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62

RELIGIOSITY AND LIFE SATISFACTION  
AMONG LDS COLLEGE STUDENTS

by

Po Nien Chou

A thesis submitted to the faculty of

Brigham Young University

in partial fulfillment of the requirements for the degree of

Master of Science

Department of Health Sciences

Brigham Young University

August 1999

BRIGHAM YOUNG UNIVERSITY

GRADUATE COMMITTEE APPROVAL

of a thesis submitted by

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This thesis has been read by each member of the following graduate committee and by majority vote has been found to be satisfactory.

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## ABSTRACT

### RELIGIOSITY AND LIFE SATISFACTION AMONG LDS COLLEGE STUDENTS

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Master of Science

The purpose of this study was to determine the relationship between religiosity and life satisfaction among Latter-day Saints (LDS) college students. The scales used were the religiosity scale by Chadwick and Top (1993), and the life satisfaction scale by Neugarten, Havighurst and Tobin (1961). The analysis was based on data obtained from 222 students (55.5%) who responded. A prediction model was used to develop a regression equation. Pearson correlation analysis was used to evaluate the correlation between religiosity and life satisfaction. The regression equation is as follows: life satisfaction = 1.436815592 + 0.045915152 (spiritual experiences) + 0.042888274 (integration in congregation). A significant correlation of 0.0230 ( $p < .05$ ) was found for spiritual experiences, and 0.0215 ( $p < .05$ ) for integration in congregation. But no

significant correlation was found between life satisfaction and the other factors such as gender, age, religious beliefs, private religious behavior, attendance/public behavior, and family religious. Spiritual experiences and integration in congregation were the only factors correlated with higher life satisfaction scores.

### Abstract

**Objective:** The purpose of this study was to determine the relationship between religiosity and life satisfaction among Latter-day Saints (LDS) college students.

**Method:** The scales used were the religiosity scale by Chadwick and Top (1993), and the life satisfaction scale by Neugarten, Havighurst and Tobin (1961). The analysis was based on data obtained from 222 students (55.5%) who responded. A prediction model was used to develop a regression equation. Pearson correlation analysis was used to evaluate the correlation between religiosity and life satisfaction.

**Results:** The regression equation is as follows: life satisfaction = 1.436815592 + 0.045915152 (spiritual experiences) + 0.042888274 (integration in congregation). A significant correlation of 0.0230 ( $p < .05$ ) was found for spiritual experiences, and 0.0215 ( $p < .05$ ) for integration in congregation. But no significant correlation was found between life satisfaction and the other factors such as gender, age, religious beliefs, private religious behavior, attendance/public behavior, and family religious.

**Conclusion:** Spiritual experiences and integration in congregation were the only factors correlated with higher life satisfaction scores.

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## Table of Contents

List of Tables .....	xiv
Religiosity and Life Satisfaction Among LDS College Students	
Abstract .....	2
Introduction .....	4
Method .....	7
Results .....	8
Discussion .....	9
References .....	10
Appendix A Prospectus .....	13
Introduction .....	14
Review of Literature .....	19
Methods .....	31
References .....	35
Appendix A-1 Religiosity Scale .....	42
Appendix A-2 Life Satisfaction Scale .....	45
Appendix A-3 Consent/Cover Letter .....	47
Appendix A-4 Reminder Card .....	50

## List of Tables

### Table

1	Gender & Age Results .....	7
2	Life Satisfaction Scores .....	8
3	Religiosity Scores .....	8
4	Regression Table .....	9
5	Pearson R Correlation Table .....	10

**Religiosity and Life Satisfaction  
Among LDS College Students**

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## Introduction

The Church of Jesus Christ of Latter-day Saints (LDS Church) teaches that there is a connection between one's spiritual health and physical health (Packer, 1977).

Recently, many have begun to explore the relationship between spirituality and physical health. Articles have been published that discuss the importance of spirituality in health (Craigie, Larson, & Liu, 1990; McKee & Chappel, 1992; Schreiber, 1991). Researchers have attempted to distinguish between religiosity and spirituality, but much of the literature uses both terms interchangeably (Emblen, 1992).

Although the dispute regarding the difference between spirituality and religiosity continues, many find there is a correlation between spirituality/religiosity and health. Researchers have only recently created a new category of psychological disorders attributed to spiritual problems as opposed to mental problems (Turner, Lukoff, Barnhouse, & Lu, 1995). Spirituality was identified by many researchers as an important element in one's health, especially mental health (Mickley, Carson, & Soeken, 1995).

A study examined how religious involvement was associated with health status among African-American men. This study indicated that religious involvement, particularly church attendance, led to healthier individuals (Brown & Gary, 1994). A review of literature found that religious traditions appear to positively affect well-being (Koenig, 1993). Others have discussed how the immune system is affected by how one thinks, believes, and feels; thus interrelating psychological and religious influences to one's health (Chirban, 1992).

According to Dr. Kendall's study, many HIV and AIDS patients report isolation from friends and relatives once they have been diagnosed with the disease. This study identified the need to address spiritual well-being in the HIV and AIDS patient (Kendall, 1994).

It is also believed that a person's inherent spirituality is integral to the treatment of hypertension. An inner peace with self has decreased patients' blood pressure and heart rates (Thomas, 1989). Relaxation which leads to spirituality contributes to one's overall health. Relaxation has been shown to decrease the sympathetic nervous system response which reduces stress and decreases blood pressure (Stuart, Deckro, & Mandle, 1989). Spirituality has also been correlated with a decrease in coronary artery disease (Goldbourn, Yaari, & Madalie, 1993).

Religious beliefs and practices cause patients to react differently toward cancer (Suhr, Lushington, & Brogdon, 1991), and even reduce the incidence of cancer (Dwyer, Clarke, & Miller, 1990; Lyon, Gardner, & Gress, 1994). Among the coping strategies reported by cancer patients were work, spirituality, information seeking, support groups, reach for recovery, family, friends, and hopeful attitude (Fredette, 1995).

