientation or a sense of perspective and wholeness or completeness which the ideal of liberation [freedom of the spirit] implies."

In Judaism, there were contrasting views of spirituality. For Gerwitz (1986), there were three qualities of the spirit – transcendent, intellectual, and nonmaterial. It was Gerwitz's opinion that, "Spirituality or soul exists in every person; some individuals have realized their spiritual being to a greater extent than others" (p. 29). Seicol (1997), on the other hand, held that spirituality has two sides. One side was grounded in issues of the self, identity, and internal integration. The second aspect of spirituality was related to issues of relationship, interactions and external processes, which were defined as the need for spiritual connectedness.

As for Christianity, Moberg (1997) suggested that the scriptures have much to say about spirituality, and measuring spirituality. However, for him, the absolute judge of any person's spirituality was the Deity. According to Moberg, while scriptural criteria were used to evaluate spirituality, sectarian groups emphasized differing signs of spiritual maturity, further highlighting the issue of diversity. Salvation, spiritual growth, and relationship with God were the key tenants.

Payne and McFadden (1994) emphasized the lack of agreement across world religions by noting that meaning and purpose are sought in Western cultures through attachment or connection, while Eastern cultures tend to emphasize detachment from self, others, the world, and even divinity as the preferred spiritual path.

Finally, while there was so much difference and diversity, there was also common ground across world religion. Pargament (1997) noted five broad features held in common by differing religions: (a) their means for and emotions associated with connectedness to the sacred, (b) their importance and embeddedness in people's lives, (c) the ways in which they are created and redesigned through life experience, (d) whether they are held more as a way of knowing or of thinking about the world, and (e) their content of conceptions and practices.

Gender

In her challenge of Kohlberg's theory of moral development, Gilligan (1982) was one of the first to reject the universality of stage theories as they pertain to women. Bateson (1990; 2000) suggested that the development of women was less linear than that

of men. Judith Jordan (1997) and other feminist psychologists proposed an alternative relational model of development based on connections and relationship.

Some models of both men's and women's spirituality may be found emerging from narrative literature. One example of such a model was found in the work of Learn's (1996) *Older Women's Spirituality: Crafting the Quilt.* Though not intending to create a model of spirituality, Learn discovered five aspects of the spirituality of older women: (a) appreciation of solitude, (b) deep spiritual connections in community, (c) dialogue with a presence [of God for some, with deceased loved ones for others], (d) recreating the self and, (e) spiritual caring of self and others.

In contrast, Moody and Carroll's *Five Stages of the Soul* offered a model male spirituality based on King Odysseus in *The Odyssey.* Five stages of the model were: (a) call, (b) search, (c) struggle, (d) breakthrough, and (e) return (1997, p. 9).

Summary and Implications of the Review of Literature

Clearly, the research to date in spirituality and counseling, and in the spirituality of older adults supported the premise that there was a difference in the spirituality of human beings based on age and gender. Furthermore, the debate on the operational definition of the construct spirituality had come full circle from being indistinguishable from religiousness, to being a separate construct, to being a polar opposite of religiousness, to being a broad and pluralistic construct, and back to being used interchangeably with religiousness. Researchers utilized multiple definitions of

spirituality; however, medical researchers tended to use “spirituality” and “religiousness” interchangeably due to the functional nature of spirituality in relation to medical research. Wheat’s (1991) definition of spirituality met the criteria established by Zinnbauer et al., (1999) as being distinguished from religiousness, integrative rather than polarizing, and allowing of the diverse ways in which people express religiousness and spirituality. However, there were limitations to Wheat’s work. First was the exclusion of adults older than age 62, an emerging, important, and influential demographic in the United States. Therefore, the validity of the HSS with older adults remained unaddressed. Second, although Wheat offered an acceptable definition of Spirituality, he did not consider alternative models of spirituality in the development of the HSS. Results of this study may expand the theoretical knowledge leading to further understanding of human spirituality across the life span and may produce a further refined measure of spirituality.

The researcher recommends that training in counselor education programs include systematic theoretical instruction in the area of human spirituality. In light of the findings that women score higher on the HSS than do men, and that there is an increase in spirituality as persons age, the researcher recommends the inclusion of human spirituality in courses dealing with gender issues and/or gerontology. This would be consistent with recommendations from Frevert & Miranti (1998), Garzon & Tan (1992), Hinterkopf (1994) Kelly (1995), Lemacher (1997), McMinn et al. (1998), Miller (1988), Richards & Bergin (2000), Thorsen (1999), and Worthington (1986).

Additionally, the researcher recommends that counselors integrate assessment and knowledge of spirituality into their own practices, which would be consistent with the position of Burke et al. (1999), Kelly (1995), Koenig & Prichett (1988), and Zinnbauer (1999). Given the findings concerning the multifaceted nature of human spirituality, the researcher recommends that practitioners expand their focus on spirituality beyond interpersonal and intrapersonal relationships. Connectivity with nature and other living things (HSS Factor I: Larger Context-Wheat) are integral parts of the multifaceted character of human spirituality.

CHAPTER III

METHODS AND MATERIALS

Introduction

At the onset of this study, the researcher could find no instruments, to assess spirituality, that were designed to be used with older adults. However, the researcher did deem the Human Spirituality Scale (HSS), developed by Wheat, to be potentially appropriate for assessing the spirituality of older adults. Therefore, the purpose of this study was to study the validity of the HSS with a specific group of older adults, adding to its viability as a research instrument for the study of spirituality and of aging. In this chapter, the researcher provided information on the (a) research design of this study, (b) participants, (c) instrumentation, (d) materials, (e) procedures, and (f) statistical analysis used to examine the data.

Research Design

The primary design of this research was a single group, correlational design. Exploratory and confirmatory correlational methods were used to determine (a) if relationships existed among items when the HSS was administered to an older adult population, (b) the degree to which those items were statistically related, and (c) to determine if there was a goodness of fit for items into categories which had been determined as part of Wheat's earlier study (1991). In this correlational, or ex post facto

design, there was no manipulation of variables and the group and conditions were already formed. Shavelson (1996) posited that ex post facto designs generally examine the degree of association between two or more variables and they do not examine causal relationships. Additionally, the design was considered ex post facto, in that, the subjects were already preconditioned, to varying degrees, by life experiences before the researcher arrived to collect data.

Even though the primary design was correlational, this research was also descriptive. It was descriptive research because the researcher measured the characteristics of the participants at only one point in time which occurred during the first phase of the project. Even though descriptive research is the most basic form of research, it can yield important information. Gall et al. (1996) suggested that many educational reform initiatives have been based on the findings of such basic descriptive research.

The design, in part, could also be described as posttest-only, non-experimental design in so far as one dependent variable was measured. Spirituality, as defined by scores on the HSS, was measured among participants from a very specific, age defined group. There was no random selection or assignment, and there was only one administration of the HSS.

Threats to Internal Validity

Fraenkel and Wallen (1999) cited participant characteristics as a threat to internal validity. Older adults who lived in United Methodist facilities may have been different from older adults who lived elsewhere. Volunteer participants may be different from those who chose not to participate.

Threats to External Validity

Several threats to external validity were included in *Educational Research, an Introduction* (Gall et al., 1996). Many of those threats were pertinent to this research: (a) an accessible population, (b) the extent to which personological variables of the participants influenced responses on the HSS, and (c) experimenter effect. The researcher used several unique conditions to facilitate this research. Those conditions were: (a) the researcher's geographical location was within the conservative state of Mississippi; (b) the residential facilities in which the data were gathered were operated by a Christian denomination; (c) there was a prior relationship between the researcher and the CEO of United Methodist Senior Services of Mississippi; and (d) the researcher held ministerial credentials in the United Methodist Church. Hence, the results of the current study may not be generalizable to older adults in other settings.

Participants

The participants for this study were drawn from the total population of older adults residing in the independent living division of the Continuing Care Retirement communities (CCRCs) operated by United Methodist Senior Services of Mississippi during the spring of 2000. There were 1,350 persons between the ages of 62 and 100, who lived independently in those facilities at that time.

These older adults were an appropriate population for study in that many older adults lived in senior housing, assisted living residencies, nursing homes, and Continuing Care Retirement Communities (CCRCs). According to the American Association of

Homes and Services for the Aging (AAHSA, 1999d), older people reported that 69%, if forced from their own home, preferred to live in supportive senior housing in their own communities. Approximately 1.7 million elders with low incomes needed access to affordable housing. Another 1.5 million needed priority housing assistance. Of all older renters living at or below the poverty level, 77% spent 30% of their income on housing. Of these older renters, 48% spent at least 50% of their monthly income for rent (American Association of Homes and Services for the Aging, 1999a).

CCRCs offer several housing and healthcare options, ranging from independent living to full-time skilled nursing care. They are considered to be one of the oldest forms of managed care in America, providing housing and health-related services for residents, under contract for a specified period of time or for life. The average reported age at entry was 78 years, while the median age of CCRC residents was 83 (American Association of Homes and Services for the Aging, 1999c).

Demographic information provided by the participants indicated that: 78.4% were female (n = 185), 18.2% were male (n = 43), and 3.4% of the participants did not indicate their sex on the questionnaire (n = 8). The median age of the females was 80 years old and the mean age was 79.6. The median age of the males was 79 years old and the mean age was 79.1. When asked if there were any chronic problems that limited daily activities, 58.5% of the participants responded “yes” (n = 138), 38.1% responded “no” (n = 90), and 3.4% did not respond to the question (n = 8).

