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An empirical study of the relationship between spiritually-related variables and depression in hospitalized adults

Brauchler, Debra Sue, M.S.
The University of Arizona, 1992

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AN EMPIRICAL STUDY OF THE
RELATIONSHIP BETWEEN SPIRITUALLY-RELATED VARIABLES
AND DEPRESSION IN HOSPITALIZED ADULTS

by
Debra Sue Brauchler

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A Thesis Proposal Submitted to the Faculty of the
COLLEGE OF NURSING
In Partial Fulfillment of the Requirements
for the Degree of
MASTER OF SCIENCE
In the Graduate College
THE UNIVERSITY OF ARIZONA

1992
STATEMENT BY AUTHOR

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Signed: Debra Branchler

APPROVAL BY THESIS DIRECTOR

This thesis has been approved on the date shown below:

Pamela Reed
Associate Professor of Nursing

May 1, 1992
DEDICATION

To my beloved husband John, whose lovingkindness and support has been a constant encouragement and whose spiritual maturity has been a "guiding light" for my spiritual growth and Biblical understanding. Thanks for being my best friend.

"He shall be like a tree
Planted by the rivers of water,
That brings forth its fruit in its season,
Whose leaf also shall not wither;
And whatsoever he does shall prosper."

Psalms 1:3

To my dear cousin Sue Injeti, whom I love as a sister, who has trusted me and shared experiences and emotions that has helped me understand the complicated dynamics of depression.
ACKNOWLEDGEMENTS

Sincere thanks and gratitude are expressed to my thesis chairperson, Dr. Pamela Reed, whose encouragement and scientific expertise enabled me to complete this study in an enjoyable fashion. Her sensitivity and professional attitude commends much respect and is greatly appreciated. Appreciation is extended to my committee members, Dr. Terry Badger and Marlys Moeckly, for the direction they gave to this research endeavor.

Much love and gratitude is extended to my parents, Richard and Pauline Van Mill, for living a lifestyle that respected and loved God and taught me clear Christian values early in my life. Most of all, thankfulness for their persistent prayers that I would someday desire to know the person of Jesus Christ. You have patience and love.

Appreciation to my brothers, Mike and Kevin, for their love and support over the years. In all of our unique differences, you both have helped to foster a close "connectedness" within the family. And to my sisters-in-law, Diane and Wanda, who have treated me like a sister. Your compassion for your family and others has been an encouragement and of great value to me. Love to my nieces Michelle and Malinda who are young ladies and such a joy to me, and to my nephews Mashon, Mitchel, and Jeremy, the spunky guys who remind me of energy I once experienced. A special compassion to my nephew Brent, who is severely handicapped but has a very special place in our hearts. All of my family are a part of who I am today!

Sincere gratitude to John Cepin, my mentor in Biblical Counseling, whose love for God and commitment to follow God to direct all counseling has been a "guiding force" as I have sorted through my secular psychology background and have kept only what is "Biblically-based" for Christian therapy. Also whose encouragement has helped me to grow spiritually. Much respect to him and his wife, Patti.

Sincere gratitude to Tucson Psychiatric Institute, who accepted the challenge to support a Christian Program. You have met an important need that is not met in most cities.

My compassion and sincere burden for those who struggle with depression and who have allowed me to be a part of that emotional pain and hopelessness. My commitment is to bring spiritual hope to all who suffer from depression.
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The relationship of spiritual perspective, self-transcendence, and philosophical orientation of treatment program to level of depression was the focus of this research study. The research was guided by a lifespan developmental framework of spirituality in which spirituality is regarded as a resource for mental health that can emerge during critical life events such as hospitalization for major depression. Individuals answered questionnaires regarding their perspective on the above variables. Findings revealed that self-transcendence was significantly related to level of depression. No significant relationship between spirituality and level of depression was found when the group was analyzed as a whole; however, when analyzed by treatment group, the Christian treatment group did show a significant negative relationship. Self-transcendence accounted for 58% of the variance in predicting depression in adults hospitalized with major depression. Findings also revealed existing relationships between spirituality and education level, previous psychiatric hospitalizations, and perceived mental and physical health.
Nurses in many settings work with patients who are experiencing depressive disorders. An estimated nine to 16 million Americans suffer from depressive disorders (Minot, 1986). Nursing literature has reflected research concerning depression in cancer patients, elderly, and patients with chronic illnesses (Goldberg, 1981; Goldberg, Van Natta, & Comstock, 1985; Miller, 1985). Cohen and Lazarus (1979) found depression to be common in later life, often having resulted from failure to cope with life changes. Half of all hospital admissions of the elderly were found to be related to depression (Zarit, 1980). Frequently, patients with a diagnosis of major depression are admitted to inpatient psychiatric units for treatment. Because depression is so prevalent, and particularly because depression is a lethal disorder, spiritual resources and treatment modalities need to be studied.

Nursing professionals have proposed a holistic health focus which is concerned with the individual's emotional, physical, and spiritual well-being. However, very little research has focused on the spiritual dimension; especially as it may be related to depression. This study examined the
relationship between spiritually-related variables and level of depression. These variables included spirituality, self-transcendence, and philosophical orientation of the treatment program.

**Background and Significance**

Depression is the most common of major psychiatric disorders. It has been estimated that more than 15% of all adults will experience a depressive episode at some point in the course of their lives (Sederer, 1983). When depression is severe, it is persistent and disabling of every day bodily and social functioning. The central theme of clinical depression is generally a subjective experience of sadness, despondency, hopelessness, or gloom. Depressed persons also complain of many problems with all systems of their body.

Nursing practice literature often has referred to the importance of treating hospitalized patients from a holistic approach. A holistic treatment program includes interventions for a patient's emotional, physical, and spiritual systems. However, there is a dearth of studies focused on the spiritual component. Spiritual and religious needs have been traditionally referred to the hospital chaplain. Research studies typically have shown that nurses
do not or cannot identify spiritually-related needs (Highfield & Carson, 1983; Sodestrom & Martinson, 1987).

Reed (1987) defined spirituality as the level of awareness of a dimension of the self that extends beyond spatial and temporal boundaries, and which is expressed through personal views, experiences and behaviors such as the use of prayer, meditation, spiritual-related interactions with others, or a sense of a closeness to a higher being.

Spirituality and religion have been used interchangeably but they do have different meanings. Spirituality is a much broader concept but might be expressed by the vehicle of religion. Nursing literature in the past has used religious practices to operationalize spirituality (Shaver, Lenauer & Sadd, 1980; Koenig, Kvale & Ferrel, 1988; O'Brien, 1982; Reed, 1986; Hadaway, 1978), which is a narrower view of spirituality than that used in this study.

Miller (1985) described the spiritual core as that which transcends the person's humanness, provides meaning in living, and enables persons to have faith and perceptions that move beyond the observable. Thus, because the spiritual is so finely interwoven with all aspects of life, the relationship between spirituality and the level of
depression in clinically depressed adults was a potentially significant area of study.

Results from the relatively few studies that have been done suggest that spirituality may be important to the well-being of depressed patients. For example, in the Sodestrom and Martinson (1987) study, many spiritual coping strategies were identified by patients, and patients who were realistically aware of their prognosis used a greater number of spiritual activities than those unaware of their prognosis.

O'Brien (1982) studied patients on long-term dialysis and found that those who reported positive attitudes toward the importance of religious faith for the acceptance of their illness also demonstrated the greatest degree of interactional behavior, appropriate compliance and lowest degree of alienation. Reed (1986) explored religiousness in terminally ill and healthy adults and found that well-being was reflected in ability to engage in activities that give meaning to life, despite severity of medical diagnosis. Miller (1985) also documented the importance of religious well-being among chronically ill patients coping with illness.

Mental health treatment centers have neglected the spiritual well-being of patients to an even greater degree than that found in other clinical areas. In this writer's
experience, very few psychiatric treatment plans included a spiritual assessment or direction for using spiritual resources. This may be so for several reasons. The neglect of spiritual awareness in mental health care could be explained in part by the dissonance that has traditionally existed between religion and psychiatry, since Freud's well-known decree of religion as merely a defense mechanism. Lederach and Lederach (1987) acknowledged that religion has sometimes hurt, rather than helped patients. This writer has observed this inner conflict in depressed patients who were taught by their pastors that they would not be depressed if they prayed and read their Bible more frequently. Also, some mental health workers may perceive that certain religious values and beliefs conflict with the principles and practice of psychiatric care. For example, the foundational tenets of humanistic theory, often used in psychiatric settings, are human abilities, aspirations, and achievements in the earthly life (Landrum, 1984). This view may conflict with Christians who attempt to live their lives by Biblical perspectives and see their self-worth primarily in their relationship to Christ, and true achievements are those that will be rewarded in heaven.

More broadly, Dombech and Karl (1987) suggested that the separation of church and state in western nations has played a part in identifying medical professionals with body
and science, and clergy with the soul and religious matters. As a result, medical and mental health professionals overlook the spiritual component of depression and other illnesses (Dombek & Karl, 1987). In summation, these barriers to integrating spirituality in mental health care have limited research and potential clinical application of spiritually-related variables in mental health care.

**Purpose**

The purpose of this study is to examine the relationship of depression and two spiritually-related variables, spiritual perspective and self-transcendence, in clinically depressed hospitalized adults. The type of treatment program (Christian and traditional) will also be examined for its potential relationship to depression. By determining the impact of spirituality and treatment programming on depression, efforts can ultimately be made to incorporate assessment of spirituality needs for intervention into psychiatric treatment plans.

**Conceptual Framework**

This study was guided by a lifespan developmental framework of spirituality in which spirituality is regarded as a resource for mental health that can emerge during critical life events (see Figure 1). Within this framework,
Figure 1. Conceptual Framework: Relationship of depression and two spiritually-related variables and type of treatment programs.
development refers to the inherent potential for positive and growth-producing changes throughout life. Spiritual development is viewed as one resource for an individual, at any age, to maintain a sense of emotional well-being during crisis situations. The incident of hospitalization for depressive illness is regarded as one such crisis life event.

Within the context of depression, personal resources are required for coping with such experiences associated with Major Depression such as difficulty in concentration, low energy, complex medication regimen, hopelessness, and inability to care for oneself. Spiritual strategies may be beneficial in dealing with these experiences associated with depression as well as with the more basic contributors to depressed feelings. These strategies may be acquired as part of the spiritual developmental process.

A basic assumption of this study is that spirituality is a basic human experience. Carson (1989) described spiritual development as an active process in which individuals become increasingly aware of the meaning, purpose, and values in life. Spiritual growth has been described in terms of a two-dimensional process which includes a horizontal and vertical process. A horizontal process increases the person's awareness of the transcendent values inherent in all relationships and activities of life.
A vertical process reflects a closer relationship with a higher being, as perceived by the individual. Spirituality may be expressed in either the vertical or horizontal process, or both. Hope, for example, has horizontal and vertical conceptualization (Travelbee, 1971); it can have a direction toward earthly relationships, goals, and actions, or it may be focused toward eternal goals, actions, and a relationship with a divine being. Stoll (1989) added that the spirit expresses itself through all dimensions and unifies the whole person.