A study was conducted on the health of Mexican-American women which showed them as having fewer low-birth-weight babies and fewer infant deaths. The biggest difference between them and their Anglo counterparts was this religious dimension. These Mexican-American women believed their religious beliefs strengthened them against serious health problems and other illnesses that affect the general public (Magana & Clark, 1995). Another study showed that Hispanics in this

country, often poverty-stricken and without health insurance, still had lower infant mortality rates than non-Hispanic whites. It was believed that this was due to social and cultural factors including religion (Sorlie, Backlund, Johnson, & Rogot, 1993).

A correlational study indicated that individuals who scored higher on community, family, and religious identity also scored lower on the Beck Depression Inventory scale. It was concluded that those who were more religious were less likely to be as depressed (Koteskey, Little, & Matthews, 1991). Moreover, Chadwick and Top (1993) have found that there was a correlation between religiosity and behavior, specifically with delinquency among adolescents. Decreased private religiosity led to increased delinquency (Chadwick & Top, 1993). Research has also suggested that patients who are well spiritually experience less anxiety. Spirituality is part of the holistic health which addresses the physical, psychological, and social aspects of healing (Elsdon, 1995).

A study involving Appalachian women evaluated their spirituality and their relationship with self, others, nature, and God or a higher power. This study concluded that care-givers need to spend time with their patients learning the things they do to stay healthy as they pertain to their spiritual well-being (Burkhardt, 1993). Another study concluded that there is a need which is not being met by health-care professionals, namely spiritual/religious health (King & Bushwick, 1994).

There is much research which suggests that spirituality can be used to relieve stress in patients. Chronically ill patients rated the search for spiritual strength as the second most important thing to do; seeking information about the illness was first. Hemodialysis patients identified hope and prayer among the most important elements of

## Chapter 1

### Introduction

Spiritual and physical health are believed to be interrelated and have been for centuries past. Priests and healers have taught the need of spiritual and physical harmony to obtain and maintain better health. Diseases and illnesses were sometimes attributed to bad spirits. Thus, religious practices such as meditation, cleanliness, and prayer were necessary components of healing, as well as health maintenance (Magana & Clark, 1995). But modern medicine has traditionally divorced the spirit and the body, focusing their treatment solely on the physical body and neglecting the role religiosity plays in an individual's health. Although many physicians cling to religious background, they rarely associate healing or health status with faith, prayer, or other religious practices (King & Bushwick, 1994).

Recently, studies involving the mind-body connection identified a relationship which is essential to health. The element explored by psychoneurologists is sometimes referred to as spiritual health (Turner, Lukoff, Barnhouse & Lu, 1995). Studies indicate the need for and importance of addressing this component for holistic health. Some studies indicate that spirituality may benefit one's health, but although a relationship is believed to exist, more research is needed.

Although some of the literature distinguishes between spirituality and religiosity, others use these terms interchangeably (Emblen, 1992). This study will not attempt to discuss the differences between spirituality and religiosity. Rather, it will focus on religiosity as it pertains to the religious beliefs of college students who are members of

the Church of Jesus Christ of Latter-day Saints (LDS Church), and their self-reported life satisfaction appraisal.

### Justification

Although some believe there is a correlation between spirituality/religiosity and physical well-being, little research has been conducted on this relationship. The LDS Church teaches that there is a connection between one's spiritual health and physical health. Elder Boyd K. Packer, an apostle of the Church of Jesus Christ of Latter-day Saints, has discussed the relationship between spiritual and physical well-being. He said, "I recently asked a doctor of family medicine how much of his time was devoted purely to correcting physical disorders... He answered, 'Not more than 20 percent. The rest of the time I seem to be working on problems that very much affect the physical well-being of my patients but do not originate in the body. These physical disorders,' the doctor concluded, 'are merely symptoms of some other kind of trouble.'..."

There is another part of us, not so tangible, but quite as real as our physical body. This intangible part of us is described as mind, emotion, intellect, temperament, and many other things. Very seldom is it described as spiritual. But there is a spirit in man; to ignore it is to ignore reality. There are spiritual disorders, too, and spiritual diseases that can cause intense suffering. The body and the spirit of man are bound together. Often, very often, when there are disorders, it is very difficult to tell which is which" (Packer, 1977).

The LDS Church's code of health known as the Word of Wisdom is as a religious commitment that they claim will result in better overall health (Doctrine & Covenants,

1995, p. 175-176). This Word of Wisdom counsels members to abstain from coffee, tea, tobacco, alcohol, and other harmful substances. No studies have been found that directly address the relationship between religiosity and life satisfaction among LDS college students.

### Statement of Problem

The purpose of this study is to determine the relationship between religiosity and self-reported life satisfaction among LDS college students.

### Research Questions

#### Null Hypothesis

There is no relationship between religiosity and self-reported life satisfaction among LDS college students.

#### Alternative Hypothesis

There is a relationship between religiosity and self-reported life satisfaction among LDS college students. The level of significance used will be  $p < .005$ .

### Assumptions

It is assumed that respondents will answer the survey questions honestly. Confidentiality will be maintained.

### Delimitations

This study and its results are delimited to LDS college students at Brigham Young University during the summer of 1999.

### Limitations

This study is limited by the fact that some participants may choose not to participate in this survey. It is also limited by the subjectivity of the participants' responses to the questionnaire such as temporary change in mood and feeling. Further, those who are non-LDS students or who are pregnant will be asked not to participate in this study. Non-LDS students are not part of the target population, and pregnant women were excluded from this study as required by the Institutional Review Board for Research with Human Participants at Brigham Young University. Finally, this study is limited to the LDS college student population at Brigham Young University during the summer of 1999. It may be inappropriate to generalize the results of this study to other LDS college students or to another university.

### Definitions

Religiosity - the degree of commitment to one's religious beliefs, as well as personal behavior and personal feelings in one's own family and congregation.

Spirituality - a belief system focusing on intangible elements that impart vitality and meaning to life's events (Maugans, 1996). It is based on one's relationship with self, others, nature, and a higher power (Burkhardt, 1993).