Racial background information indicated that 86.4% were Caucasian (*n* = 204), 3.8% were African American (*n*=9), and 5.5% indicated "other" (*n* = 13). Ten of the participants did not indicate their race.

Participants indicated that (a) 14.8% had less than a high school education (*n* = 35), (b) 17.8% were high school graduates (*n* =42), (c) 33.5% had some college (*n* = 79), (d) 7.2% were college graduates (*n* = 17), (e) 7.6% had completed some graduate course work (*n* = 18), (f) 14.4% held graduate degrees (*n* =34) and (g) 4.7% chose not to answer the question (*n* = 11).

Responses to a religious preference question indicated that: (a) 44.8% of the participants were United Methodists (*n* = 105), (b) 28.8% were Southern Baptists (*n* = 68), (c) 7.6% were Pentecostal (*n* = 18), (d) 5.1% were Roman Catholic (*n* = 12), (e) 5.1% did not respond to the question (*n* = 12), (f) 3.8% were Presbyterians [PCUSA], (*n* = 9), (g) 2.1% were Presbyterians [PCA], (*n* = 5), (h) 1.3% were Episcopalians (*n* = 3), (i) 0.8% were Lutherans (*n* = 2), (j) 0.4% indicated "None" (*n* = 1), and (k) 0.4% indicated Unitarian (*n* = 1).

Income among the population for this study spanned a broad spectrum. Some residents were able to afford $150,000 cottages on campus while others had outlived their financial resources and could no longer afford the cost of housing. The UMSSM website (UMSSM, 2000) reported an increasing number of residents relying upon federal subsidy and grants from a UMSSM benevolence fund (UMSSM, 2000).

Instrumentation

The instrument used in this study was the Human Spirituality Scale (HSS), developed by Wheat (1991) as part of his doctoral dissertation. Wheat developed a table of specifications consisting of 8 aspects of spirituality which were presented as the content variables, and 3 behavioral expressions of spirituality which were presented as the process variables. The content variables were; (a) Sacredness/Significance of Life, (b) Connection with Other Life, (c) Personal Growth, (d) Altruism/Selflessness, (e) Awareness of Pain and Suffering, (f) Truth/Justice/Morality, (g) Meaning in Life, and (h) Purpose in Life. The process variables were: (a) Personal Valuing, (b) Inner Experience, and (c) Behavioral Expression. Following a review of literature, Wheat proposed three factors by grouping together those content variables which seemed to be related. Sacredness/Significance of Life, Connection with Other Life, and Personal Growth, made up the Oneness/Unity factor. Altruism/Selflessness, Awareness of Pain and Suffering, and Truth/ Justice/Morality made up the second factor. Meaning in Life, and Purpose in Life made up the third factor. Wheat then created a pool of 131 items to be considered for inclusion in the HSS. He reported that he wrote approximately equal numbers of positive and negative items for the pool of questions.

Wheat investigated content validity of the HSS by submitting the pool of items to a panel of five expert judges. Judges rated each item on a scale of one to five for overall quality and relevance to human spirituality. For an item to be retained three judges had to rate the item 4 or 5. Using judges' ratings, 98 items were retained.

Wheat took 2 items from each of the 3x8 cells in his table of specifications, and created a 48 item questionnaire which he used for the first of three pilot studies. Wheat conducted three pilot studies. With each of the pilot studies, Wheat performed Cronbach's Alpha for internal reliability, retaining items with a value of .80 or higher. He also calculated a discrimination index for each item, retaining those items with an index of .30 or higher. Wheat also conducted Exploratory Factor Analysis (EFA) in each of the studies retaining items with a factor loading of .30 or higher.

In Wheat's (1991) initial instrument, the mean score of individuals in groups who had been classified as being different with regard to their spirituality were also found to be statistically significantly different on the HSS. With Wheat's second version of the instrument, an exploratory factor analysis was conducted, yielding three factors which he labled: (a) a larger context or structure in which to view one's life, (b) an awareness of and connection to life itself and other living things, and (c) a reverent compassion for the welfare of others. In the third refinement of the instrument, age and sex differences were consistent with predictions based on Wheat's conceptual study. Women as a group reported higher levels of spirituality than men, and Wheat's older adults (ages 45-65) reported higher levels of spirituality than Wheat's younger adults (ages 25-44). Wheat reported a Cronbach's alpha of .89 for the total scores of the final version of the HSS.

In the final version of Wheat's HSS instrument, the total score was derived by summing the value of each item. One HSS item (number 13) was reverse scored [1 = 5, 2 = 4]. When comparing different groups, Wheat utilized total HSS scores since all items

of the final version of the HSS were correlated with each other. Even though Wheat identified three factors on the HSS, he did not pursue the development of factor scores.

Procedures

The researcher contacted Wheat for permission to use the HSS, and to obtain Wheat's data from his study (see appendix A). The researcher also obtained permission from the CEO of United Methodist Senior Services of Mississippi (UMSSM) (see appendix B), and the Institutional Review Board for the Protection of Human Subjects of Mississippi State University (see appendix C), to visit each of the 10 independent living facilities operated by UMSSM, and to invite residents to participate in the data gathering activity. Since the noon meal was available to all residents as a part of the contractual agreement with UMSSM, the researcher chose to visit the facilities during that time. Even though the residents were mobile and independent, approximately 40 % of the 1350 residents were in attendance. Across the different campuses, the researcher distributed more than 500 questionnaires to individuals who considered participating in the study.

The administrators of the respective facilities introduced the researcher to the residents at the beginning of the noon meal and briefly stated the purpose of the researcher's visit. Administrators then invited the residents to remain following the meal at which time the researcher stated the purpose of the research (see appendix D). The researcher distributed questionnaires and demographic forms for he residents to examine. The researcher invited residents to ask questions about the research. The researcher answered all questions to the residents' satisfaction.

The researcher obtained a signed informed consent form before residents were allowed to participate (see appendix E). The researcher (a) notified all residents that their participation was voluntary and (b) specified that residents could discontinue participation at any time. The researcher provided residents with the questionnaire (including the Human Spirituality Scale--HSS), demographic data forms, and pencils (see Appendix F). The forms were large print to facilitate readability. The researcher allowed residents to carry the instruments to their respective apartments in an attempt to reduce anxiety and potential distractions, and to allow time for thoughtful reflection before answering questions. Some residents chose to remain in the dining facilities while filling out the scales and demographic questions. The process of completing the HSS questionnaire took no longer than 90 minutes at any location. However, the researcher chose to stay on the premises for the entire afternoon at each site to visit, provide support and to listen and respond to questions that arose for residents as a result of having participated in the study.

Several of the participants (a) decided not to complete the questionnaires or (b) could not complete the questionnaires. After the researcher inspected the questionnaires which were returned, 42 incomplete questionnaires were discarded, and 236 usable questionnaires were retained.

Analysis of Data

The researcher posited six research questions to fulfill the purposes of this study:

1. What was the estimated internal reliability of the HSS items when used with older adults?

2. Is there a statistically significant difference in the overall mean HSS scores between this study's participants and Wheat's participants?

3. Are there statistically significant differences between the mean HSS scores of male and female participants?

4. Is there a statistically significant interaction between age and sex in mean HSS scores for the adults in the combined data sets in this study and the Wheat study?

5. How does the HSS factor structure computed with data from older adults compare with the HSS structure of data from Wheat's study with middle-aged adults?

6. How well does the Wheat model of Human Spirituality fit with the data from (a) middle aged adults, (b) older adults, (c) adults from a combination of both groups [middle-aged and older adults] and (d) adults in developmental age groups created from the pooled data sets?

Research questions 1-5 referred to data from the Human Spirituality Scale and the factors which comprised the scale. In answering questions 1-5, the researcher utilized SPSS 14 (Norusis, 2006) to analyze data.

The researcher obtained permission from Wheat to use HSS data from middle-aged adults for comparisons with data obtained from older adults in the current study. To address the internal reliability of the Human Spirituality Scale (HSS), the researcher (a) performed item analysis, (b) computed Cronbach's alpha, and (c) compared the current results to those of Wheat's norming analysis.

To compare differences between Wheat's data and this study's data, the researcher first calculated means and standard deviations for the two groups. The researcher then

compared overall difference in mean HSS scores between older adult (this study's) participants and middle-aged adult (Wheat's) participants by performing a *t*-test. The researcher chose an alpha level of .05.

Wheat's older participants and this study's younger participants overlapped in age. Therefore, the researcher grouped participants into 5 age categories utilizing Super's well-established categories (as cited in Herr, Cramer, & Niles, 2004), and computed an analysis of variance (ANOVA). To test for differences among age groups, the researcher ran post hoc pairwise multiple comparisons via Tukey HSD with an alpha level of .05.

To determine differences between males and females, the researcher grouped the data by gender. He analyzed the differences between men and women by computing an *F*-ratio using the analysis of variance. To investigate whether differences in HSS score between men and women existed within age categories, the researcher performed a series of t-test analyses for each of the 5 age categories.

To test for main effects of age, gender, and the interaction between age and gender, the researcher used a 2x5 factorial analysis of variance design. The researcher maintained an alpha level of .05.