Further, Fowler (1974) described seven stages of faith development across the lifespan. The final three stages involving adulthood are individuative-reflective faith, conjunctive faith, and universalizing faith. Individuative-reflective faith refers to the critical evaluation of one's beliefs and values, understanding of self and others in a community, and assumption of taking responsibility for making commitments in relationships and career based on choices in ideology. Conjunctive faith includes alertness to paradox and the need for multiple interpretations of reality. Finally, universalizing faith grounds the person in a oneness with a power of being. This faith frees them for a detached sharing of self in love, devoted to overcoming division, oppression, and brutality. A transcendent belief system may be a very important aspect of
hope in that it endows human life with meaning beyond itself. Similarly, Peck (1978) describes spiritual growth as a journey from a microcosm to a broader view of the world, or greater macrocosm. The first step is learning and challenging the validity of everything we have ever believed. Thus, spiritual growth is a lifespan developmental process.

**Spirituality**

Definitions of spirituality are numerous. Holmes (1982) defined it as "a human capacity for relationship with that which transcends sense phenomena; this relationship is perceived by the subject as an expanded or heightened consciousness independent of the subject's efforts, and exhibits itself in creative action in the world" (p. 12). Spirituality has also been described as the core of one's being that brings meaning and purpose to one's existence. For purposes of this study, spirituality will be defined as the level of awareness of a dimension of the self that extends beyond spatial and temporal boundaries, and which is processed through personal views, experiences and behaviors such as the use of prayer, meditation, spiritual-related interactions with others, or a sense of a closeness to a higher being (Reed, 1987).
Spirituality provides a sense of purpose and a sense of relatedness to others and to a "higher being" or "God," which may help the individual transcend limitations associated with depression and achieve a sense of mental health and integrity. It is expected that spirituality has an inverse relationship with depression, and is a potential resource for recovery from depression.

Self-transcendence describes that part of personal identity that also includes characteristics of spirituality. Reed (1989) defined self-transcendence as the expanding of one's personal boundaries through inward introspective activities, outward concerns about others' welfare, and by integrating perceptions of one's past and future to enhance the present. Self-transcendence was found to be a significant correlate of mental health among the oldest-old in a study by Reed (1991).

**Spirituality and Depression**

Few published studies that directly linked the level of spirituality with the level of depression could be identified. Fehring, Brennan, and Keller (1987) studied the psychological and spiritual well-being of college students. These variables showed strong inverse relationships with negative mood swings. Nelson (1990) studied the religious orientation of the elderly and its relationship to
depression and self-esteem. The correlation between intrinsic orientation and depression was significant. The relationship of spiritual well-being and emotional well-being (low "depressed mood" and "existential well-being") to health satisfaction was explored by Michello (1988). The results suggested that emotional well-being and one dimension of spirituality ("relationship with God") are significantly associated with "health satisfaction."

Foley (1988) surveyed interpretations of personal suffering and all eleven had spiritual factors. A study by Galanter and Buckley (1978) directly linked religion and meditation to a decrease in the symptoms of depression. Religion and well-being in later life was studied by Koenig, Kvale, and Ferrel (1988). The inverse relationship they found between religious factors and low morale suggested a similar relationship with depressive symptoms. Last, Shapiro, Struening, Shapiro, and Barten (1976) found patients' religiosity to be significantly correlated with success in outpatient psychotherapy.

Thus these findings indicate that there is a relationship between emotional and spiritual well-being, and spiritual factors have been cited as significant correlates to successful outpatient therapy.
Treatment Programs and Depression

This study focuses on psychiatric treatment of hospitalized patients. A variable included in the conceptual framework is type of treatment program as it may relate to depression. The general goal of modern milieu therapy of hospitalized patients is to provide a stable and coherent social organization which encourages the development and application of an individual treatment plan. Treatment programs have a variety of components but, for the most part, all have goals to gain insight to their patterns of behavior and thoughts, set limits, and learn psychosocial skills. Leeman (1986) believed that four psychosocial skills must be learned in treatment: social orientation, assertion, occupation, and recreation. He considers milieu therapy to be the treatment context in which the full range of specific treatment techniques can be delivered in an individualized fashion.

In an effort to teach psychosocial skills, treatment programs generally use individual therapy, group therapy (insight and cognitive), occupational therapy, recreational therapy, and leisure skills training as modalities. By combining these tools, patients have an opportunity to learn to control symptomatic behaviors and learn appropriate psychosocial skills.
A Christian treatment program uses the same modalities as other in-patient treatment programs, such as group therapy, individual therapy, and general education, but uses Biblical principles to guide therapy. Thus, a Christian program does more than include a morning devotion and Bible Study in its schedule. Patients know they are being admitted to a Christian program and have that as their philosophical orientation. The program serves a dual purpose of using a patient's Christian faith as a resource in their recovery and to give balance to their beliefs. For example, many patients come to treatment with overwhelming guilt and shame because of the overemphasis of God's wrath by their Pastor. A goal of the Christian treatment program is to foster a sense of balance between God's love and mercy, and God as Guide. Further, prayer is a part of treatment but does not replace work on personal psychiatric issues. Patients are confronted when they use their spiritual rituals (Bible reading and prayer) as a way of not dealing with their personal problems. The experience of sin, forgiveness, and eternal hope are all a part of insight groups and cognitive therapy. Patients are assisted in living a "balanced Christian life."

Biblical principles guide therapy in various ways. Cognitive process group therapy uses Biblical truth to challenge false assumptions patients might have about
themselves. For example, they may believe that they must be perfect to be loved by God, which is in conflict with God's unconditional love taught in the Bible. Failure could mean God's discipline to some Christian patients, when God may simply be guiding them in another direction in their life. Or failure may simply be reality that they attempted something without all the skills needed and they have complete capability of learning those skills. When women's issues group and assertiveness group address self-esteem, the Christian program emphasizes one's identity through Jesus Christ, the uniqueness and specialness with which God created them and the purpose God had for their life before they were ever conceived. This helps women to see that their God-given beauty is an inner characteristic that is not related to performance or how loved ones treat them. Many Christian patients have internalized years of anger and rage and believe that Christians cannot be angry. Anger towards God is also processed in expressive group therapy.

In this writer's experience, a patient who has a Christian orientation can benefit greatly from this program because they come to treatment believing that the Bible and God are trustworthy guides for making changes in their thinking and behaviors. They trust the program because they have faith in living by Biblical principles. Thus, through
this they acquire a sense of hope and confidence that they can achieve mental health.

Kennison (1987) acknowledges after her literature review that nurses can energize a patient by tapping whatever dimension of faith the individual exhibits. Their spiritual strength can be a strong resource. An adult, particularly one who has a depressive disorder, experiences more personally the decreased effectiveness of their self, and may become more reliant upon other human experiences for finding meaning and hope in life. There is a dearth of literature about the effectiveness of religiously oriented treatment programs.

In sum, there is need for empirical investigation of how the inner resources of spirituality may relate to depression in psychiatric patients. In this study, three spiritually-related variables will be examined for their relationship to depression. These variables are spiritual perspective, self-transcendence, and Christian type of treatment program.

Research Questions

Five research questions were formulated based on the conceptual framework:

1. What is the relationship between spiritual perspective and level of depression in adults, six to eight days
after admission to inpatient psychiatric treatment with a diagnosis of major depression?

2. What is the relationship between self-transcendence and level of depression in adults, six to eight days after admission to inpatient psychiatric treatment with a diagnosis of major depression?

3. Is there a significant difference in the level of depression between the patients in the traditional treatment group and the patients in the Christian treatment group, six to eight days after admission to inpatient psychiatric treatment with a diagnosis of major depression?

4. To what extent do spiritual perspective, self-transcendence, and philosophical orientation of the treatment program relate with the level of depression in adults, six to eight days after admission to inpatient psychiatric treatment with a diagnosis of major depression?

5. Does the interaction between spiritual perspective and philosophical orientation of program contribute significantly to depression?

Demographic variables of age, medication, gender, and prior hospitalizations will also be examined for their potential influences on level of depression.
Definitions

Spirituality. The level of awareness of a dimension of the self that extends beyond spatial and temporal boundaries, and which is expressed through personal views, experiences, and behaviors such as the use of prayer, meditation, spiritual-related interactions with others, or a sense of a closeness to a higher being (Reed, 1987).

Major Depression. A psychological disorder where four of the following eight symptoms have been present for at least two weeks: (1) recurrent thoughts of death, or wishes to be dead; (2) feelings of worthlessness or excessive guilt; (3) impaired thinking or concentration; (4) loss of energy or fatigue; (5) reduced appetite and weight loss not due to dieting; (6) loss of libido; (7) sleep disturbance, whether insomnia or hypersomnia; and (8) change in psychomotor activity, whether agitation or the generalized slowing known as psychomotor retardation (American Psychiatric Association, 1980).

Christian. A person professing belief in Jesus as the Christ, or in the religion based on the teachings of Jesus (Webster, 1983).
CHAPTER II
REVIEW OF LITERATURE

A review of literature suggests that there may be a specific relationship between spirituality and depression and that spiritual resources may have positive effects on the recovery from depression. This chapter reviews empirical literature related to spirituality and its role in relation to depression and recovery from depression in adults.

Depression and Spiritually-Related Variables

Spiritually-related variables that are studied in this section include hope and self-transcendence. Beck's behavior model of depression is built on a cognition of negative expectations (Kovacs & Beck, 1978). He considered hopelessness and helplessness to be central to the experience of depression. Travelbee (1971) stated that hope strengthens individuals to deal with difficulties and stresses that accompany tragedy, failure, boredom, loneliness, and suffering. For many adults, their hope is grounded in a relationship with God. When personal hopes meet with disappointment, their spiritual hope allows a healthy perspective and peace and joy is sustained.
According to Carson (1989), if one's hope is only experienced in the world, disappointments that frequently come may end in despair. A key element of hope is a self-transcendent belief system.

Minkoff, Bergman, Beck, and Beck (1973) studied hopelessness, depression, and attempted suicide. The sample included 68 consecutive "attempted suicides" admitted to a Philadelphia hospital over a period of six months. These subjects were given the Center for Epidemiological Studies Scale (CESD) as a means of measuring intensity of depression and then given the Generalized Expectancies Scale (GES) as a measure of hopelessness. The BDI and GES scores showed a highly significant positive correlation ($r=.68$). The correlation between intent to attempt suicide and GES was significantly higher than intent and BDI. The results indicated that intent varies with hopelessness regardless of whether depression was high or low, with hopelessness becoming increasingly significant as depression increases. Thus hopelessness was found to be more predictive of suicide attempt than depression itself.

Depression and self-transcendence, as a developmental resource for mental health in the elderly, was studied by Reed (1986). This longitudinal study matched 28 clinically depressed and 28 mentally healthy older adults on age, sex, and years of education. Each individual was given the
Developmental Resources of Later Adulthood Scale (DRLA), a scale that measured level of self-transcendence, and the Center for Epidemiological Studies Depression Scales (CESD) to measure depression. The DRLA (later revised as the Self-Transcendence Scale) was comprised of items related to psychosocial resources characteristic of older adults such as the ability to transcend limitations of the present situation, share one's wisdom, accept one's past-present-future, and achieve a sense of physical integrity. Results of this research supported prior studies that stated that mental health in later adulthood was linked to self-transcendence. Depressed older adults consistently scored significantly lower on the DRLA than did the mentally healthy group over three measurement periods. Moreover, cross-lagged panel correlation analysis indicated a significant causal pattern between low self-transcendence and subsequent higher levels of depression among the mental health group.