Self-reported life satisfaction - measured by the Life Satisfaction Index (LSI) developed by Neugarten, Havighurst, and Tobin (1961). The concept of life satisfaction is closely related to morale, adjustment, and psychological well-being (McDowell & Newell, 1996, pp. 198-203).

LDS college student - college students who are members of the Church of Jesus Christ of Latter-day Saints and attend Brigham Young University.

Holistic health - whole body health in all its dimensions including: physical, emotional, intellectual, interpersonal or social, and spiritual health (Insel, Roth, Rollins, & Peterson, 1994).

copied with their illness. Most patients who completed a qualitative survey attributed the cause of their healing to "God" (Soeken & Carson, 1987).

### Method

A total of 400 LDS college students who were enrolled at Brigham Young University during the summer semester of 1999 were randomly selected to participate in this study. This computer-generated, random list of students was acquired from the Institutional Studies at the Faculty Office Building of Brigham Young University. Each received by mail the religiosity (Appendix A-1) and life satisfaction (Appendix A-2) surveys, along with a consent/cover letter (Appendix A-3), and were asked to return them anonymously to maintain confidentiality. Demographic information collected for the purpose of this study included age and gender. Subjects who were under eighteen years of age, non-LDS, or pregnant were asked not to return the survey. Subjects were sent a reminder card (Appendix A-4) a week after the initial mailing. A total of 222 (55.5%) subjects responded. Of the 222 who responded, 209 (52.25%) surveys were fully completed.

The life satisfaction scale by Neugarten, Havighurst, and Tobin (1961) consisted of 20 questions. The religiosity section of the "Religion and Family Survey" by Chadwick and Top (1993) consisted of 11 questions on religious beliefs, 3 on spiritual experiences, 3 on private religious behavior, 4 on attendance/public behavior, 3 on family religious activities, and 3 on integration in congregation. Both instruments were previously tested and revised. Further, minor revision was necessary to adapt the religiosity survey to this study.

## Results

Of the 400 subjects who received the survey, a total of 222 (55.5%) responded to the survey. A few did not respond to the survey completely. Therefore, the number of responses for each of the questions varied.

Of the 222 who returned the survey, 215 responded to the question on gender, and 214 responded to the question on age. For the gender question, “male” responses received a score of (1) and “female” responses received a score of (2). Thus the mean score of 1.6093, indicates that the majority of the responses were female responses. There were 84 (39.07%) who were male, and 131 (60.93%) who were female out of the 215 who responded to this question. The average age of those who responded was 21.7710, with a range between 18 and 45 years of age. Results are shown in Table 1 - Gender & Age Results.

Table 1 - Gender & Age Results

Variable	N	Mean	Std. Dev.	Minimum	Maximum
gender	215	1.6093	0.4890	1.0000	2.0000
age	214	21.7710	2.4569	18.0000	45.0000

A total of 222 subjects responded to the life satisfaction questions and were assigned a life satisfaction score. The responses to the questions in the life satisfaction scale were assigned (1) for “agree,” (2) for “disagree,” and (3) for “?” or uncertainty. For the life satisfaction scores 1.5966 was the mean score with 0.1781 standard deviation. Results are shown in Table 2 - Life Satisfaction Scores.

Table 2 - Life Satisfaction Scores

Variable	N	Mean	Std. Dev.	Minimum	Maximum
life satisfaction	222	1.5966	0.1781	1.1500	2.2000

The religiosity scale was grouped into the following sections: religious beliefs, spiritual experiences, private religious behavior, attendance/public behavior, family religious activities, and integration in congregation. A total of 217 subjects completed the religiosity scale. Responses were scored as (0) for no response, (1) for “strongly agree,” (2) for “agree,” (3) for “mixed feelings,” (4) for “disagree,” and (5) for “strongly disagree.” Results are shown in Table 3 - Religiosity scores.

Table 3 - Religiosity scores

Variable	N	Mean	Std. Dev.	Pr > F	Min.	Max.
religious beliefs	217	1.1022	0.4621	0.2514	0.9091	5.0000
spiritual experiences	217	1.1859	0.4967	0.0442	1.0000	5.0000
private religious behavior	217	1.3717	0.6154	0.6328	1.0000	5.0000
attendance/ public behavior	217	1.3491	0.5703	0.5950	0.7500	4.7500
family religious activities	217	2.1905	1.1892	0.3617	1.0000	5.0000
integration in congregation	217	2.5084	0.5406	0.1317	1.0000	4.3333

Independent variables included age, gender and religiosity. The dependent variable was the average life satisfaction score. ANOVA was used initially to analyze the data. Then a prediction model was used to develop a regression equation. Spiritual experiences and integration in congregation were the only significant factors in helping predict life satisfaction among LDS college students at Brigham Young University. The regression equation is as follows:  $\text{life satisfaction} = 1.436815592 + 0.045915152$  (spiritual experiences)  $+ 0.042888274$  (integration in congregation). The prediction model analysis is illustrated in Table 4 - Regression Table.

Table 4 - Regression Table

Parameter	Estimate	T for H0: Parameter=0	Pr > F	Std. Error of Estimate
intercept	1.436815592	24.14	0.0001	0.05952823
spiritual experiences	0.045915152	1.86	0.642	0.02468184
integration in congregation	0.042888274	1.89	0.0599	0.02267613

Pearson correlation analysis was used to evaluate the correlation between religiosity and life satisfaction. A total of 217 subjects responded to both religiosity and life satisfaction scales. The religiosity questions were highly correlated to one another. Spiritual experience and integration in congregation were the only two factors that were significantly correlated to greater life satisfaction. A significant, but weak correlation of 0.0230 ( $p < .05$ ) was found for spiritual experiences, and 0.0215 ( $p < .05$ ) for integration in congregation. Results are shown in Table 5 - Pearson R Correlation Table.