To investigate how the factor structure of data obtained from older adult, compared with the factor structure of data obtained from middle-aged adults, the researcher conducted exploratory factor analysis (EFA) of the older adult data set. The researcher inspected the item content of each factor in both Wheat's and this study's factor analyses. To compare the two factor structures, the researcher noted those HSS items that were common to the factor structures of both data sets. The researcher acknowledges that the

oblique rotation used in EFA produces factors that are highly correlated with each other. Hence, some of the observed commonality may be artificial.

To further examine Wheat's construct of Human Spirituality (as measured by the HSS), the researcher depicted a visual model of Wheat's final factor analysis, "the Wheat Model of Human Spirituality." For the Wheat Model of Human Spirituality, the researcher assigned items to the three factors proposed by the results of Wheat's EFA. Those factors were (a) Larger Context, (b) Awareness of Life, and (c) Compassion. Wheat posited that three components of his "Process Dimension," (a) Personal Valuing, (b) Inner Experience, and (c) Behavioral Expression, would be present in each of the three factors. When Wheat completed his final version of the HSS however, all three process dimensions were present in only one of the three factors. The reader should note that Factor 2, "Awareness of Life," contained no items that represented the process dimension of "personal Valuing." The reader also should note that Factor 3, "Compassion," contained no items that represented the process dimension of "Behavioral Expression." The researcher constructed Figure 1 to present the item content for Wheat's three factors and three process dimensions.

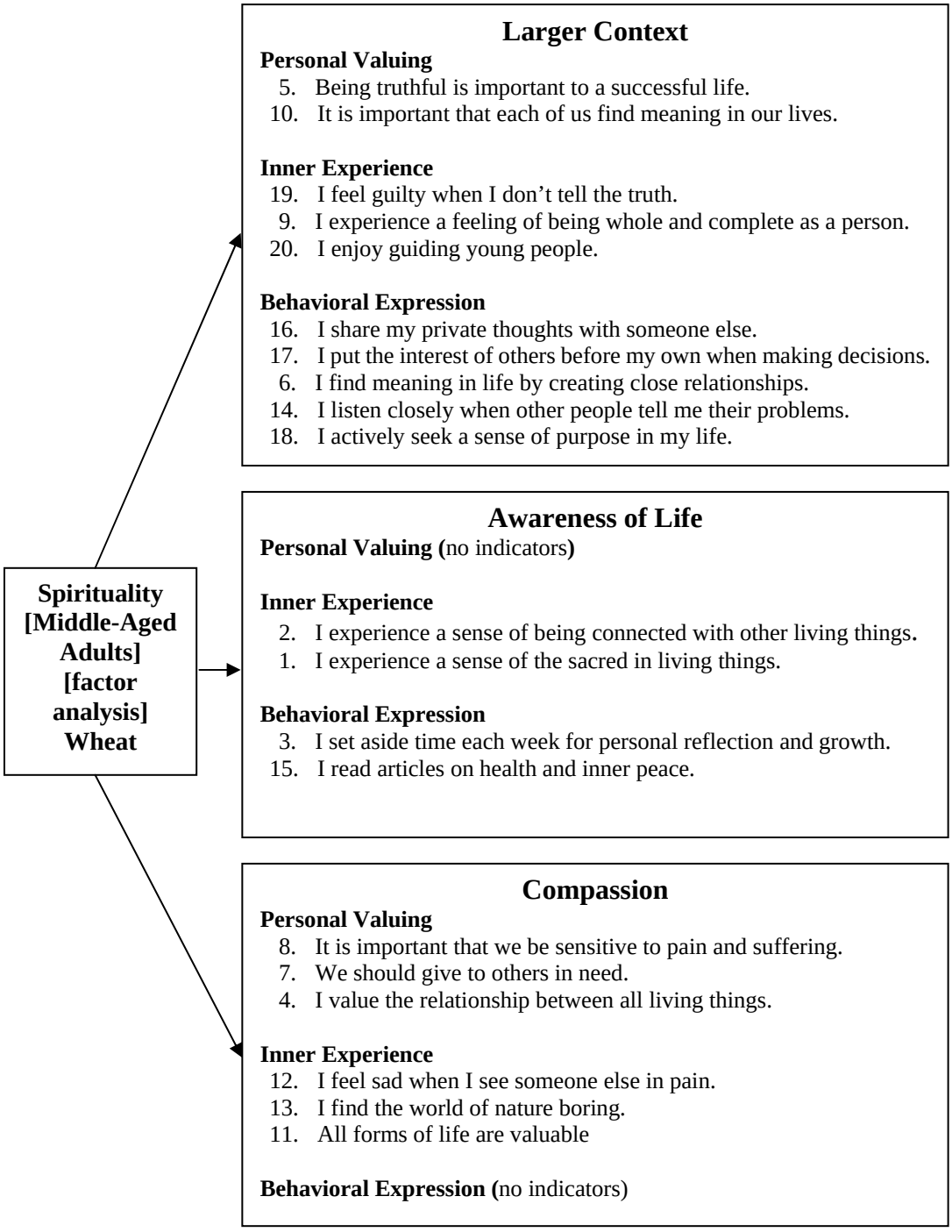

Figure 1 Wheat's Model of Human Spirituality

The researcher used confirmatory factor analysis to determine how well the Wheat model of Human Spirituality fit the data from (a) middle-aged adults, (b) older adults, (c) adults from a combination of both groups [middle-aged adults and older adults], and (d) developmental age groups created from the pooled data sets. To compute the goodness-of-fit indices for the Wheat Model, the researcher utilized AMOS (Arbuckle, 1997) to analyze the data. The researcher computed the following fit indices: Chi-Square Ratio (X^2/df), Comparative Fit Index (*CFI*), Root Mean Square Error of Approximation (*RMSEA*), Tucker Lewis Index (*TLI*), and Goodness of Fit Index (*GFI*).

Concerning the use of X^2/df, the researcher used the following guidelines as reported by Flanagan, Genshaft, and Harrison (1997). Chi-Square allowed for a statistical test of the fit of a model and, when used with degrees of freedom, could be used to determine the probability that a comparison to degrees of freedom and a small probability (e.g. $p < .05$), typically indicated that a model was not a good fit with the data. Conversely, a smaller X^2 in comparison to the degrees of freedom (e.g. $p > .05$) suggested that a model was a good fit with the data. The researcher also computed additional fit indices that utilized different dimensions of goodness-of-fit. The Chi-Square Ratio statistic adjusts for sample size and model complexity. While cutoffs for interpreting the Chi-Square Ratio vary, Arbuckle and Wothke (1999), reported that cutoff values ranging between 1 and 3 would constitute an adequate goodness of fit. Cutoff values closer to 1 indicated an excellent fit and cutoff values closer to 3 indicated an adequate fit.

The *CFI* was designed to estimate the fit of a model to a population. As an indicator of the adequacy of the model, the closer the *CFI* value was to 1.00, the better the model fit, with cutoff values close to .95 indicating good fit (Hu & Bentler, 1999). The *RMSEA* also was designed to make judgments about the adequacy of a model. For the *RMSEA* index, the closer the value was to 0.00, the better the fit of the model with the data. *RMSEA* indices of .06 and smaller were considered good fit (Hu & Bentler, 1999).

The researcher computed the Tucker Lewis Index (*TLI*) since the *TLI* could be used to test goodness-of-fit of a model and was not sensitive to sample size. As with the CFI, *TLI* indices closer to 1.00 were indicators of the adequacy of a model. Cutoff values close to .95 indicated good fit. The researcher al utilized *GFI* index to test Wheat's model. Since the *GFI* was created to measure the fit of a model with one that had a perfect fit with the data, the researcher shoes this index as another indicator of goodness-of-fit. *GFI* indices closer to 1.00 also were indicators of the adequacy of a model.

CHAPTER IV

RESULTS AND DISCUSSION

Analysis of Data

Question 1

The researcher obtained permission from Wheat to use HSS data collected from middle-aged adults to allow comparisons with data obtained from older adults. In the current research, the first research question was: "What is the internal consistency of the HSS items when used with older adults?" To address the internal consistency of the HSS, the researcher (s) computed Cronbach's alpha, and (b) presented item analysis statistics from the data obtained from older adults and with information from Wheat's analysis with middle-aged adults. The researcher created Table 1 to display the internal consistency statistics. The researcher (with Wheat's permission) utilized statistical results that Wheat presented in his dissertation.