In another study by Reed (1989) concerning depression in the elderly, thirty respondents were interviewed approximately one week after admission to a psychiatric hospital. The DRLA and CESD were administered. Pearson correlation analysis revealed a significant inverse relationship between level of self-transcendence as a
developmental resource, and level of depression (r=.55, p<.001).

In a later study by Reed (1991), the relationship between self-transcendence and mental health symptomatology in oldest-old adults was investigated and patterns of self-transcendence that these adults perceived as being important to their emotional well-being were described. Fifty five adults, aged 80 to 97, who lived independently, comprised the convenience sample. Qualitative and quantitative information on self-transcendence was obtained. A Self-Transcendence Scale was used to measure manifestations of self-transcendence through creative, social, and introspective avenues that are not physically oriented.

Matrix analysis identified four conceptual clusters of self-transcendence which were reported to be related to a sense of well-being. These clusters included generativity, introjectivity, temporal integration, and body-transcendence. Generativity included altruistic activities of helping others and family involvement. Introjectivity included categories of interiority and life-long learning. Temporal Integration related to the participants' views about their past, present, and anticipated future. Finally, body-transcendence referred to the respondent's ability to integrate physical changes due to aging or illness into their current life.
Seventy-five percent of respondents expressed an Introjectivity pattern as being important to their emotional well-being, while 25% reported none. Body-transcendence was evident among 63.5% who expressed a flexible and positive attitude about their body changes. Pearson correlation analysis indicated significant inverse relationships between Self-Transcendence and the CESD depression score, and between Self-Transcendence and the MHS score. Self-Transcendence patterns in correspondence to the CESD scores indicated that those who had the highest possible score on each of the self-transcendence patterns, had lower levels of depression. This research suggested that self-transcendence, as a spiritually-related variable, is one significant correlate of mental health among the oldest-old.

Psychological and spiritual well-being in college students was studied by Fehring, Brennan, and Keller (1987). Their hypothesis examined was that depression in response to life change will be lower in students with high levels of spiritual well-being and high spiritual maturity. Ninety-five freshman nursing students completed a questionnaire including a Beck Depression Inventory, Life Change Inventory, Spiritual Well-Being index, and Spiritual Maturity Scale.

Univariate correlations of scores on the Beck Depression Inventory with Life Change Inventory, Spiritual
Well-Being index, and Spiritual Maturity Scale was computed. Both overall spiritual well-being and the subscale of existential well-being correlated negatively with depression. A mild positive correlation between depression and life change was also found. The regression model indicated that the greatest amount of variance in Beck Depression scores were explained by existential well-being, which lowered the depression score, and life changes, which raised the score. Spiritual maturity and religious well-being did not meet the minimum tolerance test to enter the regression equation.

In summary, these studies give support to the significance of hope in existential well-being and the linking of increased mental health to self-transcendence. Those individuals with the highest scores on self-transcendence surveys had the lowest depression scores.

**Spirituality and Mental Health**

Much of the literature on spirituality involves the geriatric population. These will be reviewed because a large percentage of hospitalized depressed adults are elderly who are depressed due to problems of life readjustment and chronic illness. This section will include spirituality and mental health in older adults, terminally ill adults, chronically ill adults, and middle-aged women.
Older Adults

Koenig, Moberg, and Kvale (1988) studied religious beliefs, activities, and motivations of 106 consecutive patients attending a geriatric outpatient clinic. Religious variables examined were beliefs, rituals, religious experience, knowledge of the Bible, support derived from the community, importance of prayer, use of religion to cope with stress, and intrinsic religiosity. Health variables were measured by a subjective statement and objective findings from physical assessment and number of prescription and nonprescription medications. The Wilcoxon rank sum test was used to evaluate the data. The trend between religion and mental health was consistent, although nonsignificant (p<0.10). Patients with either chronic anxiety or depressive symptoms reported lower levels of both organizational and nonorganizational religious activity.

Religion and well being in later life was also studied by Koenig, Kvale, and Ferrel (1988). Several diverse groups of older persons were surveyed (for a total of 836 participants) using validated instruments measuring morale (Philadelphia Geriatric Center Morale Scale), organizational religious activities (ORA), and non-organizational religious activities (NORA), and intrinsic religiosity (IR) which examined religious attitudes, beliefs, and commitment. The validity of the religiosity measures was determined by
testing of ministers, priests, and rabbis to act as judges to characterize a religious person. The internal consistency and reliability of the religious measures were supported by the Cronbach's alpha statistic. Single-item measures were used for subjective health, financial status, and social support which are commonly used to determine well-being in old age.

Results indicated that social support was positively correlated with morale, subjective coping and organized religious activities; the other religious measures (NORA and IR) were similarly associated with social support, but those did not reach statistical significance. Zero-order correlations between morale, coping, and all three dimensions of religiosity were moderately strong and highly significant. Despite a decline with age in religious activities, respondents age 75 and older who were actively involved in religious behaviors or intrinsically committed were significantly more likely than the less religious to have high morale scores.

Older adults and spiritual well-being were also studied by Hungelmann, Kenkel-Rossi, Klassen, and Stollenwerk (1985). The goal of this qualitative, inductive research approach in grounded theory was to determine defining characteristics of spiritual well-being. Constant comparative analysis of data produced clusters of
descriptors of qualities and activities of spiritual well-being. Initial coding resulted in categories of reality of a Supreme Being, childhood influences, and formal religious affiliation. With further evaluation, these categories were found to be time- or person-related. Under these two headings, original categories collapsed into six core categories of Ultimate Other, other/nature, self, past, present, and future. The final delimiting process produced two major themes identified as important to the well-being of older adults: harmony and connection. Spiritual well-being was described as a sense of harmonious interconnectedness between self, others/nature, and Ultimate Other which exists throughout and beyond time and space. A dynamic and integrative growth process was identified as leading to a realization of the ultimate purpose, hope, and meaning of life.

Religion, physical disabilities, and life satisfaction were studied in an older age population (Guy, 1982). The data were collected by interviewing 1170 persons who were age sixty years and older. The instrument used to measure life satisfaction was the Life Satisfaction Index A (LSIA) developed by Neugarten, Havighurst, and Tobin (1961). This tool measured five dimensions of life satisfaction: zest for life, resolve and fortitude, perceived congruence between
aspired and achieved goals, self-image, and emotional morale.

Significant relationship between church attendance patterns and life satisfaction was found. The highest score on the LSIA belonged to individuals attending church more frequently at the time of the interview than they had fifteen years earlier. The authors also confirmed with statistical significance that physical limitations did cause a decrease in church attendance. The last hypothesis examined the relationship between life satisfaction and maintenance of church contact, since church attendance may not be possible if physical limitations are extensive. Individuals with complete limitations who attended church infrequently did not demonstrate a higher score in the LSIA when church contact was maintained. Statistical testing on the last hypothesis was in the predicted direction but was not significant (F=1.89; p<.05).

O'Brien (1982) studied religious faith and adjustment to long-term hemodialysis. This research is relevant to the present study since many renal patients become extremely depressed adjusting to their chronic illness and medication treatment regimen. Data were collected from 126 dialysis patients using an instrument measuring social functioning in terms of interactional behavior, quality of interaction, alienation and sick role behavior. The variable of religion
was defined by items measuring religious affiliation, participation in formal religious services, and quantitative and qualitative questions reflective of the patient's perception of the importance of religious faith in adjusting to end-stage renal failure and hemodialysis treatment regimen.

One-way analysis of variance and content analysis of quantitative interview data were used to analyze the data. Overall, 33 respondents (26.2%) reported that religious beliefs were never relevant in relation to acceptance of their condition; 27 (21.4%) asserted that religion was sometimes important; 31 (24.6%) responded usually; and 35 (27.8%) stated that their religious faith was always an important element. Therefore, 93 (73.0%) of the dialysis group held the opinion that their religious faith was at least sometimes an important element associated with adjustment to their illness condition.

Older persons were also studied by Hunsberger (1985) in the areas of religion, age, life satisfaction, and perceived sources of religiousness. Eighty-five persons who were 65 to 88 years old were interviewed on issues of religious socialization, attitudes on religion, and religious happiness. They were also given the Christian Orthodoxy Scale (Fullerton & Hunsberger, 1982). Correlations between
religious variables and reported happiness and adjustment in life were positive and statistically significant.

Nelson (1990) studied intrinsic/extrinsic religious orientation of the elderly and its relationship to depression and self-esteem. A convenience sample of 68 elderly persons from a day care program participated in the study. Each were given the Age Universal Religious Orientation Scale to determine extrinsic and intrinsic religious orientation. They were also given the Geriatric Depression Scale. This scale was specifically designed for the elderly as it de-emphasizes depressive features of old age that are confused with the normal aging process. The level of self-esteem was measured by the Rosenberg Self-Esteem Scale. This instrument has a Cronbach alpha of .74, a test-retest reliability of .85, and factor analysis confirming the unidimensionality of the scale.

A Pearson correlation analysis was used to determine the relationship between depression and intrinsic religious orientation. The results showed a significant negative correlation between depression and intrinsic orientation while intrinsic religious orientation was positively related to church attendance. Intrinsic religious orientation was negatively correlated with self-esteem and there was a weak negative correlation between church attendance and self-esteem. Additional analysis indicated a significant
correlation between depression and self-esteem. In summary, elderly persons with high self-esteem were more intrinsically oriented to religion and less depressed (Nelson, 1990).

**Terminally Ill Adults**

Religiousness among the terminally ill patient and healthy adults were explored by Reed (1986). Fifty-seven terminally ill outpatients and 57 healthy adults were matched on the variables of age, gender, education, and religious affiliation. The Religious Perspective Scale (RPS) was used to measure religious beliefs and behaviors. This scale was adapted by Reed from King and Hunt's (1975) Dimensions of Religiosity Scales. The reliability of the RPS was adequate with a standardized alpha coefficient of .92 and validity determined. The Index of Well-Being (IWB) was used to measure satisfaction with life as it currently is experienced. This tool was adapted by Campbell, Converse and Rodgers (1976) and measures cognitive as well as affective dimensions of general well-being. Among other findings, there was a positive significant relationship between spirituality and well-being in the healthy group (r=.43, p<.001). This relationship was not significant in the terminally ill group.
Reed (1987) continued this research by studying spirituality and well-being in critically terminally ill hospitalized adults. The Spiritual Perspective Scale (SPS), which is the same as the Religious Perspective Scale in the previous study, and the Index of Well-Being (IWB) were used to survey 300 adults. These adults were a part of three groups according to the following: terminally ill hospitalized patients, non-terminally ill hospitalized patients, and healthy nonhospitalized patients. Each group completed the two instruments.