Table 5 - Pearson R Correlation Table

RB = religious beliefs

SE = spiritual experiences

PRB = private religious behavior

APB = attendance/public behavior

FRA = family religious activities

IC = integration in congregation

LS = life satisfaction

Numbers indicated represent:

above = Pearson r coefficient

below = P value

	RB	SE	PRB	APB	FRA	IC	LS
RB	1.00000 0.0	0.80313 0.0001	0.65510 0.0001	0.44689 0.0001	0.14795 0.0293	0.20262 0.0027	0.08028 0.2389
SE	0.80313 0.0001	1.00000 0.0	0.67335 0.0001	0.44004 0.0001	0.15839 0.0196	0.20775 0.0021	0.15429 0.0230
PRB	0.65510 0.0001	0.67335 0.0001	1.00000 0.0	0.63886 0.0001	0.21350 0.0016	0.34154 0.0001	0.10687 0.1165
APB	0.44689 0.0001	0.44004 0.0001	0.63886 0.0001	1.00000 0.0	0.35719 0.0001	0.39524 0.0001	0.13094 0.0541
FRA	0.14795 0.0293	0.15839 0.0196	0.21350 0.0016	0.35719 0.0001	1.00000 0.0	0.27355 0.0001	0.12246 0.0718
IC	0.20262 0.0027	0.20775 0.0021	0.34154 0.0001	0.39524 0.0001	0.27355 0.0001	1.00000 0.0	0.15598 0.0215
LS	0.08028 0.2389	0.15429 0.0230	0.10687 0.1165	0.13094 0.0541	0.12246 0.0718	0.15598 0.0215	1.00000 0.0

### Discussion

There was a positive correlation found between the spiritual experiences and integration in congregation with the life satisfaction scores. This was a significant, but weak, correlation. It is possible that the degree to which the subjects felt they have had spiritual experiences in their lives, affected the way they felt satisfied with life. This

would support the study by Koteskey, Little, & Matthews (1991), which indicated a correlation between increased religiosity and decrease in depression (Koteskey, Little, & Matthews, 1991). Those who are more depressed are likely to be less satisfied with life in general, and spiritual experiences may improve one's outlook of life. It is also likely that the subjects satisfaction with life was related to how they viewed their integration in their new congregation at Brigham Young University.

Future study is recommended to further explore the relationship between religiosity and life satisfaction. Although there were no significant correlations between the other sections of the religiosity scale with life satisfaction, this may have been due to the sample population. This study was limited to those who were over 18 years of age, non-pregnant, and LDS students. LDS students at Brigham Young University are unique in many ways. Their LDS life-style, culture, and social activities at Brigham Young University revolves around those who are usually part of their congregation. Therefore, their satisfaction with life is connected to their feeling of belonging and integration in their congregation. Perhaps a study targeting other LDS college students outside a Church-sponsored LDS university would shed more light into the relationship between religiosity and life satisfaction.

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Appendix A  
Prospectus

## Chapter 2

### Review of Literature

Recently, many have begun to explore the relationship between spirituality and physical health. Articles have been published that discuss the importance of spirituality in health (Craigie, Larson, & Liu, 1990; McKee & Chappel, 1992; Schreiber, 1991). Moreover, discussion has been raised between the role of religion as connected to the spiritual well-being of an individual. This literature review will discuss definitions of spirituality/religiosity and how specific health problems and behaviors are affected by those attributes. Further, it will discuss nurses' and patients' perspectives, as well as scales used to measure spirituality/religiosity.

#### Defining Spirituality/Religiosity

“Spirituality can be defined as a belief system focusing on intangible elements that impart vitality and meaning to life’s events,” according to Dr. Todd A. Maugans (1996). Many researchers have reported that patients’ perceptions of spirituality are based on their feeling of “connectedness” to self, others, a higher power, and the environment (Burkhardt, 1989).

Researchers have attempted to distinguish between religiosity and spirituality. For religiosity the most frequently used words include system, beliefs, organized, person, worship, and practices; while for spirituality the most frequently used words include personal, life, principle, animator, being, quality, relationship, and transcendent (Emblen, 1992). There continues to be debate between the meaning of spirituality and religiosity. Some have attempted to separate the two, but many use them

interchangeably in the literature without making any distinction between the two (Emblen, 1992).

Dr. L. Ross defines spiritualism as the need for meaning, purpose, and fulfillment in life; hope/will to live; belief and faith. Furthermore, this spiritual dimension can affect the patient's quality of life. Ross goes on to claim that "healthy people can initiate action to meet their own spiritual needs. Illness and/or hospitalization may, however, prevent individuals from having their spiritual needs fully met and may, therefore, prevent them from obtaining their optimum health potential." It is important to look at the spiritual dimension of healing to achieve optimum healing (Ross, 1995).

McKee and Chappel concluded from their review of the literature that spiritual issues should be addressed in patient care, since they may have a positive impact on the patient's overall health. They also recommended the expansion of the current medical model to include a biopsychosocial-spiritual model. Although there is still much that is not understood, there is an apparent need to address the spiritual needs of patients (McKee & Chappel, 1992).

#### Affects on Health and Behavior

##### Mental Disorders

Although the dispute regarding the difference between spirituality and religiosity continues, many find there is a correlation between spirituality/religiosity and health. A study showed psychiatric patients will turn toward spiritualism or religion more when they have a crisis. This need for increased spirituality or religion has been observed and many researchers feel that these spiritual yearnings are actually mental disorders.

Researchers have only recently created a new category of psychological disorders attributed to spiritual problems as opposed to mental problems (Turner, Lukoff, Barnhouse, & Lu, 1995). The National Survey on Black Americans found there was an association between religious expression and physical/psychological health (Religion in Aging and Health, 1994, p. 196-230).

Spirituality or religious beliefs do affect mental health (Oleckno, 1991; Pressman, Lyons, Larson & Strain, 1990; Williams, Larson, Buckler, Heckmann, & Pyle, 1991) and alcoholism (Uva, 1991). Spirituality was identified by many researchers as an important element in one's health, especially mental health (Mickley, Carson, & Soeken, 1995).