The researcher reviewed published research to determine acceptable Cronbach's alpha levels for the instrument. Nunnally (1994) stated that .70 was an acceptable alpha level. However, the researcher chose a more stringent criterion for acceptance as .80, as set forth by Benson & Clark (1982). The researcher computed Cronbach's alpha for the current study and found it to be .82. Wheat had found that Cronbach's alpha with his data

Table 1 Item Analysis for HSS Data Completed by Middle-Aged Adults and Older Adults

Item #	Scale Mean If Item Deleted		Correlation Item-Total		Alpha If Item Deleted	
	L	Wheat	L	Wheat	L	Wheat
1	80.0	76.2	.53	.55	.82	.81
2	80.1	76.0	.40	.58	.83	.82
3	80.1	76.3	.46	.53	.83	.81
4	79.9	75.5	.52	.56	.82	.81
5	79.2	75.2	.46	.49	.83	.82
6	79.9	75.9	.50	.62	.82	.81
7	79.8	75.5	.48	.55	.82	.81
8	79.5	75.3	.44	.64	.83	.81
9	79.8	75.8	.41	.41	.83	.81
10	79.4	75.2	.35	.60	.83	.81
11	79.5	75.4	.44	.48	.83	.82
12	79.5	75.4	.41	.53	.83	.82
13	79.6	75.2	.09	.33	.84	.83
14	79.9	75.7	.33	.60	.83	.82
15	80.3	76.5	.35	.47	.83	.82
16	81.0	76.3	.30	.42	.83	.82
17	80.4	76.2	.41	.49	.83	.82
18	79.9	75.9	.46	.56	.83	.81
19	79.5	75.4	.27	.50	.83	.82
20	80.3	75.7	.37	.44	.83	.82

Note: "L" indicates the present study sample of older adults (*n*=236), whereas "Wheat" indicates former study sample of middle-aged adults from Wheat's dissertation (n=*274).*

set was .89. A value of less than .80 would have required deletion or editing of problem items. The item analysis for HSS scores completed by older adults (this study's data)was comparable with the item analysis conducted for HSS scores completed by middle-aged adults (Wheat's data). The researcher inspected the total scale scores, when each of the items was deleted. He noted that the adjusted scale scores were slightly higher for the older adults than adjusted scale scores for the middle-aged adults. The older adults consistently scored in the upper ranges of the HSS, which may have reduced the range of responses. A reduction in range of responses may have affected alpha levels.

Question 2

The second research question for the current research was: "Is there a statistically significant difference in the overall mean HSS scores between this study's participants and Wheat's participants?" The data analysis involved a comparison of the HSS scores of older adult participants (this study's data) which HSS scores of middle-aged adult participants (Wheat data). The age of Wheat's participant ranged from 25 to 65, with a mean age of 44. The median age of individuals living independently in united Methodists Senior Services of Mississippi facilities was 83. The age of the Landrum participants ranged from 62 to 98, with a mean age of 86. The researcher set an alpha level of .05, and then compared the HSS scores from the Landrum data set with the HSS scores from the Wheat data set. These results are presented in Table 2.

Table 2 Comparison of HSS Scores of Older Adults (This Study's Data) with HSS Scores of Middle-Aged Adults (Wheat Data)

	L			Wheat				
Scores	*M*	*SD*	*n*	*M*	*SD*	*n*	*t*	*p*
HSS	84.1	7.75	236	79.9	9.29	274	5.456	<.001

The older adults from this study's data set scored significantly higher on the HSS than the middle-aged adults from the Wheat data set. The researcher calculated Cohen's *d* and obtained an index of 0.49. Since this was a medium effect size, the researcher was 68% confident that the differences were meaningful.

However, the researcher observed that the younger participants in the Landrum data set and the older participants in the Wheat data set were both in their mid-sixties. Hence, to eliminate the overlap in age between the two groups, the researcher combined the two data sets and grouped the participants into five distinct age categories. These age categories were in keeping with Super's stages of career development. Super's age groupings (Super, as cited in Herr and Cramer, 2004) were delineated on the basis of 15 year increments. Thus, the researcher expanded the examination of age differences in HSS scores across the adult life span. The researcher reported comparisons among age categories in Table 3.

Table 3 Comparison of Mean HSS Scores Among Age Groupings

	Age Groups	*n*	*M*	*SD*	*F*	*p*
1	20–34	87	78.7	10.07	8.23	<.001
2	35–49	140	80.4	8.75		
3	50–64	58	82.3	9.06		
4	65–74	98	82.1	7.81		
5	75–100	121	85.1	8.88		

The researcher conducted post hoc multiple comparisons employing the Tukey HSD. Results of those comparisons indicated that the mean HSS scores of participants who were above the age of 74 (Age Group #5, $M = 85.1$), were statistically significantly different, $p = <.001$, from both the mean HSS scores of participants who were between the ages of 20 and 34 (Age Group #1, $M = 78.7$), and from the mean HSS scores of the participants who were age 35–49 (Age Group #2, $M = 80.4$). In addition, the comparison between the mean HSS scores of participants who were age 65–74 (Age Group #4, $M = 82.1$), and the mean HSS scores of participants who were between the ages of 20 and 34 (Age Group #1, $M = 78.7$) yielded a difference which approached statistical significance, $p = .055$). It appeared that the spirituality scores of older adults, (groups 4 & 5) were significantly higher than the spirituality scores of younger group (20–34 years of age) middle-aged adults, but no significant differences were found between older adults and groups 2 or 3.

Question 3

The third research question was, “Are there statistically significant differences between the mean HSS score of male and female participants?” The researcher compared differences, in HSS score, between (a) older men and middle aged men, and (b) older women and middle aged women. Results of these comparisons are found in Table 4.

Older men (M = 80.1) scored significantly higher on the HSS than middle-aged men (75.5) (F (1,152) = 7.692, p = .006), and older women (M = 85.2) scored significantly higher on the HSS than middle-aged women (M = 83.2) (F (1,326) – 6.400, p = .012).

Table 4 Comparison of Differences in Scores of Older Adults (This Study’s Data) with HSS Scores of Middle-aged Adults (Wheat Data) When Participants Were Grouped by Sex

	L			Wheat				
Sex	*M*	*SD*	*n*	*M*	*SD*	*n*	*F*	*p*
Men	80.1	7.04	40	75.5	9.95	114	7.692	.006
Women	85.2	7.39	168	83.1	7.26	160	6.400	.012

The researcher then conducted an analysis of variance to compare differences between male and female participants using combined data sets from both this study and Wheat’s study. The researcher presented the results of this analysis in Table 5.

Table 5 Comparison of the Human Spirituality Scale Scores of Men and Women from the Combined Data Sets of this Study and Wheat's Study

Sex	*M*	*SD*	*n*	*F*	*p*
Men	76.7	9.50	157	11.664	.001
Women	84.2	7.36	345		
Total	81.8	8.82	502		

The researcher found that women had statistically higher HSS scores than men for the combined data sets for this study and Wheat's study, F (1,500) = 11.664, p = .001. The researcher calculated Cohen's d and obtained an index of 0.88. With this large effect size, the researcher was 81% confident that the differences were meaningful.

Since the researcher had compared age differences by grouping the data into age categories, he investigated whether differences in HSS scores between men and women existed within age categories, the researcher performed a series of t-test analyses for each of the 5 age categories. The results of these analyses are found in Table 6.

Table 6 Comparison of Differences Between HSS Scores of Males and Females When Participants Were Grouped by Age Categories

Age	Male			Female				
Categories	*M*	*SD*	*n*	*M*	*SD*	*n*	*t*	*p*
1. 20-34	72.7	10.82	34	82.6	7.37	53	-5.074	<.001
2. 35-49	76.4	9.35	57	83.2	7.15	83	-4.885	<.001
3. 50-64	78.5	9.28	27	85.6	7.88	31	-3.224	<.001
4. 65-74	78.8	6.82	18	83.3	6.83	79	-2.559	.012
5. 75-100	80.2	7.55	21	86.0	7.40	99	-3.247	.002

The researcher found that women, in each of the five age categories, scored statistically higher on the HSS than their male counterparts. The researcher calculated Cohen's *d* and obtained indices ranging from 0.78 to 1.07. The researcher's level of confidence ranged from 78% to 85%. Hence, the researcher was confident that the differences in gender across the five age groups were meaningful. The standard deviations of scores for the women remained fairly consistent for each of the five categories (6.83– 7.88). The standard deviations of scores for the men were less consistent (6.82–10.82).

Question 4

The fourth research question was, "Is there a statistically significant interaction between age and sex in the assessment of spirituality for the adults in the combined data sets of this study and Wheat's study?" The researcher conducted a 5 x 2 factorial analysis of HSS scores with age and sex being the two factors examined. The numerical value of HSS scores increased with age and the HSS scores of women consistently were higher than HSS scores of men. However, the researcher found no statistically significant interaction between age and sex, F (4,1) = 1.151, p = .332. The researcher concluded that age and sex were independent variable for this research. The results are presented in Table 7.

Table 7 Factorial Analysis of Variance of the Variables Age and Sex Using the Combined Data Set from this Study and Wheat's Study

Source	*df*	*SS*	*MS*	*F*	*p*
Age	4	1394	348	5.597	.000
Sex	1	4279	4279	68.693	.000
Age x Sex	4	286	71	1.151	.332
Residual	492	30651	62		
Total	502	3399719			

Question 5

The fifth research question was, “How does the HSS factor structure computed with data from older adults compare with the HSS structure of data from Wheat’s study with middle-aged adults?” Comparing the factor structure of data obtained from older adults with the factor structure of Wheat’s final instrument allowed the researcher to determine whether the factors in this study were consistent with that of the original study.

In Table 8, the researcher presents Wheat’s final factor analysis which he [Wheat] analyzed utilizing data from his middle adult sample. The researcher copied the data verbatim from Wheat’s (1991) dissertation. Wheat utilized the principal axis extraction method. He chose the oblique rotation in light of the possibility that several factors of human spirituality might be correlated. Wheat deemed factor loadings of .3 and higher to be salient. One consequence of the oblique procedure was that there were some significant off-factor loadings.