Orthogonal comparisons showed a significant difference between Group 1 and the average of Group 2 and Group 3 SPS scores ($F(1,297) = 5.16$, $p=.02$), whereas there were no differences between the mean scores of Groups 2 and 3; the terminally ill group had a significantly higher level of spiritual perspective than either of the other two groups. Also a positive relationship was found between spiritual perspective and well-being in the terminally ill hospitalized group. Overall, Reed's (1987) study provided support for viewing spirituality as an important variable during end of life experiences.

**Chronically Ill Adults**

Loneliness and spiritual well-being were studied in 64 chronically ill patients with rheumatoid arthritis and
compared to loneliness and spiritual well-being in 64 healthy adults (Miller, 1985). The Abbreviated Loneliness Scale (ABLS) was used to measure loneliness. This scale was developed by Paloutzian and Ellison (1982), consisting of seven items. The test-retest reliability of the instrument was .85 (p<.001) and the internal consistency alpha coefficient was .68. The Spiritual Well-Being Scale consisted of 20 items, half measuring religious well-being (RWB) and half measuring existential well-being (EWB). The test-retest reliability coefficients were .93 for total SWB, .96 for RWB, and .86 for EWB. The internal consistency alpha coefficients were .89 for EWB, .87 for RWB, and .78 for EWB. Data were analyzed using a t-test, Pearson Product correlation, and canonical correlation.

Results indicated a negative correlation between loneliness and spiritual well-being in both the chronically ill and healthy subjects (Miller, 1985). The chronically ill group did not have significantly higher loneliness scores than the healthy group. The mean loneliness score for the ill group was 12.44 and the mean loneliness score for the healthy group was 11.86. The chronically ill group had significantly higher spiritual well-being scores than did the healthy group. The mean SWB scores were 94.25 for the ill subjects and 83.72 for the well subjects, significant at the .01 level. So, again, spiritual well-
being was found to correlate significantly with a variable of chronic illness.

Middle-Aged Women

Shaver, Lenauer, and Sadd (1980) surveyed 2500 women via a Redbook magazine questionnaire and studied religiousness, conversion, and subjective well-being. Part of their purpose was to study religion, health, and well-being with the implication that confidence and consistency of belief, regardless of its specific nature, is likely to be associated with health and happiness and with the absence of tension and conflict. Curvilinear relationships between religiousness and problems were evident throughout the data; as religiousness decreased from very religious to slightly religious, problems (feelings of loneliness, worthlessness, and guilt; crying easily, anxiety, and fears) increased, and then the same problems began to decrease as religiousness decreased to "antireligious." This same curvilinear relationship was true for the score of unhappiness with the slightly religious being less happy than either strongly religious or the antireligious. This analysis of the Redbook study is particularly relevant to the current study because many of the mental health symptoms used in the survey were symptoms of depression.
Summary

The literature review addressed research in the area of spirituality and depression. Though the literature is sparse in material correlating spirituality and depression, existing research does support a relationship between spirituality and emotional well-being. In various studies, elderly patients with depression or chronic anxiety reported lower levels of spiritual activities; however, those who were actively involved in religious behaviors or were intrinsically committed were significantly more likely than the less religious to have high morale scores. There was also a significant relationship between church attendance patterns and life satisfaction in this population. Terminally ill hospitalized adults and chronically ill adults were found to have significantly higher levels of spiritual perspective than healthy nonhospitalized adults. This research will attempt to extend the findings identified in this chapter by examining the relationships of spiritual variables and depression in clinically depressed adults.
CHAPTER III
THE METHOD

This chapter presents the sample, procedure, and instruments used to answer the five research questions. Instruments were selected to elicit information from clinically depressed adult participants regarding their spirituality and level of depression. A descriptive correlational study was used to investigate the relationship between depression and spiritual variables, and between type of treatment programs and depression. The population of interest was clinically depressed adults admitted to a psychiatric hospital in a city in the Southwestern United States.

Sample and Setting

The sample consisted of 40 adults over the age of 18, admitted to the psychiatric hospital with the diagnosis of major depression. The psychiatric hospital has a traditional adult unit and Christian adult unit. Therapeutic approaches for the patients from the Christian adult unit included occupational therapy, leisure counseling, one psychodrama group, men's group, chemical dependency step group, and physical fitness with the
traditional adult unit. Groups with Biblical perspectives were insight group, cognitive process group, assertiveness training, women's group, and Bible Study. The traditional adult program facilitated their own women's groups, assertiveness training, and insight group.

Overall, the programs were very similar in structure in terms of the number of groups and staff time spent with individual patients, with the exception of the Christian-oriented focus in the Christian program. One other difference was that the Christian program had in-house therapists who facilitated the program and did social histories and treatment planning. The traditional unit had social workers who did social histories, nurses who did treatment plans, social workers attended the staffings when treatment plans were discussed, and therapists were contracted from outside of the hospital to facilitate the various groups (psychodrama, assertiveness, insight, and men's group).

Criteria for sample selection were: (1) major depression as defined by the Diagnostic and Statistical Manual of Mental Disorders III (American Psychiatric Association, 1980), (2) absence of psychotic symptoms, (3) able to comprehend and respond to the questions, and (4) English-speaking.
Procedure

Written permission was granted from the psychiatric hospital and the University of Arizona Human Subjects Committee (Appendix A), to survey all patients who met the criteria of this study. The subjects were contacted between their sixth and eighth day after admission to determine their willingness to participate. If willingness was expressed, a time and place convenient to the participant was arranged to complete the questionnaires, preferably that day. Prior to the interview, a written explanation of the study and a disclaimer was presented to each subject, and was discussed with them orally (Appendix C). After obtaining informed consent, participants were asked to respond to a "Demographic and Health-Related Information" form (Appendix D) and three questionnaires. If the participant had difficulty completing the questionnaires, they were administered in an interview format with a focus on avoidance of interpreting the items. The instruments used in this study were the Spirituality Perspective Scale (SPS) (Appendix E), the Self-Transcendence Scale (STS) (Appendix F), and Center for Epidemiological Studies - Depression Scale (CESD) (Appendix G). The instruments were given in random order across all participants.

Interviews lasted approximately 30 to 60 minutes. Subjects answered the questionnaires without interpretation
from the investigator. After the questionnaires were completed, discussion was encouraged and any questions were answered.

**Instruments**

A review of nursing literature in the areas of spirituality and depression led to the selection of instruments designed to gain information from the participants regarding their perspectives on those areas. Permission was granted to this writer for use of the instruments by each of the respective authors prior to data collection.

The Spirituality Perspective Scale (SPS)

The Spiritual Perspectives Scale (SPS) was used to measure spiritual beliefs (Appendix E). Following a review of literature, Reed (1986b) adapted the SPS from King and Hunt's (1975) Dimensions of Religiosity Scale. The SPS is a 10-item scale, arranged in a Likert format which measures the subjects' perspectives of the extent that spirituality is a part of their lives and is a part of daily interactions with others. Possible scores ranged from 10 to 60, with 60 indicating a greater spiritual perspective. The SPS is scored by summing all responses and can be administered in either a structured interview or questionnaire format.
Reliability and validity were demonstrated in previous research by Reed (1986b) with terminally ill and healthy adults. Reliability was measured by Cronbach's alpha as an estimate of internal consistency. Alpha coefficients ranged from .93 in Group 2 to .95 in Groups 1 and 3. Inter-item analysis indicated that one item concerning prayer was redundant. No inter-item correlations fell below .41; average inter-correlations ranged from .57 to .68 across the groups. Women and those who reported having a religious background scored higher on the SPS which lent support to the instrument's construct validity.

The Self-Transcendence Scale (STS)

The Self-Transcendence Scale (Appendix F) was developed from the 36-item scale, the Developmental Resources of Later Adulthood (DRLA) scale (Reed, 1986). The STS consists of 15 items which identify intrapersonal, interpersonal, and temporal experiences which are characteristic of later life and reflect expanded personal boundaries. Responses are based upon a four-point scale ranging from one (not at all) to four (very much). The final score ranging from 15 to 60 reflects overall level of self-transcendence and takes into account differences in personal experiences of self-transcendence. For example, a low score on one item may be offset by a high score on another item. A sample of the
items includes, sharing my wisdom with others, helping other in some way, and finding meaning in past experiences. The items were designed to avoid bias toward strong or healthy persons.

Reliability as estimated by Cronbach's alpha has been within the normal range, from .80 (Reed, 1991) to .93 (Reed, 1989). Secondary analysis across three time periods also indicated test-retest reliability was .95. Construct validity was supported in the relationship of STS scores to other measures and in groups who scored on the STS. Construct validity was also supported by participants who indicated that the items were very relevant to their current life; a mean rating of 2.7 (SD=0.9) out of a possible 3.0 was found (Reed, 1991).

Center for Epidemiological Studies Depression Scale (CESD)

The CESD (Appendix G) is a 20-item self-report questionnaire used to measure levels of depression in both clinical and general populations. It focuses on the person's current emotional experience. The scale requires the participant to rate each of 20 depressive symptom statements on a four-point scale representing intensity or frequency of occurrence of the symptoms. The score range is zero to 60 with any score >16 indicating clinical depression (Radloff, 1977). Reliability and concurrent and content
validity have been established by Husaini, Neff, Harrington, Hughes and Stone (1979). The CESD is relatively brief, and understandable.

Analysis

The research questions will be analyzed using bivariate correlations and multiple correlations. Descriptive statistics will be used to examine other demographic variables that may significantly correlate with the study variables, and to characterize the sample.
CHAPTER IV
FINDINGS

The results of data analysis are presented in this chapter. The level of significance set for this study was $p<.05$. The mean scores, standard deviations and range of scores on the demographic and study variables provide an overview of the characteristics of the respondents in this study. Findings on the research questions are presented, followed by results from additional analyses.

Characteristics of the Sample

A total of 40 subjects participated in the study. The mean age of this sample was 40.75 with a standard deviation of 11.85. Thirty-five (87.5%) were women and five (12.5%) were men; 37 (92.5%) were Caucasian and three (7.5%) were Hispanic. The mean years of education was 13.58 with a standard deviation of 2.72, with a range from nine to 21 years; eight (20%) respondents did not have a high school education. Subjects indicated religious preference as Protestant (50%), Catholic (20%), Jewish (2.5%), other such as Mormon (10%), and none (17.5%). Of the forty subjects, forty-two percent were married, 42% were divorced, 5% were widowed, and 10% were never married. Forty-seven percent of
the respondents were employed, 40% were unemployed, and 12.5% were retired.

The mean number of days that subjects had been hospitalized at the time of administering the surveys was seven to eight days with a standard deviation of 1.5 and range of five to ten days. Participants subjectively described their physical health as average ($\bar{x}=3.3$ on a 5-point scale, $SD=1.1$). They described their mental health as fair ($\bar{x}=2.1$, $SD=1.1$).

Four subjects (10%) reported taking no medications, two (5%) were taking only antianxiety medications, two (5%) were taking only neuroleptics, 19 (48%) only antidepressants, and 13 (33%) were taking a combination of one or more antidepressants or an antidepressant in combination with other psychiatric medications. Twenty-one (53%) had never been hospitalized before.