One study examined how religious involvement was associated with health status among African-American men. Those who reported increased religious involvement also had better mental health and decreased use of alcohol and tobacco. This study indicated that religious involvement, particularly church attendance, led to healthier individuals (Brown & Gary, 1994). Another study suggested that those who scored higher in the Mathew Materialism-Spiritualism Scale were less likely to abuse alcohol (Mathew, Mathew, Wilson, & Georgi, 1995).

Another study discussed the work of Dr. Aldridge on spiritual healing. It showed that religion has the ability to fight against stress in hospitalized men. A review of literature found that religious traditions appear to positively affect well-being (Koenig, 1993). Others have discussed how the immune system is affected by how one thinks, believes, and feels; thus interrelating psychological and religious influences on one's health (Chirban, 1992).

### AIDS/HIV

According to Dr. Kendall's study, many HIV and AIDS patients report isolation from friends and relatives once they have been diagnosed with the disease. This relationship was part of their spiritual wellness and was a critical component of their holistic health. These patients indicated that physical health was important, but health also included the psychological, emotional, social, physical, and the spiritual. Furthermore, patients discussed connectedness as part of spiritual well-being. This connectedness was associated with a sense of belonging, sharing, bonding, supporting, touching, meaning, and self-acceptance. This study merely identifies the need to address spiritual well-being in the HIV and AIDS patient, but further studies are needed to identify therapeutic models (Kendall, 1994).

### Hypertension

Alternative ways have been explored to control hypertension. Transactional psychophysiology therapy which involves talking and blood pressure monitoring has been used. It is believed that a person's inherent spirituality is integral to the treatment of hypertension. Patients' inner peace with self has decreased both their blood pressure and heart rate (Thomas, 1989).

The interaction of the body, mind, and spirit is important for healing. Relaxation which leads to spirituality contributes to one's overall health. Relaxation has been shown to decrease the sympathetic nervous system response which reduces stress and decreases blood pressure (Stuart, Deckro, & Mandle, 1989).

## Cancer

Religious beliefs and practices cause patients to react differently toward cancer (Suhr, Lushington, & Brogdon, 1991), and even reduce the incident of cancer (Dwyer, Clarke, & Miller, 1990; Lyon, Gardner, & Gress, 1994). But although many studies are appearing, there is still a reluctance in modern medicine to discuss spirituality/religion as a component of the whole body health. Although physicians in Asia readily accept the mind-body or spiritual-physical health relationship, this is not true for their counterparts in western society.

Breast cancer is on the increase. Some coping strategies, which include spiritual care, can be used to improve the lives of the survivors. A study surveyed cancer survivors to determine a correlation between their coping strategies and cancer survival rate. Among the coping strategies reported by these patients were work, spirituality, information seeking, support groups, reach to recovery, family, friends, and hopeful attitude (Fredette, 1995).

## Heart Disease and Prayers

Spirituality has also been correlated with a decrease in coronary artery disease (Goldbourt, Yaari, & Madalie, 1993). In another study, some patients identified prayer and discussion about spiritual feelings as an important component of their well-being during illnesses (Reed, 1991).

## Hispanics

Studies have discussed the relationship between religion and physical health in many cultures. A study was conducted on the health of Mexican-American women

which showed fewer low birth weight babies and fewer infant deaths. Even with lower socioeconomic living standards, these Mexican-Americans' babies survived better than their Anglo counterparts. Most of these women attributed their healthy babies to God. They are quite involved in the healing of the physical, mental, and spiritual self. Their belief includes the power and influence of the "Virgin of Guadalupe" during pregnancy and delivery. The biggest difference between Mexican-Americans and their Anglo counterparts was this religious dimension. These Hispanic women believed that their religious beliefs strengthened them against serious health problems and other illnesses that affect the general public. Their religious belief protected them and their babies and had a positive effect on their health (Magana & Clark, 1995).

Another study showed that Hispanics in this country had poverty problems and lacked health insurance, but still had lower infant mortality rates than non-Hispanic whites. It was believed that this was due to social and cultural factors including religion (Sorlie, Backlund, Johnson, & Rogot, 1993).

### Depression

A correlational study indicated that individuals who scored higher on community, family, and religious identity also scored lower on the depression scale. The study used the Beck Depression Inventory and an identity scale. It was concluded that those who were more religious were less likely to be as depressed (Koteskey, Little, & Matthews, 1991).

### Religion and Delinquency Among LDS Adolescents

Chadwick and Top (1993) have used a religiosity scale tailored towards an LDS population. In their study, they found that there was a correlation between religiosity and behavior, specifically with delinquency among adolescents. In this study they learned that, although one's public religious practices did not affect delinquent behaviors, one's private religious commitment did. Those who scored higher in personal/private religiosity had a decreased number of delinquent behaviors (Chadwick & Top, 1993).

### Nursing and Patient's Perspectives

#### Nursing Perspectives

Prail (1995) felt that nurses must be spiritually in tune with themselves in order to be able to care effectively for their patients' spiritual needs. Many nurses felt that their patients needed spiritual care, but few felt they were able or adequately prepared to provide such care. Nevertheless, they also felt that meeting the spiritual needs of the patients was important as part of the healing process (Oldnall, 1996).

Research has suggested that patients who are well spiritually experience less anxiety. Some patients who experience spiritual distress during a terminal illness will turn to their nurses for spiritual relief. Most of them just need someone with whom to talk, but most nurses feel uncomfortable and have little time to address this need. A psychosocial (or spiritual) assessment is important. Spiritual care may include visits, flowers, conversation, and other ordinary things. Prayer, reading, and music can also serve as spiritual healers. Spirituality is part of the holistic health which addresses the physical, psychological, and social aspects of healing (Elsdon, 1995).

A study involving Appalachian women evaluated their spirituality and their relationship with self, others, nature, and God or a higher power. This study concluded that care-givers need to spend time with their patients learning the things they do to stay healthy, as it pertains to their spiritual well-being (Burkhardt, 1993).