Following the oblique rotation, Wheat analyzed data from the middle-aged adults. He labeled Factor I, which explained the greatest amount of variance, as “A Larger Context or Structure in Which to View One’s Life.” Several of the items in this factor contained references to “sense of purpose,” “meaning,” “being truthful,” and “being whole and complete as a person.” Wheat referred to content elements of “Altruism/Selflessness,” “Truth/Justice/Morality,” and “Meaning in Life.” In Table 9, the researcher presents a listing of the item content for each of the three factors identified by Wheat.

Table 8 Human Spirituality Scale Factor Loadings, From Wheat's Middle Aged Adult Sample, Three Factors, Oblique Rotation

Item	FACTOR I	FACTOR II	FACTOR III
5	.659	-.134	-.077
19	.546	-.084	-.165
9	.519	.183	.092
16	.482	.111	.082
10	.475	-.067	-.238
17	.443	.143	.240
6	.437	.217	-.133
14	.408	.194	-.154
18	.383	(.327)	-.007
20	.291	.083	-.180
2	-.050	.749	-.119
1	-.019	.681	.164
3	.199	.671	.068
15	.219	.353	-.038
8	.015	.000	-.856
7	.070	-.020	-.697
12	.171	.013	-.504
4	-.047	(.394)	-.415
13	-.007	.117	-.339
11	.231	.070	-.325

Note: Significant off-factor loadings are in parentheses. All information in this table was taken verbatim from Wheat's (1991) dissertation.

Table 9 Wheat's Factor Structure for the Human Spirituality Scale When Analyzed with Participants from a Middle-Aged Adult Population

Factor/ Item #	Factor and Item Content
Factor I:	Larger Context
5.	Being truthful is important to a successful life.
19.	I feel guilty when I don't tell the truth.
9.	I experience a feeling of being whole and complete as a person.
16.	I share my private thoughts with someone else.
10.	It is important that each of us find meaning in our lives.
17.	I put the interest of others before my own when making a decision.
6.	I find meaning in life by creating close relationships.
14.	I listen closely when other people tell me their problems.
18.	I actively seek a sense of purpose in my life.
20.	I enjoy guiding young people.
Factor II:	Awareness of Life
2.	I experience a sense of connection with other living things.
1.	I experience a sense of the sacred in living things.
3.	I set aside time for personal reflection and growth.
15.	I read articles on heath and inner peace.
Factor III:	Compassion
8.	It is important that we be sensitive to pain and suffering.
7.	We should give to others in need.
12.	I feel sad when I see someone else in pain.
4.	I value the relationship between all living things.
13.	I (don't) find the world of nature boring.
11.	All forms of life are valuable.

Note: All information in Table 9 was taken verbatim from Wheat's (1991) dissertation.

Wheat labeled Factor II as “Awareness of Life.” While Factor II contained only four items, all the items related to either “connectedness with” and “sacredness of” living things or quality of life and heath. Wheat used the term “awareness” very broadly.

Wheat labeled Factor III as “Compassion.” In his definition of “Compassion,” Wheat included concepts such as (a) “sensitivity to pain and suffering,” (b) “giving to others in need,” and (c) “feeling sad upon seeing someone else in pain.” He also included, in his definition of “Compassion,” appreciation of nature and positive relationships with all living things.

To determine grouping of HSS items with older adults, the researcher conducted exploratory factor analyses utilizing the same guidelines followed by Wheat. One of those guidelines was that a factor contain no less than four items. The researcher’s initial factor analysis yielded a seven factor solution. The researcher examined the scree plot and determined that either a three factor solution or a four factor solution was plausible. When he examined the four factor solution, the researcher found that only one item in factor four loaded with a value greater than .300. The researcher found that the 3 factor solution yielded factors which contained at least four items that loaded with a value greater than .300. The factor loadings of items from this study’s analysis, of data obtained from older adults, may be viewed in Table 10.

Of the 20 HSS items in the exploratory factor analysis with data collected from older adults, 11 clustered together in the same manner as the HSS item groupings from Wheat’s analysis of middle-aged adults. Both Wheat and this researcher found three

factors. The order of the factors was different for the analyses for this study and Wheat's study, but the item content of the three factors were similar.

Table 10 Older Adult Sample Human Spirituality Scale Factor Loadings, Three Factors, Oblique Rotation with Kaiser Normalization (10 Iterations)

Item	FACTOR I	FACTOR II	FACTOR III
12	.657	-.115	.281
7	.628	-.278	.294
8	.568	-.250	(.304)
5	.492	-.272	(.345)
17	.435	-.176	(.369)
14	.421	.043	(.386)
19	.338	-.128	.208
4	.289	-.713	(.349)
2	.225	-.677	.209
1	(.338)	-.643	(.333)
11	(.422)	-.429	.252
13	.063	-235	.000
18	.266	-.260	.649
6	(.442)	-.251	.526
10	(.485)	(-.369)	.486
16	.234	.006	.454
3	(.346)	(-.356)	.451
9	.271	(-.364)	.434
15	(.329)	-.032	.433
20	(.332)	-.178	.428

Note: Significant off-factor loadings are in parentheses.

Table 11 contains summaries of the item content of the factor structure of the analysis of data from older adults. Note the similarity with Wheat's factors.

Table 11 Factor Structure for the Human Spirituality Scale when Analyzed with Participants from an Older Adult Population

Factor/ Item #	Factor and Item Content
Factor I:	Similar to Wheat's Factor III: Compassion
12.	I feel sad when I see someone else in pain.*
7.	We should give to others in need.*
8.	It is important that we be sensitive to pain and suffering.*
5.	Being truthful is important to a successful life.
17.	I put the interests of others before my own when making a decision.
14.	I listen closely when other people tell me their problems.
19.	I feel guilty when I don't tell the truth.
Factor II	Similar to Wheat's Factor II: Awareness of Life
4.	I value the relationship between all living things.
2.	I experience a sense of connection with other living things.*
1.	I experience a sense of the sacred in living things. *
11.	All forms of life are valuable.
13.	I (don't) find the world on nature boring.
Factor III:	Similar to Wheat's Factor I: Larger Context
18.	I actively seek a sense of purpose in my life.*
6.	I find meaning in life by creating close relationships.*
10.	It is important that each of us find meaning in our lives.*
16.	I share my private thoughts with someone else.*
3.	I set aside time for personal reflection and growth.
9.	I experience a feeling of being whole and complete as a person.*
15.	I read articles on health and inner peace.
20.	I enjoy guiding young people.*

Note: *Denotes items which clustered together in a similar fashion with Wheat's analysis.

HSS item-groupings of the exploratory factor analysis with this study's older adults were similar to the HSS item-groupings of Wheat's middle-aged adults. Three items from this study's Factor I directly corresponded to items in Wheat's Factor III. Two items from this study's Factor II directly corresponded to items in Wheat's Factor II, Six items from this study's factor III directly corresponded to items in Wheat's Factor I. Eleven HSS items, (a) were common to factor structures identified by both studies, and (b) were top loading items for the this study's data (Table 12).

Table 12 Eleven Items with Common Factor Loadings on Administrations of the Human Spirituality Scale with Different Populations

Middle-Aged Adults	Item	Older Adults
Factor III		Factor I
-.504	12. I feel sad when I see someone else in pain.	.657
-.697	7. We should give to others in need.	.628
-.856	8. It is important that we be sensitive to pain and suffering.	.568
Factor II		Factor II
.749	2. I experience a sense of connection with other living things.	-.713
.681	1. I experience a sense of the sacred in living things.	-.677
Factor I		Factor III
.383	18. I actively seek a sense of purpose in my life.	.649
.437	6. I find meaning in life by creating close relationships.	.526
.475	10. It is important that each of us find meaning in our lives.	.486
.482	16. I share my private thoughts with someone else.	.454
.519	9. I experience a feeling of being whole and complete as a person.	.434
.291	20. I enjoy guiding young people.	.428

The percentages of explained variance by this study and by the Wheat's study were slightly different. The total amount of cumulative variance explained by the 3 factors in the Wheat study was 48.8 % and was 40.5% in this study. The factor analysis included all 20 items following the oblique rotation. The difference in the percentage of explained variance is presented in Table 13.

Table 13 Comparison of the Explained Variance in the Human Spirituality Scale for the Factor Analyses Conducted by Landrum and Wheat

Factor	% Variance Explained	Cumulative % Variance Explained
Landrum (n = 236)		
I	27.2	27.2
II	6.5	33.7
III	6.8	40.5
Wheat (n = 274)		
I	34.3	34.3
II	7.8	42.1
III	6.3	48.8

Note: The information about Wheat's (1991) factors was taken verbatim from his dissertation.

Since 11 HSS items from the respective exploratory factor analyses loaded in a similar fashion, and because both factor analyses accounted for similar amounts of variance, the researcher concluded that the factor structure of the two studies were similar.

Question 6

The sixth question was, "How well does the Wheat model of Human Spirituality fit with the data from (a) middle-aged adults, (b) older adults, (c) adults from a combination of

both groups [middle-aged adults and older adults], and (d) adults in developmental age groups created from the pooled data sets. In answering the question the researcher used the factor structure that Wheat computed from his final exploratory factor analysis of data obtained from middle-aged adults.