Demographic and health-related data were analyzed in reference to the two subgroups represented in the sample, Group 1 as those in the traditional treatment program ($N=20$) and Group 2 as those in the Christian treatment program ($N=20$). The subgroups were comparable on the continuous variables of age, years of education, number of days hospitalized, subjective description of physical and mental health. In Table 1, the subgroup frequencies on these
Table 1. Participants from the Traditional Treatment Program and Christian Treatment Program Mean Scores, Standard Deviation, Range, and t-Test on Demographic Factors of Age, Years of Education, Perceived Level of Physical Health, Perceived Level of Mental Health, and Number of Days Hospitalized When Surveys were Administered (NODH) (N=20)

<table>
<thead>
<tr>
<th></th>
<th>Traditional Program</th>
<th>Christian Program</th>
<th>(c)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Mean</td>
<td>S.D.</td>
<td>Range</td>
</tr>
<tr>
<td>Age</td>
<td>40.6</td>
<td>10.8</td>
<td>25-58</td>
</tr>
<tr>
<td>Years of Education</td>
<td>13.8</td>
<td>2.4</td>
<td>9-17</td>
</tr>
<tr>
<td>Physical Health (a)</td>
<td>3.2</td>
<td>1.3</td>
<td>1-5</td>
</tr>
<tr>
<td>Mental Health (b)</td>
<td>2.0</td>
<td>1.1</td>
<td>1-4</td>
</tr>
<tr>
<td>NODH</td>
<td>7.4</td>
<td>1.4</td>
<td>5-10</td>
</tr>
</tbody>
</table>

(a) Range Possible = 1-5 with 1 indicating lowest level of perceived Physical Health

(b) Range Possible = 1-5 with 1 indicating perceived POOR Mental Health

(c) No significant differences between the two groups were found in these five areas
variables are listed and the t-values of the differences between the groups identified.

The subgroups did have some differences in the noncontinuous variables of marital status and religious preference. In the traditional treatment program, seven (35%) were married, 11 (55%) were divorced, none were widowed, and two (10%) were never married. This differed from the Christian treatment group, in which ten (50%) were married, six (30%) were divorced, two (10%) were widowed, and two (10%) were never married. These frequencies are listed in Table 2.

Respondents of the traditional treatment group listed their religious preference as Protestant (30%), Catholic (25%), Jewish (5%), other (10%) and none (30%). In the Christian treatment group, 70% listed their religious preference as Protestant, 15% as Catholic, 10% as other, and 5% as none. Both groups had similar racial backgrounds.

Following are the mean scores on the study variables. The mean score for depression was 36.0 (S.D. = 12.9) and a range of 13-59. The mean spirituality perspective score was 45.3 (S.D. = 11.6) and a range of 13-59. The self-transcendence mean score was 41.1 (S.D. = 7.0) and range of 27-55. Table 3 identifies these scores and the significant differences by subgroups of the traditional and Christian treatment programs. The t-values indicate that the only
Table 2. Frequency and Percentage of Marital Status, Religious Preference, and Race Within Traditional and Christian Treatment Groups.

<table>
<thead>
<tr>
<th></th>
<th>Traditional Program (N=20)</th>
<th>Christian Program (N=20)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Frequency</td>
<td>%</td>
</tr>
<tr>
<td>Married</td>
<td>7</td>
<td>35.0</td>
</tr>
<tr>
<td>Widowed</td>
<td>0</td>
<td>0.0</td>
</tr>
<tr>
<td>Divorced</td>
<td>11</td>
<td>55.0</td>
</tr>
<tr>
<td>Never Married</td>
<td>2</td>
<td>10.0</td>
</tr>
<tr>
<td>Protestant</td>
<td>6</td>
<td>30.0</td>
</tr>
<tr>
<td>Catholic</td>
<td>5</td>
<td>25.0</td>
</tr>
<tr>
<td>Jewish</td>
<td>1</td>
<td>5.0</td>
</tr>
<tr>
<td>Other</td>
<td>2</td>
<td>10.0</td>
</tr>
<tr>
<td>None</td>
<td>6</td>
<td>30.0</td>
</tr>
<tr>
<td>White, non-Hispanic</td>
<td>18</td>
<td>90.0</td>
</tr>
<tr>
<td>Hispanic</td>
<td>2</td>
<td>10.0</td>
</tr>
</tbody>
</table>
Table 3. Traditional Treatment Program and Christian Treatment Program Respondent Scores and t-Values for Differences on Depression (CES-D), Spirituality (SPS), and Self-Transcendence (STS) (N=20 in each subgroup)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Traditional Group</th>
<th>Christian Group</th>
<th>t-Test</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>( \bar{x} )</td>
<td>S.D.</td>
<td>Range</td>
</tr>
<tr>
<td>Depression (a)</td>
<td>35.2</td>
<td>14.7</td>
<td>13-57</td>
</tr>
<tr>
<td>Spiritual Perspective (b)</td>
<td>40.1</td>
<td>10.7</td>
<td>13-55</td>
</tr>
<tr>
<td>Self-Transcendence (c)</td>
<td>40.6</td>
<td>6.5</td>
<td>30-55</td>
</tr>
</tbody>
</table>

* * p<.05

(a) Range possible = 0-60 with 0 indicating lowest level of depression

(b) Range possible = 10-60 with 10 indicating lowest level of spirituality

(c) Range possible = 15-60 with 15 indicating lowest level of self-transcendence
significant difference in these scores between the two groups was the score on spiritual perspective. There was no significant difference between the two groups on scores of depression or self-transcendence.

**Psychometric Analysis**

Reliability of the three instruments was also examined, using Cronbach's alpha as an estimate of internal consistency. The following reliability coefficients were found: "Spirituality Perspectives Scale" (r=.93); "Self-Transcendence Scale" (r=.77); and "Center for Epidemiologic Depression Scale" (r=.92).

**Research Question One**

The first research question examined the relationship between Spiritual Perspective and level of Depression in adults six to eight days after admission to inpatient psychiatric treatment with a diagnosis of depression. The Pearson product correlation coefficient was calculated to determine the magnitude and significance of this relationship in the total group (N=40). Findings indicated that the relationship between Spiritual Perspective and Depression was not significant (r=-.25, p=.06), although there was a trend in the expected direction.
**Research Question Two**

The second research question examined the relationship between Depression and Self-Transcendence in adults six to eight days after admission to inpatient psychiatric treatment with a diagnosis of depression. The Pearson product correlation coefficient between these two variables was significant ($r=-.58$, $p=.000$). The negative direction of the relationship indicates that as self-transcendence increased, depression decreased.

**Research Question Three**

The third research question examined the difference in the level of depression between the subjects in the traditional and subjects in the Christian treatment programs. The t-test for difference of scores on the depression scale was not significant ($t=-.42$, $p=.67$).

**Research Question Four**

The fourth research question involved the relationship of Spiritual Perspective, Self-Transcendence and philosophical orientation of the treatment program with the level of depression in adults. Stepwise multiple regression techniques were used to determine with spiritually-related variables best predicted level of depression. Spiritual perspective, self-transcendence, and treatment group were
entered into the equation as predictor variables. Depression was the dependent variable. Self-transcendence was the first and only variable to enter the equation, explaining a significant 58% of the variance of depression. The multiple R was .58, R Square was .33, and Significant p=.0001. Spiritual perspective and treatment group did not contribute significantly to the variance.

**Research Question Five**

The fifth research question examined whether the interaction between Spiritual Perspective and philosophical orientation of the treatment program contribute significantly to level of depression. This analysis was done by first entering spiritual perspective into the stepwise multiple regression, followed by self-transcendence and treatment program. An interaction variable representing the interaction of spiritual perspective and treatment group was entered on step four followed by the interaction variable of self-transcendence and treatment group. Table 4 reveals these values. Although the F ratios and degrees of freedom were significant, the T measures were not significant. The interaction variable was entered in step four was not significant (T=-.91); the interaction between spiritual perspective and treatment program did not
Table 4. Stepwise Multiple Regression Analysis of Spiritual Variables and Depression in Adults Hospitalized with Major Depression (N=40)

<table>
<thead>
<tr>
<th>Spiritual Variables</th>
<th>Multiple R</th>
<th>R2</th>
<th>R2 Change</th>
<th>Beta</th>
<th>T</th>
<th>F(df)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Spiritual Perspective</td>
<td>.25</td>
<td>.06</td>
<td>.06</td>
<td>-.25</td>
<td>-1.56</td>
<td>2.43(1,38)</td>
</tr>
<tr>
<td>Self-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transcendence</td>
<td>.58</td>
<td>.33</td>
<td>.27</td>
<td>-.57</td>
<td>-3.86**</td>
<td>9.13(2,37)**</td>
</tr>
<tr>
<td>Treatment Group</td>
<td>.59</td>
<td>.35</td>
<td>.02</td>
<td>-.14</td>
<td>-.95</td>
<td>6.37(3,36)*</td>
</tr>
<tr>
<td>Spiritual Perspective &amp; Treatment</td>
<td>.60</td>
<td>.36</td>
<td>.01</td>
<td>-.54</td>
<td>-.91</td>
<td>4.96(4,35)*</td>
</tr>
<tr>
<td>Group</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Self-Transcendence &amp; Treatment Group</td>
<td>.60</td>
<td>.36</td>
<td>.00</td>
<td>-.31</td>
<td>-.32</td>
<td>3.88(5,34)*</td>
</tr>
</tbody>
</table>

* p<.01
** p<.001
contribute significantly to the explained variance in level of depression in this study.

**Additional Findings**

**Intercorrelation Analysis on Entire Group**

Several significant relationships were found in additional correlational analysis on the entire group (Table 5). Spiritual perspective was negatively related to years of education among the participants \( (r=-.26, p=.05) \). In reference to this study, this indicates that as years of education increased, spiritual perspective decreased. Years of education did not significantly relate to self-transcendence \( (r=.08, p=.30) \).

A positive significant relationship existed between spiritual perspective and perceived mental health \( (r=.35, p=.01) \). This indicates that in this group of respondents, as spiritual perspective increased, perceived mental health also increased even though they all were diagnosed with major depression. This was also true with self-transcendence and perceived mental health \( (r=.69, p=.0001) \). As self-transcendence increased, so did perceived mental health.

Self-transcendence has a moderate significant relationship with perceived physical health in this group of participants \( (r=.28, p=.04) \). This was not significant for
Table 5. Correlations of Study Variables and Demographic Information of Number of Years of Education, Age, Perceived Mental Health, and Perceived Physical Health \( (N=40) \)

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>SPS</th>
<th>STS</th>
<th>Yrs of Education</th>
<th>Age</th>
<th>Mental Health</th>
<th>Physical Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Treatment Group</td>
<td>.07</td>
<td>.45*</td>
<td>.07</td>
<td>-.08</td>
<td>.01</td>
<td>.09</td>
<td>.09</td>
</tr>
<tr>
<td>Depression</td>
<td>1.000</td>
<td>-.25</td>
<td>-.58*</td>
<td>.18</td>
<td>.05</td>
<td>-.54*</td>
<td>.10</td>
</tr>
<tr>
<td>SPS</td>
<td>1.000</td>
<td>.41*</td>
<td>-.26</td>
<td>-.03</td>
<td>.35*</td>
<td>.02</td>
<td></td>
</tr>
<tr>
<td>STS</td>
<td>1.000</td>
<td>.09</td>
<td>-.10</td>
<td>.69*</td>
<td>.28*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of Education</td>
<td>1.000</td>
<td>-.11</td>
<td>-.13</td>
<td>.46*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.000</td>
<td>.03</td>
<td>-.14</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>1.000</td>
<td>.16</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Health</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* \( p<.05 \)
the relationship between perceived physical health and spiritual perspective \( (r = .02, p = .46) \) and depression \( (r = .10, p = .27) \). Therefore higher levels of self-transcendence were associated significantly with perception of physical health.