Nurses typically realize their role in the healing of their patients, which includes care for the mind, body, and spirit. There is much research which is currently examining the relationship between spirituality and health. Some of the findings suggest that spirituality can be used to relieve stress in patients. Chronically ill patients rated the search for spiritual strength as the second most important thing to do; seeking information about the illness was first. Hemodialysis patients identified hope and prayer among the most important elements of coping with their illness. Most patients who completed a qualitative survey attributed the cause of their healing to "God." Chronically ill patients felt their spiritual needs were not being met. The study also indicated that nurses with better spiritual health were more likely to help their patients address their spiritual needs (Soeken & Carson, 1987).

The approaches of holistic care in nursing practice have included spiritual care of the patients. Even though spiritual illness is difficult to distinguish biologically, it is nevertheless accepted as very real in the health-care profession. The National Conference on Nursing Diagnosis identifies spiritual distress as one of their standard categories, even though many in the health-care profession failed to address it. A qualitative study identified what patients felt was part of spiritual health care. These included establishing a trusting relationship, providing a supporting environment,

sensitivity to patients' beliefs, and integrating spirituality into the quality assurance plan (Clark, Cross, Deane, & Lowry, 1991).

### Patient's Perspective

Another study surveyed patients at the hospital to determine how important religion/spiritualism was to them as a component of healing. Of those who responded, 94% felt spiritual/religious health was as important as physical health, and 48% wanted their physicians to pray with them. Also, 77% felt the physicians should consider their spiritual health, even though only 32% of the physicians discussed it at all. The study concluded that there is a need which is not being met by health-care professionals, namely a lack of spiritual/religious health being addressed by physicians (King & Bushwick, 1994).

### Measuring Spirituality/Religiosity

There are many spirituality/religiosity scales that have been developed (Ellison & Smith, 1991; Kass, Friedman, Leserman, Zuttermeister, & Benson, 1991; Mathew, et al., 1995) including the Mathew Materialism-Spiritualism Scale (MMSS); and the Spirituality Perspective Scale (SPS) developed by Dr. Chappel (Chappel, 1996). Other scales include the Spiritual Well-Being Scale (SWBS) by Dr. Raymond F. Paloutzian and Dr. C. W. Ellison (Ellison & Smith, 1991; Bufford, Paloutzian & Ellison, 1991; Ledbetter, Smith, Vosler-Hunter, & Fischer, 1991), the Hoge's Intrinsic Religious Motivation Scale (IRM) (Leman, 1993), and the Spirituality Assessment Scale (SAS) (Howden, 1992).

The SPS has had limited application and did not seem to identify one's spirituality (Chappel, 1996). The SWBS, developed by Paloutzian and Ellison, lacked completeness in the spiritual assessment of the patients, and it had a low ceiling or low top score, which caused many individuals to top off in the scale (Bufford, Paloutzian, & Ellison, 1991; Ellison & Smith, 1991; Ledbetter, Smith, Fischer, & Vosler-Hunter, 1991). The IRM is currently under study for content validity and reliability (Leman, 1993), and the SAS is also being reviewed, although it has had limited usage (Howden, 1992). Finally, the MMSS is used specifically to measure the spirituality of alcoholic patients (Mathew, Mathew, Wilson, & Georgi, 1995).

The "Religion and Family Survey" was developed by Dr. Bruce A. Chadwick and Dr. Brent L. Top, and it is tailored specifically for an LDS population (Chadwick & Top, 1993). This religiosity scale contains 27 questions on religious beliefs, spiritual experiences, private religious behavior, attendance/public behavior, family religious activities, and integration in congregation. The phraseology, terminology, language and questions in this scale, were adapted to an LDS population. There are questions about the president of the LDS church, Joseph Smith, the Book of Mormon, and others which are specific about the LDS church (see Appendix A-1). As such, it is the best available scale to measure religiosity for this study.

### Measuring Life Satisfaction

A few life satisfaction scales have been used in the past, including the life satisfaction section of the "Health Risk and Lifestyle Appraisal," Student's Life Satisfaction Scale (SLSS) by Huebner in 1991, and the Life Satisfaction Index (LSI) by

Neugarten, Havighurst, and Tobin, 1961. The LSI has been modified and refined since 1961, and it has good construct validity and reliability (McDowell & Newell, 1996, pp. 198-203).

The life satisfaction section of the “Health Risk and Lifestyle Appraisal,” has been used to evaluate and examine life satisfaction among LDS college students at Brigham Young University. It is the only one used specifically on an LDS population. Unfortunately, the life satisfaction section of the “Health Risk and Lifestyle Appraisal” has not been tested for validity and reliability, and continues to be modified. No study has directly evaluated the life satisfaction section in this scale.

The SLSS was developed by Huebner in 1991. It has been used predominantly with elementary and middle-school children (Huebner & Alderman, 1993; Huebner & Dew, 1993). It is still being analyzed for validity and reliability, and has recently been looked at for application with an adult population (Huebner & Dew, 1996). Although the SLSS appears to be a good scale, it still needs independent evaluation for validity and reliability. Further studies with an adult population is also needed for the SLSS.

The most commonly used life satisfaction scale is the “Life Satisfaction Index” (LSI) developed by Neugarten, Havighurst, and Tobin (1961). Although it was developed back in 1961, it continues to be used today. The LSI has been evaluated for reliability and validity. It has been modified and refined through the years. Variations of the LSI include the LSIB, and LSIZ. The LSI is sometimes referred to as the LSIA. The LSIB was the second version of the LSI, but it was used very little compared to the LSI. The third version, the LSIZ, was proposed as a refinement, but only contained 13 of the

20 question in LSI. Therefore, the LSI continues to be the most comprehensive and most extensively used life satisfaction scale (McDowell & Newell, 1996, pp. 198-203). The LSI has recently been used to investigate the quality of life of middle-aged and senior-aged sports participants at the 10<sup>th</sup> National Sports & Recreation Festival in Japan, in November of 1997 (Kiwaniishi, Kitamura, & Nogawa, 1998). The LSI has several strengths, including reliability and consistency of reliability. It is the best available scale to measure life satisfaction, and has been more thoroughly evaluated than other life satisfaction scales (McDowell & Newell, 1996, pp. 198-203).

