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# Religiosity, Spirituality, and Quality of Life Among Selected University Students

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Religiosity, Spirituality and Subjective Quality of Life Among Selected University

Students


By

Abby Kreitlow



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Mankato, Minnesota

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Religiosity, Spirituality, and Quality of Life Among Selected University Students

Abby A. Kreitlow

This thesis has been examined and approved by the following members of the student's committee.

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Dr. Joseph Visker, Advisor

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Dr. Judith Luebke

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Dr. Amy Hedman

**Abstract**

Religiosity, Spirituality and Subjective Quality of Life Among Selected University
Students
By Abby A. Kreitlow
Master of Science in Community Health Education.
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**Objective:** College marks a time of transition and self-exploration. Quality of life can be
enhanced or diminished throughout this experience. The objective of this study was to
identify the level of religiosity, spirituality and quality of life and identify if there was a
relationship between a person's level of religiosity and spirituality and quality of life.

**Participants and Methods:** The sample group, consisting of 548 Midwestern university
undergraduate students, completed the Spiritual Wellbeing Scale (SWBS) and the
Ontological Wellbeing Scale (OWBS) in the spring semester of 2015.

**Results:** Findings indicate that Midwestern university students have a moderate sense of
spiritual wellbeing and a high quality of life. Participants' who reported experiencing
higher levels of existential wellbeing, also scored higher on spirituality wellbeing.
Results revealed a positive statistically significant relationship between all measured
variables.

**Conclusions:** There is a positive relationship between spiritual wellbeing, religious
wellbeing, existential wellbeing, and quality of life. As spiritual wellbeing increased,
hope increased and regret decreased. Recommendations for future research include
examining different measures and other quality of life variables, conducting a regression
analysis, measuring a more diverse sample, and a longitudinal approach.

**Acknowledgments**

*"And we know that God causes everything to work together for the good of those who love God and are called according to his purpose for them"* (Romans 8:28).

I would have never had the opportunity or ability to complete this thesis without the guidance and provision of God. All the praise and glory go to Him. I also want to thank my mother, for her constant love, encouragement, support, and phone calls when I was tired, hopeless, and in need of someone to understand. I am so thankful and fortunate for Bethany and Kristi. Thank you for always believing in me, keeping me sane, for your constant love and laughter, and prayers. I would have never been able to do this without your humor, friendship, or long hours at Caribou. Lastly, thank you Zach for your support, prayers, and encouragement. Thank you for loving me at my worst and at my best.

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## Table of Contents

# List of Tables

**Chapter I**

**Introduction**

*"For scientific investigation to occur there has to be a consensus of meaning with regard*

*to the phenomenon being overseen…It is probably because such terms as 'spiritual'*

*appear to have subjective meanings which are impossible to operationalize that*

*behavioral scientists have avoided the study of spiritual health and disease"*

*(Ellison, 1983, p. 331)*

**Introduction**

    The university population encompasses young adults undergoing a transformative period that involves a quest for self-exploration (Burke, Van Olphen, Eliason, Howell & Gonzalez, 2012). Additionally, it is a pivotal time where quality of life (QOL) may be diminished or enhanced. Through this transition, many university students are actively seeking and engaging in a spiritual quest to find meaning and purpose in life (Higher Education Research Institute HERI, 2003). Results from 98,593 university and college students from 27 different institutions reveal that students are highly interested and involved in spirituality and religion (HERI, 2003). Statistics from that study reveal that two-thirds of the participants indicated, "my spirituality is a source of joy" (HERI, 2003, p. 4), and three-fourths of participants indicated that they are "searching for meaning and purpose in life" (HERI, 2003, p. 4). Additionally, more than three-fourths of the participants indicated that they believe in God and more than two out of three indicated, "my religious/spiritual beliefs provide me with strength, support, and guidance" (HERI, 2003, p. 4).

Research in the university population concerning religious and spiritual development has been evolving. One reason for this is that researchers are attempting to "quantify and describe the changing nature of how students define, express, and search for spiritual and religious meaning" (Montgomery-Goodnough & Gallagher, 2007, p. 63). University students have high expectations that their college experience will play a vital role in emotional and spiritual development (HERI, 2003). Additionally, students value the college experience because they are seeking self-understanding, deeper personal values and encouragement to express their spirituality (HERI, 2003).

However, defining and studying religiosity and spirituality is exceptionally difficult because of the multidimensionality of concepts. To date, research and definitions of spiritual health have not been sufficiently grounded in theory and understanding and therefore lack the integration into health education curriculum (Hawks, 1994).

Religiosity and spirituality is an emerging topic in health professions because of its role in total wellbeing. There is a substantial amount of literature that reveals the connection of religion and spirituality to physical and mental health (Hill & Pargament, 2003). Sufficient evidence has revealed the influence of religiosity and spirituality on specified dimensions of health such as physical, social, emotional, intellectual, occupational, and environmental realms (Chobdee, 2014). The influence of religiosity and spirituality on holistic health holds a profound implication for disease prevention and wellness (Hawks, Hull, Thalman, & Richins, 1995). Further, research has revealed that religiosity and spirituality has health-protective qualities (Burke, Van Olphen, Eliason, Howell & Gonzalez, 2012).