The researcher computed confirmatory factor analysis (Arbuckle, 1997) to determine goodness of fit of the Wheat model of Human Spirituality to the respective data sets. The researcher presented the following fit indices in Table 14: Chi-Square Ratio (X^2/df), Comparative Fit Index (*CFI*), Root Mean Square Error of Approximation (*RMSEA*), Tucker Lewis Index (*TLI*), and Goodness of Fit Index (*GFI*).

Table 14 Results of the Confirmatory Factor Analysis of Wheat's Model of Human Spirituality

Data Set	GFI	CFI	TLI	RMSEA	*df*	X^2	*p*	X^2/df
Middle-aged Adults[a] [Wheat]	.98	.99	.98	.06	11	20.5	.039	1.86
Older Adults[b] [Landrum]	.96	.95	.90	.09	11	32.9	.001	2.98
Combined Data[c]	.98	.98	.97	.06	11	32.9	.001	2.99
Five Age [c] Groups [pooled]	.96	.98	.96	.03	58	83.6	.015	1.44

[a]n = 274, [b]n = 236, [c]n = 510

Upon examining the goodness-of-fit indices presented in Table 14, the researcher concluded that the Wheat model provided an adequate fit with the data from each data set. The researcher had anticipated that there would be a strong goodness-of-fit with the data

collected with Wheat's middle adults, based on his examination of the factor loadings generated by Wheat's exploratory factor analysis. The researcher noted that there was a strong goodness-of-fit with the data collected with Wheat's middle adults insofar as all of the goodness-of-fit indices were well within the acceptable fit guidelines established in Chapter 3.

In regards to the goodness-of-fit of the Wheat model with data collected from older adults, the researcher found that there was an adequate goodness-of-fit as indicated by the GFI, CFI, and the X^2/df. However, the Tucker Lewis Index and the Root Mean Square Error of Approximation both exceeded the pre-established guidelines for goodness-of-fit presented in Chapter 3. The researcher interpreted the inconsistencies between the goodness-of-fit indices as an indication that the Wheat model was less adequate in describing the concept of Human Spirituality with older adults than with middle-aged adults.

Discussion

The researcher found that there was a satisfactory goodness-of-fit between the combined data from both middle-aged adults (Wheat) and older adults (this study), and the Wheat model of Human Spirituality. He observed that all goodness-of-fit indices for the combined data set were within the chosen guidelines found in Chapter 3. The researcher concluded that the Wheat Model of Human Spirituality provided an adequate fit with the combined data sets.

The researcher also examined the goodness-of-fit indices for the Wheat Model of Human Spirituality and data from five developmental age groups from across the adult life

span. The Wheat Model of Human Spirituality was observed to have a satisfactory goodness-of-fit with the data.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Human Spirituality has been an increasingly important subject of study for the field of counseling as evidenced by: (a) an important and specific call for the delineation of perspective between theology and counseling/psychology (Pruyser, 1976); (b) the emergence of national professional organizations such as ASERVIC and The Council on Spiritual Practices (CSP); (c) the provision for spiritual counseling by educationally qualified professionals in Hospital Accreditation standards (JCAHO, 1999) and in state regulated hospice organizations (The Mississippi State Department of Health, 1995); (d) the naming of spirituality as one of the areas to be assessed as a part of resident's self-determination of quality of life in nursing homes that receive federal funds (U.S. Department of Health and Human Services: Health Care Finance Administration, 2000); and (e) calls for research studying the relationship between spirituality and psychological traits of individuals (Burke and Miranti, 1996; Young, Cashwell, & Woolington, 1999).

In his doctoral dissertation, Wheat (1991) stated that the study of human spirituality was limited by the lack of a generally accepted operational definition of human spirituality and by the lack of acceptable measures of human spirituality. The focus of his dissertation

was the development of the HSS and to offer an operational definition of spirituality, that would be appropriate for use in conducting research.

The researcher in the current study found that the HSS was one of only a few instruments measuring human spirituality, which had supporting normative data generated from a study of middle-aged adults ranging in age from 25-65. Subsequently, the researcher determined from demographic data, university course work, and a review of literature that a second emerging concern for the field of counseling as aging. The researcher set out to extend the findings of Wheat's (1991) previous study by an investigation of the construct of spirituality, as measured by the HSS, across the adult life span, specifically including older adults.

Therefore, the researcher's data was collected with participants ranging in age from 62 to 98, who were ambulatory and who lived in the nine independent living facilities operated by UMSSM. The researcher also wanted to develop and to compare and contrast different conceptualizations of spirituality, analyzing data from middle-aged adults, data from older adults, and the combined data from both sets.

The researcher conducted a review of literature, which included the following topics (a) the evolution of construct spirituality; (b) spirituality in counseling; (c) spirituality and aging; (d) culture, gender, and spirituality; and (e) summary. Clearly, the research to date in spirituality and counseling, and in the spirituality of older adults supported the premise that there was a difference in the spirituality of human beings based on age and gender. Furthermore, the debate on the operational definition of the construct spirituality had come full circle from being indistinguishable from religiousness, to being a

separate construct, to being a polar opposite of religiousness, to being a broad and pluralistic construct, and back to being used interchangeably with religiousness. Researchers utilized multiple definitions of spirituality; however, medical researchers tended to use “spirituality” and “religiousness” interchangeably due to the functional nature of spirituality in relation to medical research.

The participants for the current study consisted of volunteers drown from the 1365 individuals, ages 62-100, who resided in the 10 independent living facilities operated by UMSSM. The researcher traveled to each of the 10 facilities to administer the HSS to those older adult participants in the current study. More than 500 questionnaires were distributed to volunteer participants who completed 236 usable instruments.

The researcher posed six research questions which were answered by the analysis of data:

1. What was the estimated internal reliability of the HSS items when used with older adults?
2. Is there a statistically significant difference in the overall mean HSS scores between this study’s participants and Wheat’s participants?
3. Are there statistically significant differences between the mean HSS scores of male and female participants?
4. Is there a statistically significant interaction between age and sex in the assessment of spirituality for the adults in the combined data sets of this study and Wheat’s study?
5. How does the HSS factor structure computed with data from older adults compare with the HSS structure of data from Wheat’s study with middle-aged adults?

6. How well does the Wheat model of Human Spirituality fit with the data from (a) middle aged adults, (b) older adults, and (c) developmental age groups created from the pooled data sets?

Q1. To address the estimated internal reliability of the HSS, the researcher: (a) performed item analysis, (b) computed Cronbach's alpha, and (c) compared the current results to those of Wheat's norming analysis. The researcher found that Cronbach's alpha for the current study with older adults was .82. The item analysis for HSS scores completed by older adults (this study's data) was comparable with the results of the item analysis of the HSS as completed by middle-aged adults (Wheat data). The total scores, when each of the items was deleted were slightly higher for older adults than scale scores for the middle-aged adults. The older adults consistently scored in the upper ranges of the HSS, which may have reduced the range of responses. A reduction in range of responses may have affected alpha levels.

Q2. The older adults (age 62-98) from this study's data set scored significantly higher on the HSS than the middle-aged (age 25-65) adults from the Wheat data set. However, the researcher observed that the younger participants in this study's data set and the older participants in the Wheat data set were both in their mid 60's. Hence, to explore further differences among age groups, the researcher combined the two data sets and grouped the participants into five age categories. Those categories were in keeping with Super's stages of career development (as cited in Herr & Cramer, 2004). The researcher conducted post hoc, pair wise multiple comparisons with the Tukey HSD. Results of those comparisons indicated that the spirituality scores of older adults (65-100 years of age) on

the HSS were significantly higher than the spirituality scores of younger category (20-34 years of age) of middle-aged adults, but no significant differences were found between older adults and the remaining middle-aged adults (35-64 years of age).

Q3. Older men scored significantly higher on the HSS than middle-aged men, and older women scored significantly higher on the HSS than middle-aged women. Women had statistically higher HSS scores than men across the adult lifespan. To investigate whether difference, in HSS scores, between men and women existed within age categories based on Donald Super's stages of career development, the researcher performed *t*-tests for each of the 5 age categories. Women, in each of 5 age-based grouping scored higher on the HSS than their male counterparts.

Q4. The researcher conducted a 5x2 factorial analysis of HSS scores with age and sex being the two factors examined. There was no statistically significant interaction between age and sex.

Q5. The researcher conducted exploratory factor analysis (EFA), replicating procedures followed by Wheat in his study with middle-aged adults. He determined that the HSS item grouping yielded by the EFA conducted with data from Wheat's study with middle-aged adults. The order of the factors from the two studies were different, but the item content was similar. Wheat reported that the cumulative explained variance of his study was 48.8 %, while the researcher reported 40.5 % from his study with older adults. Of the HSS items, 11 were common to factor structures identified by both this study's and Wheat's factor analyses. The same 11 factors were the top loading factors for the Landrum data. The researcher noted a developmental maturation that seemed to occur across age

groups which led him to merge the two data sets. He conducted EFA on the combined data set and concluded that a three factor structure was optimal to utilize with data from all adults.