#### Summary

In summation, the literature review defined spirituality/religiosity. It further discussed the effects of spirituality/religiosity on health and behavior, such as AIDS/HIV, hypertension, cancer, mental health and substance abuse, heart disease, infant deaths, and depression. Then, there was a discussion on nurses' and patients' perspectives and the different scales used to measure spirituality/religiosity and life satisfaction. The above-mentioned studies support a relationship between spirituality/religiosity and physical health in some aspect. Thus, it is also believed that level of religiosity may also affect the level of life satisfaction of individuals.

## Chapter 3

### Methods

The purpose of this study is to determine the relationship between religiosity and self-reported life satisfaction among LDS college students at Brigham Young University, Provo, Utah. Previous studies have expanded our understanding and seem to indicate that there is a relationship between one's religiosity and one's health. Some of the studies have reported that religiosity was connected to behavior, particularly delinquent behavior, but have not specifically dealt with health risk and lifestyle behavior. Neither has there been a study done specifically with an LDS population.

### Subjects

#### Population

The population consists of LDS college students who are enrolled at Brigham Young University during the summer of 1999.

#### Sample

A random sample will be drawn from LDS college students enrolled at Brigham Young University during the summer of 1999. This sample will consist of both men and women. The sample size will be  $n=400$ .

#### Selection of Subjects

A random sample will be used. Subjects must be LDS college students enrolled at Brigham Young University during the summer of 1999. A random list of these students will be acquired from Julie Hatch from the Institutional Studies at Faculty Office Building at Brigham Young University. Participation in this study will be

voluntary. Subjects will be mailed two surveys, which will measure religiosity and life satisfaction. Individuals who are under eighteen, or are not LDS, or are pregnant, will be asked not to respond to the survey.

### Instruments

The two instruments used will be the Life Satisfaction Index (LSI) and the religiosity scale of the “Religion and Family Survey.” These two instruments will be used to determine the relationship between religiosity and self-reported life satisfaction. The LSI by Neugarten, Havighurst and Tobin (1961) consists of 20 questions related to satisfaction with life. Responses include “agree,” “disagree,” or “not sure” (Appendix A-2). The LSI was chosen because it has good validity and reliability (McDowell & Newell, 1996, pp. 198-203).

The religiosity section of the “Religion and Family Survey” by Chadwick and Top (1993) consists of 11 questions on religious beliefs, 3 on spiritual experiences, 3 on private religious behavior, 4 on attendance/public behavior, 3 on family religious activities, and 3 on integration in congregation. Responses range from strongly agree to strongly disagree on a 5-point Likert scale (Appendix A-1). This instrument was chosen, since it was the only one designed specifically for an LDS population, and it has been validated (Chadwick & Top, 1993).

Both instruments have been previously developed after testing and revision. Minor revisions have been included to adapt the instruments to this study. Further examination suggests that both instruments have good construct validity and reliability (Chadwick & Top, 1993; McDowell & Newell, 1996, pp. 198-203).

## Procedure

Permission to use human subjects for this study will be obtained from the Institutional Review Board for Research with Human Participants at Brigham Young University, and the Health Science Department of the Brigham Young University.

A random sample of 400 LDS college students enrolled at Brigham Young University during the summer term of 1999 will receive the religiosity scale along with the LSI in the mail. The religiosity scale is a section of the "Religion and Family Survey," developed by Chadwick and Top (1993), and the LSI was developed by Neugarten, Havighurst and Tobin (1961). A consent/cover letter will also accompany the religiosity scale and the LSI, which will briefly explain the purpose of this study and convey the confidentiality issues. Participants will be informed that some questions may be sensitive and that they can decline participation in this study at any time. They will be informed of the minimal risk that participation in this study may trigger unpleasant recollection of past negative experiences and create a problem. In the rare instance when this may happen, participants can attain a referral. Further, participants will be informed that they may decline participation without it jeopardizing their grades and/or enrollment at Brigham Young University (Appendix A-3). Confidentiality will be maintained.

Participants will be asked to answer privately and as truthfully as possible. Response will indicate the subjects willingness to participate in the study. Participants will be encouraged to return both scales together in the enclosed envelope within a week, and they will also be told not to include their names to maintain confidentiality. Those who do not wish to participate will be encouraged not to return them. Subjects will

receive a reminder card a week after the initial mailing. This reminder card will encourage them to complete the survey, and to contact the primary researcher in case they need another copy of the survey (Appendix A-4). Analysis of the responses will begin 21 days after the initial mailing to allow adequate time for participants to respond.

Each participant will answer the questions in the LSI and the religiosity scale. Each subject will be assigned a religiosity score and a life satisfaction score. Demographic information will be collected for the purpose of the study. This information will include age and gender. Surveys will be analyzed to determine if there is a relationship between religiosity and life satisfaction.

#### Analysis

A multiple regression model will be used for this study. After the data is gathered, an analysis will follow to determine whether religiosity affects an individual's satisfaction with life. Further analysis will explore the difference, if any, between one's private and public religiosity and how it affects self-reported life satisfaction.

Independent variables will include age, gender and religiosity. Further, religiosity scores will be grouped under public religiosity, private religiosity, and explanatory variable religiosity scores. Dependent variable will consist of the average life satisfaction scores. ANOVA will be used to analyze the data gathered. Item analysis will also be used for test validity.

Appendix A-1  
Religiosity Scale

### Religiosity Scale

The following section asks about your religious beliefs and your church activity. Please circle the choice that best indicates the extent of your agreement or disagreement with the following statements.