The relationship between age and spiritual perspective was very weak and not significant \( (r = -.03, p = .44) \) as was true for the relationship between depression and age \( (r = .05, p = .37) \). Somewhat stronger was the relationship between spiritual perspective and sex, although it was not significant \( (r = .20, p = .11) \).

Significant relationships were identified among health-related factors. There was a negative significant relationship between having had a previous psychiatric hospitalization and perceived mental health \( (r = -.36, p = .01) \). As the number of prior hospitalizations increased, the perception of mental health decreased. Previous hospitalizations also had a significant negative correlation with self-transcendence \( (r = -.36, p = .01) \). The relationship between number of previous psychiatric hospitalizations and spiritual perspective was also negative and moderately strong but not significant \( (r = -.25, p = .06) \). As previous hospitalizations increased in this population, self-transcendence and spiritual perspective decreased, while depression increased. Last, there was then a moderately
strong, positive relationship between previous hospitalizations and depression ($r=.32$, $p=.02$).

Subgroup Analysis on Research Questions 1 and 2

Pearson correlations of the individual subgroups, the traditional treatment group and the Christian treatment group, were also examined. Research question one explored the relationship between spiritual perspective and depression. This relationship was not significant in the traditional treatment group ($r=-.25$, $p=.14$) whereas the relationship was significant in the Christian treatment group ($r=-.40$, $p=.04$) ($N=20$ for both groups).

Research question two examined the relationship between depression and self-transcendence. This relationship was significant in both treatment groups with the correlation being stronger in the Christian treatment group. In the traditional treatment group, $r=-.55$, $p=.006$ and in the Christian treatment group $r=-.65$, $p=.001$ (See Tables 6 and 7).

Subgroup Correlations Analyses on Demographic and Health-Related Factors

Differences in correlations were identified when subgroups were analyzed separately (Tables 6 and 7). The relationship between perceived mental health and years of
Table 6. Correlations of Study Variables and Demographic Information of Participants from the Traditional Treatment Program (N=20)

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>SPS</th>
<th>STS</th>
<th>Yrs of Education</th>
<th>Age</th>
<th>Mental Health</th>
<th>Physical Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>1.000</td>
<td>-.25</td>
<td>-.55*</td>
<td>.14</td>
<td>.31</td>
<td>-.54*</td>
<td>.16</td>
</tr>
<tr>
<td>SPS</td>
<td>1.000</td>
<td>.18</td>
<td>-.23</td>
<td>-.24</td>
<td>.35</td>
<td>.12</td>
<td></td>
</tr>
<tr>
<td>STS</td>
<td>1.000</td>
<td>.35</td>
<td>-.52</td>
<td>.70*</td>
<td>.56*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Years of Education</td>
<td>1.000</td>
<td>-.01</td>
<td>.02</td>
<td>.56*</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.000</td>
<td>-.59*</td>
<td>-.36</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>1.000</td>
<td>.31</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Health</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

* p<.05
Table 7. Correlations of Study Variables and Demographic Information of Participants from the Christian Treatment Program (N=20)

<table>
<thead>
<tr>
<th></th>
<th>Depression</th>
<th>SFS</th>
<th>STS</th>
<th>Yrs of Education</th>
<th>Age</th>
<th>Mental Health</th>
<th>Physical Health</th>
</tr>
</thead>
<tbody>
<tr>
<td>Depression</td>
<td>1.000</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SFS</td>
<td>-0.40*</td>
<td>1.000</td>
<td></td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>STS</td>
<td>-0.65*</td>
<td>-0.27</td>
<td>1.000</td>
<td>0.22</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yrs of Education</td>
<td>0.65*</td>
<td>-0.08</td>
<td>0.18</td>
<td>0.68*</td>
<td>1.000</td>
<td>0.42*</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mental Health</td>
<td>0.22</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Physical Health</td>
<td>0.42*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*p <.05
education in the traditional treatment group was $r = 0.02$
compared to $r = -0.22$ in the Christian treatment group.
Neither were significant. The relationship between age and
perceived physical health was in a negative direction in the
traditional treatment group ($r = -0.36$) and in a positive
direction for the Christian treatment group ($r = 0.42$) and
significant only in the Christian group. Pearson products
correlation coefficients from both groups were significant
for the relationship between perceived mental health and age
but in opposite directions. In the traditional group
$r = -0.59$, $p = 0.003$ while in the Christian group $r = 0.48$, $p = 0.02$.

The correlation between years of education and
perceived physical health was moderately strong and
significant for both subgroups. For subjects in the
traditional treatment group, $r = 0.56$ ($p = 0.005$), while in the
Christian treatment group $r = 0.42$ ($p = 0.03$). Both groups had a
moderately strong negative correlation between spiritual
perspective and years of education but neither were
significant. There was a strong positive correlation
between self-transcendence and perceived mental health in
both subgroups and both were significant (Traditional group,
$r = 0.70$ and Christian group, $r = 0.68$. The relationship between
self-transcendence and perceived physical health was
significant in the traditional treatment group ($r = 0.56$,
$p = 0.005$) while the relationship was very weak and not
significant in the Christian group (r=-.02, p=.47). These correlations are shown for the traditional treatment group in Table 6 and for the Christian group in Table 7.

Medications taken by the subjects would also effect the level of depression. However, the most significant information would have been the medications that subjects were taking before admission, but that information was not requested on the demographic questionnaire. Those subjects who began taking antidepressants on admission would not have the therapeutic effect of the medication by day six to day eight. Table 8 records the amount of medications taken by subjects, comparing each treatment group. This is a very superficial comparison since dosages and length of time on the medications is not identified. As noted in the Table, medications were a strong part of the treatment of participants in both groups.

**Summary**

In summary, self-transcendence was significantly related to depression while spiritual perspective was not in the group as a whole. When the groups were divided by treatment program, spiritual perspective was significantly related to level of depression in the Christian treatment program group. Self-transcendence maintained the significant strong negative correlation with the level
Table 8. Comparison of Medications Taken by Number of Subjects in the Traditional and Christian Treatment Groups (N=20 for each group)

<table>
<thead>
<tr>
<th>MEDICATIONS</th>
<th>Traditional Group</th>
<th>Christian Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>One Anti-Depressant</td>
<td>10</td>
<td>13</td>
</tr>
<tr>
<td>One Anti-Anxiety</td>
<td>1</td>
<td>0</td>
</tr>
<tr>
<td>Lithium only</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Two Antidepressants</td>
<td>4</td>
<td>1</td>
</tr>
<tr>
<td>Antidepressant and one other psych med</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>Three Psych meds</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td>Pain meds only</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>No medications</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
of depression in both treatment groups when they were analyzed separately. There was no significant difference in the level of depression in the two groups. Demographic characteristics of having had a previous psychiatric hospitalization, years of education, and perceived mental and physical health were found to have significant correlations with the study variables.
A descriptive correlational design was used to investigate the relationships among spiritual perspective, self-transcendence, philosophical orientation of treatment program and depression in adults diagnosed with primary depression. The study sample focused on depressed adults for two reasons. First, they represent a very large percentage of those adults hospitalized in psychiatric hospitals. Second, they are a group of people who have a very high risk for attempting suicide.

This study was guided by a lifespan developmental framework of spirituality in which spirituality is regarded as a resource for mental health that can emerge during critical life events such as hospitalization for primary depression. A basic assumption of this study is that spirituality is a basic human experience with a two-dimensional process which includes the horizontal process and vertical process. The horizontal process increases the individual's awareness of the transcendent values inherent in all relationships and activities of life. A vertical process reflects a closer relationship with a higher being, as perceived by the individual.
Spirituality and Depression

The first research question addressed the relationship between spiritual perspective and level of depression in adults six to eight days after admission to inpatient psychiatric treatment. Researchers (Carson, 1989; Reed, 1986, 1987; Koenig, Kvale & Ferrel, 1988; Hunsberger, 1985; and Fehring, Brennan, & Keller, 1987) have well documented the significance of a spiritual component in human life. The findings from this study did not support a relationship between spiritual perspective and level of depression when the entire group was analyzed. However, there was a significant inverse relationship between spiritual perspective and level of depression when the Christian treatment group was analyzed separately (N=20), with no significant findings from the traditional treatment group.

Several reasons may explain this finding in the Christian subgroup. First, the Spiritual Perspective Survey might measure more of the intrinsic factors of spirituality that characterize Christianity, such as a personal relationship with a "Higher Being." Because the Christian faith guides individuals in a more personal relationship with God, the patients in the Christian treatment program may have a deeper intrinsic attitude. Carson (1989) has described the relationship with a Higher Being as the "vertical" dimension of spirituality. Intrinsic and
extrinsic orientation of spirituality of the elderly and its relationship to depression and self-esteem was studied by Nelson (1990). The correlation between intrinsic orientation and depression was significant. Michello (1988) found that emotional well-being and one dimension of spirituality ("relationship with God") were significantly associated with "health satisfaction."

Secondly, the "language spoken" in the Christian treatment program is the spiritual language best understood by Christian patients. The traditional unit is more limited in the spiritual language they use because patients have such diverse spiritual orientations. For example, Christian patients relate to phrases like "God's unconditional love," "Allow time to hear what God is speaking to you and be guided by Him," "What is God's purpose at this time in my life?". The traditional unit might also speak in phrases that reflect another view of spirituality that may not be represented on the SPS, such as one's personal power over their destiny, perhaps guiding to "channel energy" to a "higher consciousness." The significant relationship between spiritual perspective and depression in the Christian treatment program population may be influenced by a therapy communicated in a spiritual language to which patients readily relate, without having to "sort out" what agrees with their philosophy, and thus they can relate their
spirituality more readily to their mental health. The same result may have happened on the traditional unit given more treatment time for them to assimilate their spiritual beliefs into the existing therapy. However, all participants were interviewed on the sixth to eighth day of treatment in this study. Furthermore, each therapist on the Christian program is committed to the spiritual growth of each patient in all parts of their therapy. Staff on the traditional unit may not be as committed to the spiritual component of patients.

Lastly, and related to the second reason, the basic difference between the Christian treatment program and the traditional treatment program is one of philosophical orientation. Much of traditional psychiatric treatment revolves around frameworks of humanism and existentialism. Humanism accentuates the human tenets of human abilities, aspirations, and achievements in the earthly life. It is a philosophical movement in which people and their interests, development, fulfillment, and creativity are dominant. The cultural and rational aspects of human nature, rather than the supernatural, are magnified (Beck, Rawlins & Williams, 1984). In contrast, the philosophical orientation of the Christian Treatment program centers on a relationship with God, the supernatural. Perhaps this focus enhances one's spirituality, at least in terms of the vertical dimension of
spirituality, as compared to someone who centers on their human nature.