Religiosity can be defined as a practice of being religious, which includes activities such as attending religious services, praying, and finding value in religious beliefs (Gunnoe & Moore, 2002). Mattis' (2000) findings revealed three distinct differences between religiosity and spirituality. First, religiosity is defined as organized worship whereas spirituality is defined as personal values. Second, religion is associated with a path or journey and spirituality as an effect. Finally, religion is closely linked to worship experiences and spirituality is closely associated with relationships. In comparison, spirituality is defined as an internalization of positive values, an outcome, and associated with relationships. Spirituality can also be defined as beliefs that one develops over his or her lifetime that guides one's view of the world and has the ability to influence one's understanding of a higher power. Spirituality can also influence a person's faith, hope, trust, morals, ability to cope with a loss, and provide meaning and stability to daily activities (Wick, 1999). Meraviglia (1999) describes spirituality as personal experiences and expressions of a person's spirit in a way that reflects faith in God or a higher power, feeling connected to oneself, others, nature, or God, and a combination of all human dimensions (mind, body, spirit). Spirituality is also defined as a pursuit to find purpose and meaning in one's life, a hope or optimistic frame of mind when considering the future, and values that guide relationships and decisions (Witmer & Sweeney, 1992). Spirituality is also defined as a pursuit to find purpose and meaning in one's life, a hope or optimistic frame of mind when considering the future, and values that guide relationships and decisions (Witmer & Sweeney, 1992).

Religiosity and spirituality are tied together through their common denominator of the sacred, which for most religious and spiritual individuals is the most vital destination

(Hill & Pargament, 2003). Both elements share a search for the sacred, a pursuit for peace and guidance, and a connection with a higher power through meditation, prayer, worship, contemplation, or self-examination (Witmer & Sweeney, 1992).

Quality of life (QOL) is defined by the World Health Organization (WHO) as "an individual's perception of their position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (World Health Organization, 1997, p. 1). QOL is multidimensional and includes six domains: physical, psychological, social, environmental, spiritual/religious and level of independence (WHO, 1997). QOL is also referred to as an individual's perceived wellbeing and satisfaction with life (Abdel-Khalek, 2010). Satisfaction can be defined as a gap that a person identifies between his or her current situation and the one he or she hopes for (Campbell, 1981).

Many studies have identified a connection in religiosity and spirituality and better health. Peterson and Roy (1985) have suggested three major pathways of how religiosity and spirituality plays a role in one's life, which include: 1) religiosity and spirituality offers hope, comfort, and optimism, 2) religiosity and spirituality can provide meaning and purpose to the individual regarding his or her existence, and 3) religious participation can provide social support through interpersonal relationships that offer encouragement and sympathy. In addition, religiosity and spirituality can also have a positive effect on psychological wellbeing because it is resource for coping with stress (Krageloh, Chai, Shepherd, & Billington, 2010). There are many meta-analytic reviews on this topic that have noted the positive correlation between religiosity and spirituality and psychosocial health outcomes. Those outcomes include decreased rates of crime and delinquency

(Baier & Wright, 2001), decreased substance and alcohol abuse (Moreira-Almeida, Neto & Koenig, 2006), higher grade point averages and standardized test scores (Jeynes, 2002), more satisfying committed and longer marriages (Mahoney, Pargament, Tarakeshwar & Swank, 2001), and increased longevity (Powell, Shahabi, & Thoresen, 2003). Findings continuously reveal the influence religiosity and spirituality upon each dimension of wellness.

Additionally, weekly religious attendance was associated with an increase of two to three years of life expectancy, which is proportionate to the life expectancy associated with regular physical activity (3-5 years) (Hall, 2006). A systematic review of 850 studies on the relationship between religion and mental health done by Moreira-Almeida, Neto, and Koenig (2006) found that individuals who were more religiously involved tended to have positive associations with psychological wellbeing indicators such as overall satisfaction with life, happiness, and confidence. Additionally, those individuals experienced less depression, suicidal thoughts and behavior, and drug use/abuse. The findings from the meta-analysis indicate several positive associations between religiosity and wellbeing. The following associations to religiosity were found: optimism and hope (12 out of 14 studies) self esteem (16 out of 29 studies), self meaning and purpose in life (15 out of 16 studies), and internal locus of control and social support (19 out of 20 studies) (Moreira-Almeida, Neto, & Koenig, 2006, p. 245).

**Statement of the Problem**

Over the years there has been a increasing trend in health education and researchers have acknowledged the importance of holistic wellbeing. However, there are many gaps in the religiosity and spirituality dimension of wellbeing. The college

experience is a time of development where formed opinions, beliefs, and thought processes that will stay with the individual for life (MacDonald, 2014).

While previous studies have established the relationship between religiosity and spirituality and specified health outcomes, few studies have examined the relationship between religiosity and spirituality and factors related to an individual's QOL. In addition, while there have been statistically significant associations between religiosity and spirituality and health, these findings are unclear.