Q6. The researcher used Confirmatory Factor Analysis (CFA) to assess the question of goodness of fit of the Wheat Model of Human Spirituality. The researcher conducted several variations of CFA utilizing Wheat's Model of Human Spirituality, and the following data sets (a) middle-aged adults, (b) older adults, (c) five different developmental age groupings spanning the adult life span, and (d) pooled data from both middle-aged adults and older adults. The goodness-of-fit between the Wheat Model of Human Spirituality and data from the middle-aged adults was excellent. The goodness-of-fit between the Wheat Model of Human Spirituality and data from the older adults was deemed adequate by the researcher, even though two of the goodness-of-fit indices exceeded the guidelines set in Chapter Three. The goodness-of-fit between the Wheat Model of Human Spirituality and both (a) data from the pooled data set, and (b) data from the five developmental age groups, was judged to be adequate.

Conclusions

Conclusion One

The researcher concluded that the 20-item Human Spirituality Scale is an appropriate scale for use in the study of human spirituality with adults across the adult life span. The HSS scores seem to possess both reliability and validity.

Wheat and this researcher utilized Cronbach's Alpha as a measure of internal consistency with their respective data sets. Wheat's study yielded a Cronbach's Alpha of 89, while this study yielded a Conbach's Alpha of .82. Alpha coefficients of this magnitude indicate adequate internal consistency insofar as the research has previously adopted .80 as an adequate level of consistency. Hence, the researcher concluded that the Human Spirituality Scale has satisfactory internal consistency.

Concerning validity, the researcher observed evidence of construct validity, noting a progressive increase in HSS scores across the adult lifespan. Even at the upper age limits of the studied population, the researcher found evidence for increasing spirituality. The increase in spirituality across the life span, a major characteristic of the construct of Human Spirituality, is consistent with the finding of several authors: Atchely (1991), Baltes (1966), Gilligan (1982), Hall (1922), Jung (1966); Kohlberg & Ryncarz (1990), and Neugarten (1977). The researcher also noted evidence of content validity in that the panel of experts deemed the content of all items of the HSS to be associated with the concept of Human Spirituality. The panel expressed concern that the negatively worded item number 13 was problematic. While the panel concurred with the appropriateness of people's relationship with nature as an important aspect of Human Spirituality, the reverse scoring of the item was cumbersome.

Conclusion Two

Overall HSS scores of women were statistically higher than the HSS scores of men. The researcher also found the same pattern of differences within each of the five age grouping in this study. Hence, the researcher concluded that women are more spiritual

than men. This conclusion is similar to the findings several researchers (Erickson, 1950; Frey, et al., 2005; Gilligan, 1982; Wheat, 1991).

Conclusion Three

The researcher concluded that level of spirituality of older adults is higher than the level of spirituality of younger adults. The researcher found that the older adults in the Landrum data set scored significantly higher on overall HSS scores than middle-aged adults in the Wheat data set. The researcher found significant differences between overall HSS scores of the adults in the first of the five age categories (75-100 years of age). He also found that the differences between overall HSS scores of the adults in the first of the five age categories (20-35 years of age) and adults from the fourth of the five age categories (65-74 years of age) approached significance ($p = .055$).

Even though the HSS scores of men and women increased across the adult life span, there was no statistically significant interaction between sex and age. The researcher concluded that there was insufficient evidence to verify that there was an interaction between the variables of sex and age.

Conclusion Four

The researcher's final conclusion was that human spirituality is a multifaceted, complex, and dynamic concept. This conclusion is in keeping with the concepts of spirituality that the researcher reviewed in Chapter 2 (Atchley, 1991; Carroll & Moody, 1997; Labouvie-Vief, et. al. 1998; Learn, 1996; McFadden & Gerl, 1990).

When the researcher analyzed HSS scores of middle-aged adults and older adults, using Exploratory Factor Analysis, he noted consistency in factor structure, as evidenced by the way items clustered in similar fashion for both data sets. Of the 16 items that loaded in both this study's and Wheat's analyses, 11 items clustered in similar groupings. The items in "older-adult" Factor 1 corresponded to items in "middle-aged-adults" Factor 3, and visa versa. Hence, the researcher concludes that the dynamic nature of spirituality is supported, insofar as HSS items relating to "Compassion" may be more important for older adults, and that FSS items relating to "Larger Context Relationships" may be more important for younger adults. This conclusion is in keeping with Erickson's (1950) developmental stages which were enumerated by Wheat (1991), in his theoretical conceptualization, and with Super's (1990) stages of career maturity which were referenced in Chapter 4. More research about the factor structure would need to be conducted to verify the possibility of differences between older and middle-aged adults.

The researcher deemed that the Wheat Model of Human Spirituality was an adequate representation of human spirituality across the adult life span. The researcher noted that Wheat's model provided an excellent goodness-of-fit with the data from middle-aged adults and was especially appropriate for use in research with middle-aged adults. However, the Wheat model was somewhat adequate in explaining the data from older adults. Perhaps more research is needed to examine alternative models for use in working with older adults.

Recommendations

Practitioners

Recommendation: When working with couples, counselors should be mindful of the differences in level of spirituality between men and women. However, when working with older adults, counselors should also be aware that the level of spirituality increases with age for both men and women.

Research

Recommendation One: The researcher recommends a replication of the two data sets. Replication could afford a researcher the opportunity to see it future data sets function in a similar or a different manner in comparison to the data sets in the current study. Replication also would strengthen/refute the reliability and validity of the current findings.

Recommendation Two: The researcher affirmed that the Human Spirituality Scale contains multiple factors (content) and postulated that the factors included additional sub-factors (process variables). The researcher recommends that the HSS data sets be expended to allow for the exploration and development of scale score to measure these factors. Factors/scale scores could be subdivided to allow the development of measure of the process variables.

Recommendation Three: The researcher recommends that norm table be developed to allow for the comparisons of total HSS scores and scale scores by age groupings, and by sex. Comparisons of HSS scores with the HSS scores of other persons within a similar age group may be more meaningful for individual participants.

Recommendation Four: The researcher recommends further research to explore the relationship between human spirituality (HSS factors) and other corollary issues such as (A) personality, (b) conventional wisdom, and (c) depression. Additional research could add to deeper understanding of (a) how individuals of differing personality types and preferences experience and express their spirituality, (b) is and how spirituality is functionally manifested, (c) the discovery of differing pathways to spiritual growth, and (d) the development of archetypal spiritual identities, similar to the different roles used by Meyer-Briggs researchers to teach about the role, functions, and relational attributes of the different types. Further research into the relationship between spirituality and wisdom could lead to the discovery of other concrete attributes of human spirituality that can be empirically investigated. Investigation of the relationship between spirituality and depression may lead to further insight into the moderating effects of spirituality.

Recommendation Five: The researcher advocates the positive restatement of item 13 of the HSS. That item did not significantly load on any of this study's exploratory factor analyses. Furthermore, the researcher observed multiple examples of frustration with item 13, among the older adults who participated in the current study. Many older adults expressed that the idea that "the world of nature is boring" was absurd and therefore confusing. Other older adults expressed that the item was "offensive."

Recommendation Six: Because of the complex and dynamic nature of human spirituality, the researcher recommends further research. Research utilizing larger and more diverse samples may lend itself to: (a) the discovery of additional factors/facets of human spirituality, (b) deeper understanding of the complex and dynamic nature of human

spirituality, and (c) the creation of models of the structure of human spirituality that provide a better goodness of fit.

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APPENDIX A

WHEAT'S LETTER OF PERMISSION TO USE HSS

325 Druid hill Drive
Front Royal, VA 22630

16 October 1999

C. Joseph Landrum
222 Hiwassee Drive
Starkville, MS 39759

Dear Mr. Landrum,

Please feel free to use the human Spirituality Scale in your research at Mississippi State University, as described in your e-mail of 13 October 1999. I look forward to reading the completed report. Please forward me a copy of any manuscript you submit for publication.

Good luck in your studies and in your future career.

Sincerely,

L. Wm. Wheat, Ph.D.

APPENDIX B

UMSSM LETTER OF PERMISSION TO COLLECT DATA WITH HSS

UNITED METHODIST
SENIOR SERVICES
OF MISSISSIPPI, INC.

November 23, 1999

Rev. Joe Landrum
222 Hiwassee Drive
Starkville, MS 39759

Dear Joe:

I have reviewed the Human Spirituality Scale (which is attached hereto) and this letter is to advise you that you have permission to collect data through the United Methodist Senior Services of Mississippi, Inc. system using the Human Spirituality Scale.

I understand that our residents' participation will be totally voluntary and totally anonymous. One of our values is to protect the privacy of our residents and we understand that by allowing you to collect data you will adhere to that policy.

Very truly yours,

Stephen L. McAlilly
President

SLM/lw

Aldersgate Retirement Community *Meridian*
Dugan Memorial Home *West Point*
Flowers Manor Retirement Community *Clarksdale*
The Henry Clay Retirement Community *West Point*
Methodist Retirement Community *Biloxi*
Riggs Manor Retirement Community *Raymond*
Traceway Retirement Community *Tupelo*
Trinity Place Retirement Community *Columbus*
Turner-Duvall Retirement Community *Leakesville*
Wesley Manor Retirement Community *Hattiesburg*
Wesley Meadows Retirement Community *Hernando*

~

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APPENDIX C

IRB APPROVAL LETTER TO CONDUCT RESEARCH

INSTITUTIONAL REVIEW BOARD APPROVAL FORM
FOR THE PROTECTION OF HUMAN SUBJECTS IN RESEARCH
MISSISSIPPI STATE UNIVERSITY

STATEMENT OF BOARD: _____ **IRB DOCKET#** **99-358**

This is to certify that the research proposal entitled: **Spirituality of Older Adults: Expanding the Norms of an Existing Instrument**

and submitted by: Name: **C. Joseph Landrum**

Department: **Counselor Education & Educational Psychology**

Name of Advisor: **Dr. Joe Ray Underwood**

to **Sponsored Programs Administration** for consideration has been reviewed by the Regulatory Compliance Officer or the IRB and approved with respect to the study of human subjects as appropriately protecting the rights and welfare of the individuals involved, employing appropriate methods of securing informed consent from these individuals and not involving undue risk in the light of potential benefits to be derived therefrom.