In conclusion, although the relationship between spiritual perspective and depression was not significant in the traditional treatment group, the comparatively high level of spiritual perspective ($x=40.1$; range possible = 10-60) found among the participants of the traditional treatment group indicates that spirituality is an important experience for patients hospitalized with depression.

Self-Transcendence and Depression

The second research question explored the relationship between self-transcendence and depression in adults hospitalized for depression. These findings supported a highly significant inverse relationship of moderate magnitude between these two variables ($r=-.58$, $p=.000$). As adults hospitalized with depression used more transcendent behaviors, their depression decreased. Further, when this correlation was analyzed in the separate treatment groups, both had a highly significant negative relationship between self-transcendence and depression. There was a stronger magnitude of the relationship in the Christian group ($r=-.65$, $p=.001$) than the traditional group ($r=-.54$, $p=.006$). The higher self-transcendence score for the Christian group might relate to the intrinsic spiritual
component of self-transcendence. For the Christian group, spiritual perspective and self-transcendence were significantly related in a strong magnitude ($r = .65, p = .001$) while the relationship was not significant and of low magnitude for the traditional group ($r = .18, p = .22$). However, since the relationship between self-transcendence and depression is moderately high and significant in the traditional group, it would seem that the subjects of that group experience self-transcendence without necessarily a strong religious or spiritual emphasis; while in the Christian group, subjects' spirituality may be a larger part of their transcendence.

Transcendent perspectives developed over a person's lifespan may help the individual maintain a sense of well-being as biological losses occur (Reed, 1987). Engaging in transcendent activities has been found to be a significant component of one's life satisfaction (Hunter & Linn, 1981). Reed (1988, 1986a) and Fengler (1984) are researchers who have studied transcendence and have found it to relate with other variables such as positive health behaviors, life satisfaction and mental health. Reed (1986a) researched self-transcendence in depressed and mentally healthy people. Significant differences were found between the two groups. Mentally healthy people exhibited significantly higher scores than depressed participants, suggesting the
importance of a self-transcendent perspective in maintaining mental health.

In a later study by Reed (1991), the relationship between self-transcendence and mental health symptomatology in the oldest-old adults was investigated. Pearson correlation analysis indicated significant inverse relationships between self-transcendence and the depression score.

In this research study involving depressed patients, the average self-transcendence score for the total group was 2.72 (range=1.0-4.0, with 1.0 indicating a low level of transcendence). The average score was similar in both groups with 2.77 for the Christian group and 2.67 for subjects in the traditional program. These scores are similar to the findings by Reed (1987), whose depressed participants scored 2.48. It is interesting to note that even though these scores are low measures of transcendence, it still had a moderately significant negative relationship with depression. This would indicate that even though depressed individuals are restricted in their ability to seek out activities that provide a sense of satisfaction, they do seek out some activities and that does have a major impact on their experience of depression.
Treatment Programs and Depression

The third research question, "Is there a significant difference in the level of depression between the two treatment groups?" generated a t-test statistic that was not significant. The two groups were not significantly different in levels of depression six to eight days after admission to a hospital with a diagnosis of primary depression. This was as expected, given the admission criteria for inpatient treatment which is fairly uniform across units.

Spirituality, Self-Transcendence, Treatment Program and Depression

The fourth research question addressed the question, "To what extent do spiritual perspective, self-transcendence, and type of treatment program explain variance in level of depression in adults, six to eight days after admission to inpatient psychiatric treatment with a diagnosis of major depression?" Findings revealed that spiritual perspective did not play a significant role in determining level of depression, and that self-transcendence alone accounted for 58% of the variance in determining depression (p=.0001). The degree of shared variance between self-transcendence and spiritual perspective (r=.41) likely minimized the relationship between spiritual perspective and
depression once the self-transcendence variable was entered. In addition, spiritual perspective did not correlate highly with depression initially ($r=.25$). Thus, the only significant contributing variable was self-transcendence.

Self-transcendence, as a process of "reaching out" to help others, may represent one spiritual dimension used by adults to cope with depression. The other non-spiritually related factors may account for the unexplained variance (42%) in level of depression, such as chronicity of depression (feeling more and more hopeless and that they will never be completely free from depression). This was indicated in the significant negative relationship between perceived mental health and depression, and between the number of previous hospital admissions for depression and depression.

**Other Findings**

The negative significant relationship found in this study between spiritual perspective and years of education has been found in other research by Reed (1986). In a previous study of Reed, women were found to have a higher level of spiritual perspective than men. This could not be tested in this study because of the low numbers of men in the sample. Reed also found significant relationships between age and spiritual perspective. Again, that
relationship in this study may not be accurate because there were so few people over 65 years old. In this study, age was not significantly correlated with spiritual perspective ($r=-.03, \ p=.44$) nor with self-transcendence ($r=-.10, \ p=.26$).

The relationship between age and perceived mental health was also weak and not significant ($r=.03, \ p=.44$). However, when analyzed by separate groups, the subjects from the Christian treatment program did reflect a significant, strong positive correlation with age and perceived mental health ($r=.48, \ p=.02$) while the relationship for traditional program subjects was significant but in the opposite direction ($r=-.59, \ p=.003$). Since the groups were not significantly different in age, it may be suggested that spiritual perspective (the only variable found to be different in the two groups) had an influence on how mental health is perceived through the aging process. That is, spiritual perspective may be viewed as a resource for one's mental health in later life.

Another interesting finding is that the relationship between spiritual perspective and perceived mental health in the whole group ($N=40$) was significant and moderately strong in a positive direction ($r=.35, \ p=.01$), whereas the relationship between spiritual perspective and level of depression was less significant ($r=-.25, \ p=.06$). Therefore one's spiritual perspective may affect the perception of
mental health in general more than the actual experience of depression. This was consistent with the results from analysis of the subgroups.

In the Christian group, the relationship between spiritual perspective and perceived mental health was not significant \((r=.35, p=.07)\) although there was a trend suggesting that a positive relationship existed. The relationship between spiritual perspective and depression was significant \((r=-.40, p=.04)\).

In the traditional treatment group, the two relationships approached significance in the expected directions. The relationship for spiritual perspective and perceived mental health was \(r=.35, p=.06\); while the relationship between spiritual perspective and depression was \(r=-.25, p=.14\). Overall, however, the results indicated that the extent of spiritual perspective is positively related to positive perceptions of one's mental health. This is congruent with previous research results (O'Brien, 1982).

The number of prior psychiatric hospitalizations of patients related significantly to several areas of their life. There was a negative significant relationship between previous psychiatric hospitalizations and perceived mental health. Perhaps this reflects chronicity or mental illness and indeed their mental status is poorer. A significant
relationship was present between previous psychiatric hospitalizations and spiritual perspective and self-transcendence.

The demographic information sheet did allow for subjects to write about their treatment issues. Two on the traditional unit mentioned marital problems while three reported that from the Christian program. Seven from the Christian program listed "sexual and physical abuse" as their major treatment issue, while only two wrote that from the traditional program. Five subjects from the traditional program listed "learning to adjust to chronic pain" while only one listed that from the Christian program. Perhaps what is most significant is that nearly the same number of subjects in both programs listed MANY issues - nine from the Christian program and eight from the traditional program.

**Recommendations for Further Research**

Several recommendations can be made for future research. First, the study should be repeated on a larger sample which would provide more accurate reliability estimates, and more power to test the theorized relationships. A convenience sample was obtained which resulted in a greater number of women subjects (87.5%). However, a more equal distribution of men and women may have led to more variability in the spiritual perspective scores
and, perhaps, a different correlation between spiritual perspective and the level of depression. Men, as a group, also need to be studied since literature reveals lower spiritual perspective in men than in women (Reed, 1986).

Second, the study could have been strengthened by obtaining baseline measures of all variables (depression, spiritual perspective, and self-transcendence) on day of admission. The baseline measures could then be used to examine the possible influence of degree of change in depression upon the relationships between depression and the spiritually-related variables at time two. This information may have been useful in speculating why spiritual perspective and level of depression was a significant correlation for the Christian treatment group, but not for the traditional treatment group at six to eight days after admission.

Third, a follow-up measure of the variables would strengthen this research. Perhaps six to eight days was not sufficient time for any measurable difference to occur in level of depression as a result of the treatment program. A follow-up interview done six weeks to three months after the day of admission would provide more data to determine the significance of spiritual resources in recovery.

Fourth, a more subjective description by each participant regarding their spiritual beliefs could have
strengthened this study. Several subjects in the traditional treatment program identified a religious preference. However, it was not clear if they, too, based their life on Biblical principles or identified with a "higher power" that was not necessarily supernatural. It would also be helpful to know exactly how participants use their spiritual resources; how is the "connectedness" to a power/being outside oneself experienced and used as a resource in dealing with depression? Furthermore, do participants use their spirituality beliefs in ways that intensify the depression? For example, a Christian may believe that God is punishing them through the depression. They would then have a very difficult time using their spiritual beliefs as a resource for recovery. Qualitative data on these questions could provide new insights into the role of spiritually-related variables in depression.

Last, the question concerning the potential effect of depression, itself, on the perception and ability to use spirituality as a resource is worthy of study. A longitudinal research could help address this question, as well as gain better understanding of the role of spirituality throughout and following the depressive episode. In sum, knowledge obtained from additional research could be used to design better nursing
interventions that help clients to access their spiritual resources during depression.

**Implications for Nursing**

An assessment of factors influencing the patient's mental health is required of nurses assessing a patient's emotional well-being. Spiritual perspective, self-transcendence, and philosophical orientation of the treatment program may be important mechanisms for an individual to access their spiritual resources for recovery from major depression. The high level (45.3 in a range of 10-60) of spiritual perspective for depressed subjects in this study adds support to the existing literature that emphasized the importance of including the spiritual dimension in nursing assessment of patients (Carson, 1989; Dombeck & Karl, 1987; Highfield & Carson, 1983). Continued research in this area is needed to clarify the role of spirituality as a resource in recovery from depression. Depending on a patient's needs, the spiritual component may be integrated into nursing care in a number of ways. As the nurse explores the significance of spirituality in a patient's life, he/she may be better able to incorporate the dimension into the treatment plan.

The nurse must also recognize her/his own spiritual dimension and how that influences assessment of and
interactions with clients. In the past, a nurses' spirituality has been considered a very private experience and not something to be explored when a nurse applies for a job. This study's framework acknowledges the potential relevance of spirituality for both the nurse and client. In this writer's experience, treatment teams often make referrals to clergy, when appropriate, but never include the clergy in staffings and treatment planning. This indicates the team's attitude about patients with a Christian spiritual reference. This study lends support to the fact that many patients do have some Christian beliefs. This is indicated by the number of subjects (82.5% of all subjects; 72% from the traditional treatment group and 95% of the Christian treatment group) who identified a Christian or "Bible-based" religious preference.