1=Strongly Agree   2=Agree   3=Mixed Feelings   4=Disagree   5=Strongly Disagree

#### Religious Beliefs

1.	Jesus Christ is the divine Son of God	1	2	3	4	5
2.	The president of the LDS Church is a prophet of God	1	2	3	4	5
3.	God lives and is real	1	2	3	4	5
4.	Joseph Smith actually saw God the Father and Jesus Christ	1	2	3	4	5
5.	The Book of Mormon is the word of God	1	2	3	4	5
6.	The Bible is the word of God	1	2	3	4	5
7.	The Lord guides the Church today through revelations to Church leaders	1	2	3	4	5
8.	There is a life after death	1	2	3	4	5
9.	God really does answer prayers	1	2	3	4	5
10.	Satan actually exists	1	2	3	4	5
11.	Even in this life, God blesses individuals for their righteousness	1	2	3	4	5

#### Spiritual Experiences

12.	I have been guided by the Spirit with some of my problems or decisions	1	2	3	4	5
13.	I know what it feels like to repent and be forgiven	1	2	3	4	5
14.	There have been times in my life when I felt the Holy Ghost	1	2	3	4	5

#### Private Religious Behavior

15.	I read the scriptures	1	2	3	4	5
16.	I pray privately	1	2	3	4	5
17.	I read church magazines and books	1	2	3	4	5

#### Attendance/Public Behavior

18.	I attend Sacrament Meeting	1	2	3	4	5
19.	I attend Sunday School	1	2	3	4	5
20.	I attend Priesthood Meeting or Relief Society Meeting on Sunday	1	2	3	4	5
21.	I bear my testimony in church	1	2	3	4	5

## Family Religious Activities

22.	My family reads the scriptures together	1	2	3	4	5
23.	My family holds Family Home Evening	1	2	3	4	5
24.	My family has family prayer	1	2	3	4	5

## Integration in Congregation

25.	I seem to fit in very well with the people in my ward	1	2	3	4	5
26.	I am well liked by members of my ward	1	2	3	4	5
27.	I sometimes feel like an outsider in the Church	1	2	3	4	5

Source: Chadwick, B. A., & Top, B. L. (1993). Religiosity and Delinquency among LDS Adolescents. Journal for the Scientific Study of Religion, 32(1), 51-67.

Appendix A-2  
Life Satisfaction Scale

## The Life Satisfaction Index A

Here are some statements about life in general that people feel differently about. Would you read each statement in the list, and if you agree with it, put a check mark in the space under "AGREE." If you do not agree with a statement, put a check mark in the space under "DISAGREE." If you are not sure one way or the other, put a check mark in the space under "?"

Please be sure to answer every question on the list.

	AGREE	DISAGREE	?
1. As I grow older, things seem better than I thought they would be.	_____	_____	_____
2. I have gotten more of the breaks in life than most of the people I know.	_____	_____	_____
3. This is the dreariest time of my life.	_____	_____	_____
4. I am just as happy as when I was younger.	_____	_____	_____
5. My life could be happier than it is now.	_____	_____	_____
6. These are the best years of my life.	_____	_____	_____
7. Most of the things I do are boring or monotonous.	_____	_____	_____
8. I expect some interesting and pleasant things to happen to me in the future.	_____	_____	_____
9. The things I do are as interesting to me as they ever were.	_____	_____	_____
10. I feel old and somewhat tired.	_____	_____	_____
11. I feel my age, but it does not bother me.	_____	_____	_____
12. As I look back on my life, I am fairly well satisfied.	_____	_____	_____
13. I would not change my past life even if I could.	_____	_____	_____
14. Compared to other people my age, I've made a lot of foolish decisions in my life.	_____	_____	_____
15. Compared to other people my age, I make a good appearance.	_____	_____	_____
16. I have made plans for things I'll be doing a month or a year from now.	_____	_____	_____
17. When I think back over my life, I didn't get most of the important things I wanted.	_____	_____	_____
18. Compared to other people, I get down in the dumps too often.	_____	_____	_____
19. I've gotten pretty much what I expected out of life.	_____	_____	_____
20. In spite of what people say, the lot of the average man is getting worse, not better.	_____	_____	_____

Neugarten, B. L., Havighurst, & R. J., Tobin, S. S. (1961). The measurement of life satisfaction. Journal of Gerontology, 16, 141.

Appendix A-3

Consent/Cover Letter

### **Consent To Be A Research Subject**

Dear Participant,

The purpose of this research study is to determine the relationship between religiosity and life satisfaction among LDS college students at Brigham Young University. It is being conducted by Po Nien Chou, a graduate student in the Department of Health Sciences, at Brigham Young University. You were randomly selected to participate in this study. You will be asked to answer the attached questionnaire and return it in the enclosed envelope. It will only take about 5-10 minutes to answer the questionnaire.

There is a minimal risk that participation in this study may trigger unpleasant recollection of past negative experiences and create a problem. In the rare instance when this may happen, you may contact Po Chou for a referral. There are no known benefits to you for participation in this study. But your participation will add to our knowledge concerning the relationship between religiosity and life satisfaction among LDS college students. Please fill out this survey as completely and honestly as possible. If you are under the age of eighteen, or non-LDS, or if you are pregnant, do not fill it out. Do not put your name and/or address in this survey, nor in the enclosed return envelope. This will allow your answers to remain confidential and anonymous. Participation in this research is voluntary, and you may chose not to participate without any jeopardy to your grades and/or enrollment at Brigham Young University.

If you have questions regarding this research you may contact Po Nien Chou at 1032 S. Slate Canyon Dr., Provo, Utah 84606; email: [chou.family@juno.com](mailto:chou.family@juno.com); phone

(801) 812-1805.

If you have questions regarding your rights as a participant in a research project you may contact Dr. Laurence Hilton, Chair of the Institutional Review Board, A-261 ASB, Brigham Young University, Provo, Utah 84602; phone (801) 378-6456.

The return of this survey is your consent to participate in this research.

Appendix A-4

Reminder Card

### Reminder Card

Dear participant,

My name is Po Chou, and I am a graduate student at BYU. I sent you a survey on religiosity and life satisfaction a week ago. As you can appreciate, it is important that I obtain responses from everyone possible. If you have already returned the survey, please disregard this reminder card. But if you have not already done so, it would be very helpful if you would take 5-10 minutes to answer and return the survey. If for some reason you have not received it or have misplaced it, please call me at 812-1805 with your name and address, and I will be happy to mail you another survey. Thank you for your time and cooperation.

Sincerely,

Po Chou