Administrative Approval Date: **12/14/1999** **Expiration Date:** **4/15/2000**

(A) Contingent upon receipt of _____

_____

(B) All necessary documents were received

Expedited Approval Date: _____ **Expiration Date:** _____

(A) Contingent upon receipt of _____

_____

(B) All necessary documents were received

Full Board Approval Date: _____ **Expiration Date:** _____

(A) Contingent upon receipt of _____

_____

(B) **All necessary documents were received**

Tracy S. Arwood 12/14/99

Tracy S. Arwood, MSU Regulatory Compliance Officer **Date**

_____

Institutional Review Board Member **Date**

APPENDIX D

INVITING PARTICIPATION IN THE STUDY

Inviting Participation in the Study

Good (morning/afternoon). I am Joe Landrum, a doctoral student in Counselor Education at Mississippi State University, and this is Dr. Joe Ray Underwood, professor of Counselor Education and Educational Psychology at MSU. We are here today, seeking your assistance in a research project on human spirituality. Specifically, we are asking you to fill out the Human Spirituality Scale, in order that we may determine if this scale, in its present form, is a valid and reliable measure fo the spirituality of older adults.

Participation in this study is strictly voluntary. There are no incentives or rewards for your participation. You may choose to end your participation at any time and, while you are encouraged to answer all of the questions, you are not required to do so.

Privacy and anonymity are assured. The results of this study will never be reported by name or any other classification which could identify you personally. The instruments are numbered only to insure that materials are correctly collated.

If you choose to participate, please read the attached informed consent form, sign both copies, and ask someone to sign as a witness to your signature.

Please reach each question carefully and then mark the answer that best fits your thoughts, feelings, or behaviors.

Thank you for your cooperation and participation in this study.

APPENDIX E

INFORMED CONSENT FORM

Informed Consent Form

Subject Study: Expanding the Validity of an Existing Instrument for Use With Older Adults: The Human Spirituality Scale.

Our names are Joe Landrum and Dr. Joe Ray Underwood. We are trying to determine if a research instrument, The Human Spirituality Scale, is a valid and reliable measure of the spirituality of older adults. Participants are asked to complete the Human Spirituality Scale. The time required to complete this instrument varies among participants. Please note: Your participation is wholly voluntary.

All data and information collected will be held in strict confidence. Your privacy and confidentiality are assured in that results will never be reported by name or any other classification which could identify you personally. The instruments are numbered only to insure that materials are correctly collated. If, at any time, you choose not to participate in this project, you are free to discontinue. If you are uncomfortable answering any of the questions on the forms, you may choose not to answer or to withdraw from the study. If you have any questions or comments about this project, please contact us, Joe Landrum or Dr. Joe Ray Underwood, at (662)325-7925, or the Mississippi State University Regulatory Compliance Officer, Tracy Arwood, at (662)325-7404.

I, _____, hereby agree to participate in the project described above. I have read and understand this statement, and have had all my questions answered. I further acknowledge receipt of two copies of this consent form, one of which will be retained by me and the other returned to the researchers.

Signature_____ Date_____

Witness_____

APPENDIX F

DEMOGRAPHIC DATA FORM AND HSS QUESTIONNAIRE

General Information

1. Your sex is: ( )Male ( )Female

2. Your age is ____ years.

3. Race
____Caucasian ____African American ____Other (Specify)_____

4. How frequently do you participate in formal religious services or activities?
____Never ____Rarely ____Occasionally ____Often ____Very Often

5. How frequently do you read devotional/sacred materials?
____Never ____Rarely ____Occasionally ____Often ____Very Often

6. How often fo you pray/meditate?
____Never ____Rarely ____Occasionally ____Often ____Very Often

7. Compared to other people you know, how religious are you?
____Not very ____Slightly ____Moderately ____Above Average ____Very

8. Compared to other people, how spiritual are you?
____Not very ____Slightly ____Moderately ____Above Average ____Very

9. Describe your general health.
____Chronically ill ____Poor ____Fair ____Good ____Excellent

10. Do you have any chronic problems that limit your daily activities?
____Yes ____No

If yes, please describe

_____

11. How frequently do you help other people?
____Rarely ____Once in a while ____Fairly Often ____Frequently ____Very Often

12. How frequently do other people help you?
____Rarely ____Once in a while ____Fairly Often ____Frequently ____Very Often

13. Do you know older adults who are dependent on others?
____Yes ____No

14. How comfortable do you feel asking your family for help?
____Not at all Comfortable
____Somewhat Uncomfortable
____A Little Comfortable
____Fairly Comfortable
____Very Comfortable

15. How comfortable do you feel asking friends for help?
____Not at all Comfortable
____Somewhat Uncomfortable
____A Little Comfortable
____Fairly Comfortable
____Very Comfortable

16. How important is it for older adults to be completely independent?
____Not important
____A little important
____Somewhat important
____Very important
____Extremely important

17. How uncomfortable would you feel if you required more help from others than you currently receive?

____Not at all Uncomfortable
____A Little Uncomfortable
____Somewhat uncomfortable
____Quite Uncomfortable
____Very Uncomfortable

18. Educational Level
____Less than High School diploma
____High School diploma
____Some College Course Work
____Bachelor Degree
____Some Graduate Course Work
____Graduate Degree

19. Religion
____United Methodist
____Episcopal
____Presbyterian (PCUSA)
____Presbyterian (PCA)
____Lutheran
____Southern Baptist
____Roman Catholic
____Jewish
____Unitarian
____Other (please specify) _____
____None

HUMAN SPIRITUALITY SCALE

INSTRUCTIONS:

Your honest answer to each item is very important. There is no agreement as to what are right and wrong responses to these items, but if the scale is to be useful, you should respond to each item the best you can.

For the first two items, place a check (✓) to the left of the response that applies to you; and enter your age in the third item.

A. Your sex is: ( ) Male ( ) Female

B. Your education level is:
( ) Some high school or less
( ) High school graduate
( ) Some college
( ) College graduate
( ) Graduate/professional degree

C. Your age is: _____ years.

For the remainder of the items, please select the one response which is most true for you and place a check (✓) in the space provided to the left of that response.

****

1. I experience a sense of the sacred in living things.

( ) Constantly/ Almost Constantly ( ) Frequently ( ) Occasionally ( ) Seldom ( ) Never/ Almost Never

2. I experience a sense of connection with other living things.

( ) Constantly/ Almost Constantly ( ) Frequently ( ) Occasionally ( ) Seldom ( ) Never/ Almost Never

3. I set aside time for personal reflection and growth.

( ) Constantly/ Almost Constantly ( ) Frequently ( ) Occasionally ( ) Seldom ( ) Never/ Almost Never

4. I value the relationship between all living things.

( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree

5. Being truthful is important to a successful life.

( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree

6. I find meaning in life by creating close relationships.

( ) Constantly/ Almost Constantly ( ) Frequently ( ) Occasionally ( ) Seldom ( ) Never/ Almost Never

7. We should give to others in need.

( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree

8. It is important that we be sensitive to pain and suffering.

( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree

9. I experience a feeling of being whole and complete as a person.

( ) Constantly/ Almost Constantly ( ) Frequently ( ) Occasionally ( ) Seldom ( ) Never/ Almost Never

10. It is important that each of us find meaning in our lives.

( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree

11. All forms of life are valuable.

( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree

12. I feel sad when I see someone else in pain.

( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree

13. I find the world of nature boring.

( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree

14. I listen closely when people tell me their problems.

( ) Constantly/ Almost Constantly ( ) Frequently ( ) Occasionally ( ) Seldom ( ) Never/ Almost Never

15. I read articles on health and inner peace.

( ) Constantly/ Almost Constantly ( ) Frequently ( ) Occasionally ( ) Seldom ( ) Never/ Almost Never

16. I share my private thoughts with someone else.

( ) Constantly/ Almost Constantly ( ) Frequently ( ) Occasionally ( ) Seldom ( ) Never/ Almost Never

17. I put the interests of others before my own when make a decision.

( ) Constantly/ Almost Constantly ( ) Frequently ( ) Occasionally ( ) Seldom ( ) Never/ Almost Never

18. I actively seek a sense of purpose in my life.

( ) Constantly/ Almost Constantly ( ) Frequently ( ) Occasionally ( ) Seldom ( ) Never/ Almost Never

19. I feel guilty when I don't tell the truth.

( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree

20. I enjoy guiding young people.

( ) Strongly Agree ( ) Agree ( ) Neutral ( ) Disagree ( ) Strongly Disagree