Self-transcendence is identified in this study as the primary spiritual variable that has a moderately strong relationship with level of depression in hospitalized patients. The following factors are identified:

1. This study lends support to the significance of self-transcendence, as a spiritually-related variable not necessarily religious. Self-transcendence may be of particular importance to clients who do not experience a spirituality that transcends to the supernatural.
2. They may experience more support in depressive illness from reaching out to others than from a relationship with God.

3. Self-transcendence contributes to feelings of self-worth and hope that they have in life.

4. A nursing assessment that includes transcendent activities may assist in maximizing the quality of life for an adult who is experiencing a major depressive episode.

The spiritual emphasis of the treatment program is usually not a consideration when referring a depressed adult to treatment. This study supports the importance of connecting the philosophical orientation of the treatment program to the philosophical orientation of the patient in determining treatment for depression. In this study, there was a significant correlation between spiritual perspective and level of depression for patients in the Christian treatment program.

More planning must be given to the spiritually-related variables in psychiatric treatment. This study provides initial empirical basis for considering the clinical relevance of spiritual perspective, self-transcendence, and the philosophical orientation of treatment programs as potential resources for clients experiencing a major depression episode.
**Summary and Conclusion**

In summary, there were many significant findings in this study. The relationship between self-transcendence and depression was significant and of moderately high magnitude. The relationship between spiritual perspective and level of depression was not significant when the total group and traditional treatment group were analyzed. However, when analyzing the Christian treatment group, the relationship was moderately high, in a negative direction, and significant. Other factors that indicated a significant relationship with spiritual perspective and self-transcendence were perceived mental health, perceived physical health, years of education, and previous psychiatric hospitalizations. The results suggest that nurses need to be more aware of a patient's spirituality and, in some instances, guide the patient in using their spirituality as a potential resource in recovery from depression.
APPENDIX A

HUMAN SUBJECTS APPROVAL
September 12, 1991

Debra S. Brauchler, RN
College of Nursing
Arizona Health Sciences Center

RE: Spiritually Related Variables and Depression in Clinically Depressed Hospitalized Adults

Dear Ms. Brauchler:

We received your above referenced project approval form as well as the approval letter from the Tucson Psychiatric Institute. Regulations published by the U.S. Department of Health and Human Services [45 CFR Part 46.101(b)(3)] exempt this type of research from review by our Committee.

Consult your department chairman for approval, the requirement of a subjects' consent form and any other departmental guidelines.

Thank you for informing us of your work. If you have any questions concerning the above, please contact this office.

Sincerely yours,

William F. Denny
Chairman
Human Subjects Committee

cc: Departmental/College Review Committee
MEMORANDUM

TO: Debra Brauchler
1745 S. Shannon
Tucson, AZ 85713

FROM: Leanna Crosby, D.N.Sc., R.N., Director of Intramural Research

DATE: September 16, 1991

SUBJECT: Human Subjects Review: "Spiritually Related Variables and Depression in Clinically Depressed Hospitalized Adults"

Your research project has been reviewed and approved by William Denny, M.D., Chairman of the University of Arizona Human Subjects Committee, and deemed to be exempt from review by their full committee. You will be receiving a confirmation letter from Dr. Denny. In addition, your project has been reviewed and approved as exempt by the College of Nursing Human Subjects Review Committee. A disclaimer may be used versus a signed consent form. Please be certain that the subjects read the disclaimer prior to giving their oral consent to the research.

We wish you a valuable and stimulating experience with your research.

LC/ms
APPENDIX B

AGENCY APPROVAL
September 10, 1991

To Whom It May Concern,

Debra S. Brauchler, M.A., R.N. presented a research project proposal to the Education Committee at Tucson Psychiatric Institute. The Committee has reviewed the proposal and has approved the project. Mrs. Brauchler is responsible for informing the patient's attending physician regarding their patient who is participating in the project.

If you have any questions or concerns, please do not hesitate to contact me.

Sincerely,

Kurt N. Homan, A.S.C.W., B.C.D.
Administrator
Education Committee Chairman
APPENDIX C

SUBJECT DISCLAIMER
SUBJECT DISCLAIMER

Title: Exploring Depression and Spirituality

You are being asked to voluntarily participate in a study exploring your opinions or views about spiritual issues and current feelings you may be having. By responding to three surveys, you will be giving your consent to participate.

The questionnaires will be given in a location convenient for you and will last approximately 30 to 45 minutes. Your identity will not be revealed and your confidentiality will be maintained.

You are asked to answer all the questions. However, you may choose to withdraw from the study after you begin the survey without affecting your treatment in any way. There are no known risks for participating in this study. I will answer any questions you may have about the study.

The overall aim of this study is to help nurses and therapists gain a better understanding of patients' views about spirituality and depression. Your participation is appreciated.

Thank you.

Debra Brauchler, RN, MA
745-7248
APPENDIX D

DEMOGRAPHIC INFORMATION
DESCRIPTIVE AND HEALTH-RELATED INFORMATION

____ AGE
____ SEX
____ Number of years of education: (e.g. High School diploma = 12 years)
____ Religious group with which you most easily identify:
    1 = Protestant  2 = Catholic  3 = Jewish  4 = Other  5 = None
____ Race: 1 = Caucasian  2 = Black  3 = Hispanic  4 = Amer. Indian  5 = Asian Amer.
____ Marital Status: 1 = Married  2 = Widowed  3 = Divorced  4 = Never Married
____ Employment Status: 1 = Employed  2 = Unemployed  3 = Retired
____ Type of treatment program: 1 = Traditional Adult  2 = Christian Adult

Directions: The following questions ask your opinions about your health.
____ How would you describe your present physical health?
    1 = Poor  2 = Fair  3 = Average  4 = Good  5 = Excellent
____ How would you describe your present mental health?
    1 = Poor  2 = Fair  3 = Average  4 = Good  5 = Excellent
____ How many days have you been in the hospital?
____ What medications are you taking?

____ Have you ever been hospitalized before for a psychiatric illness?
If so, when? ______ What kind of problem did you have? _______________________
What kinds of things are going on in your life right now, or have
happened in the past, that you think may be affecting your current
physical or mental health? __________________________________________
APPENDIX E

SPIRITUAL PERSPECTIVE SCALE
SPIRITUAL PERSPECTIVE SCALE

Introduction and Directions: A person's spiritual views may be an important part of their life. In general, spirituality refers to an awareness of one's inner self and a sense of connection to a higher being, nature, others, or to some purpose greater than oneself. I am interested in your response to the questions below. There are no right or wrong answers, of course. Answer each question to the best of your ability by marking an "X" in the space above that group of words which best describes you.

1. In talking with your family or friends, how often do you mention spiritual matters?

   Not at all / Less than once a year / About once a year / About once a month / About once a week / About once a day

2. How often do you share with others the problems and joys of living according to your spiritual beliefs?

   Not at all / Less than once a year / About once a year / About once a month / About once a week / About once a day

3. How often do you read spiritually-related material?

   Not at all / Less than once a year / About once a year / About once a month / About once a week / About once a day

4. How often do you engage in private prayer or meditation?

   Not at all / Less than once a year / About once a year / About once a month / About once a week / About once a day

Directions: Please indicate the degree to which you agree or disagree with the following statements by marking an "X" in the space above the words which best describe you.

5. Forgiveness is an important part of my spirituality.

   Strongly Disagree / Disagree / Disagree more than agree / Agree more than disagree / Agree / Strongly Agree
6. I seek spiritual guidance in making decisions in my everyday life.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree more than agree</th>
<th>Agree more than disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

7. My spirituality is a significant part of my life.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree more than agree</th>
<th>Agree more than disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

8. I frequently feel very close to God or a "higher power" in prayer, during public worship, or at important moments in my daily life.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree more than agree</th>
<th>Agree more than disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

9. My spiritual views have had an influence upon my life.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree more than agree</th>
<th>Agree more than disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

10. My spirituality is especially important to me because it answers many questions about the meaning of life.

<table>
<thead>
<tr>
<th>Strongly</th>
<th>Disagree</th>
<th>Disagree more than agree</th>
<th>Agree more than disagree</th>
<th>Agree</th>
<th>Strongly Agree</th>
</tr>
</thead>
</table>

Do you have any views about the importance or meaning of spirituality in your life that have not been addressed by the previous questions?


Thank you very much for answering the questions

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APPENDIX F

SELF-TRANSCENDENCE SCALE
SELF-TRANSCEENDENCE SCALE

DIRECTIONS: Please indicate the extent to which each item below describes you. There are no right or wrong answers. I am interested in your frank opinion. As you respond to each item, think of how you see yourself at this time of your life. Circle the number that is the best response for you.

<table>
<thead>
<tr>
<th>AT THIS TIME OF MY LIFE, I SEE MYSELF AS:</th>
<th>NOT AT ALL</th>
<th>VERY LITTLE</th>
<th>SOMewhat</th>
<th>VERY MUCH</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Having hobbies or interests I can enjoy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>2. Accepting myself as I grow older.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>3. Being involved with other people or my community when possible.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>4. Adjusting poorly to retirement or to my present life situation.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>5. Adjusting to the changes in my physical abilities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>6. Sharing my wisdom or experience with others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>7. Finding meaning in my past experiences.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>8. Helping younger people or others in some way.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>9. Having no interest in continuing to learn about things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>10. Putting aside some things that I once thought were so important.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>11. Accepting death as a part of life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>12. Finding meaning in my spiritual beliefs.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>13. Letting others help me when I may need it.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>14. Enjoying my pace of life.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>15. Dwelling on my past unmet dreams or goals.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
</tbody>
</table>

Thank you very much for completing these questions. Please feel free to list on the back any other issues that are important to you at this time of your life that were not listed above.

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APPENDIX G

CENTER FOR EPIDEMIOLOGICAL STUDIES

DEPRESSION SCALE
Instructions: Below is a list of the ways you might have felt or behaved. Please indicate how often you have felt this way during the past week. Place a check (v) in the column which most accurately describes how often you had those feelings during the past week.

DURING THE PAST WEEK:

<table>
<thead>
<tr>
<th></th>
<th>Less than 1 day/Never</th>
<th>1 to 2 days</th>
<th>3 to 4 days</th>
<th>5 to 7 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I was bothered by things that usually don't bother me.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>I did not feel like eating; my appetite was poor.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3.</td>
<td>I felt that I could not shake off the blues even with the help of my family or friends.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.</td>
<td>I felt that I was just as good as other people.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5.</td>
<td>I had trouble keeping my mind on what I was doing.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6.</td>
<td>I felt depressed.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>7.</td>
<td>I felt that everything I did was an effort.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>8.</td>
<td>I felt hopeful about the future.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>9.</td>
<td>I thought my life had been a failure.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10.</td>
<td>I felt fearful.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>11.</td>
<td>My sleep was restless.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12.</td>
<td>I was happy.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>13.</td>
<td>I talked less than usual.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>People were unfriendly.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>I enjoyed life.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>I had crying spells.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>I felt sad.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>19.</td>
<td>I felt that people disliked me.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>I could not get &quot;going.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
REFERENCES
REFERENCES