Health problems in the college population are vast and can diminish QOL among students. Exploring the relationship between an individual's level of religiosity and spirituality and dimensions of QOL is worth examining because it has been considered such a salient factor that can influence one's QOL and wellbeing (Abdel-Khalek, 2010). Religiosity and spirituality is a poorly understood topic and the quality of research that has been performed has been limited because researchers have failed to reach a consensus on a definition for religiosity and spirituality (Schettino, 2012). Therefore, there is a great need for a deeper understanding of how religiosity and spirituality relates to QOL. This study will use specific criteria to define the terminology of religiosity and spiritualty.

Plante and Sherman (2001) used the following analogy to describe spirituality and religiosity. "Just as personality is more than behavior, health is more than blood pressure, spirituality is more than feeling connected to life, and religiousness is more than attending church services" (p. 23). Research regarding religion and spirituality has underestimated the complexity of the variables and influence that they have on an individual's health (Hill & Pargament, 2003). Spilka's (1993) review of literature is a worthy demonstration of that. Spilka's research (as cited in Hill et al., 2000) has led him

to believe that the most modern understandings of spirituality tend to fall into one of three categories: 1) "A God-oriented spirituality where thought and practice are premised in theologies, 2) a world-oriented spirituality stressing one's relationship with ecology or nature, or 3) a humanistic (or people oriented) spirituality stressing human achievement or potential" (p. 57). Therefore, like religiosity, spirituality should be viewed as a multidimensional construct.

The university population encompasses young adults undergoing a transformative period that involves a quest for self-exploration (Burke, Van Olphen, Eliason, Howell, & Gonzalez, 2012). However, few studies have examined religiosity and spirituality among the university population and their relationship with QOL. Most studies have researched adults or specific university populations (such as Judeo-Christians, Muslims, or academic majors and so forth). Students encounter many challenges throughout the transition into college. Many students look for ways to cope with the daily stress from school, work, or even relationship stress. Decisions students make in those pivotal times can directly affect their mental and physical health and overall life satisfaction. Research reveals that religiously and spiritually committed individuals view aspects of life through a religious and spiritual light and tend to treat those dimensions with respect and care. On the contrary, less religiously and spiritually committed individuals may view life through a different lens. Additionally, Holman and Sillars' (2011) findings reveal 'hooking up' or engaging in casual sexual encounters, is very common in college students. Religious and spiritually mature individuals often turn to a higher power for support and direction in critical times and may choose to avoid lust as a result. Further, personality risk factors for sexual hookup behavior can include an inclination towards hooking up, depression,

impulsive behavior and the desire to seek sensation (Fielder, Walsh, Carey & Carey, 2013). Protective factors against sexual behavior may include religious service attendance and academic achievement (Fielder, Walsh, Carey, & Carey, 2013).

Another serious health problem in the college population, that directly affects QOL, is alcohol and drug abuse. The individual may use alcohol or drugs as a means to cope to compensate for shyness or low self-esteem or for feelings of guilt (Florida Institute of Technology, n.d.). The impacts of this health problem include, but are not limited to, negative impacts such as specific alcohol-related problems (such as missing class, damaging property, unplanned sex), academic impact (such as failure to graduate), and health (such as diet, smoking, exercise). Positive impacts that make this behavior socially desirable include social enhancement, relief from boredom, and enjoyment (Murphy, Hoyme, Colby, & Borsari, 2006). Adverse outcomes associated with United States 4-year undergraduate college student alcohol abuse are well documented such as injuries (599,000), unprotected sexual encounters (474,000), physical assaults (696,000), sexual assault or date rapes (97,000), and unintentional alcohol-related fatalities (1,700) (Hingson, Heeren, Winter, & Wechsler, 2005). Findings also reveal a statistical association with the impact of alcohol related problems and diminished life satisfaction in both males and females (Murphy, Hoyme, Colby, & Borsari, 2006). Further, religiosity and spirituality has been discovered to have an association with decreased alcohol use in the college population (Burke, Van Olphen, Eliason, Howell, & Gonzalez, 2012).

**Purpose of the Study**

The purpose of this research is to explore the relationship between level of religiosity and spirituality and quality of life dimensions. The relationship of religiosity

and spirituality to quality of life is, multidimensional and few studies have examined these variables among university students. These variables are important to research because college is a time of transition, change, stress, and a time when quality of life may be diminished.

**Need for the Study**

The relationship between religiosity and spirituality and QOL is poorly understood and this research could add to the existing literature. Religion and spirituality are imperative QOL influences in adults, but to date, few studies reviewed have explored those two factors and the relationship between QOL in the college population (Zullig, Ward & Horn, 2006). Among the adult population, a considerable amount of literature has revealed an association between spirituality, religiosity and QOL. Sparling and Snow (2002) stated the importance of studying the college population by recognizing that college can be a major life transition which provides many opportunities for campus groups to positively shape decisions and behavior. With that said, since religiosity and spirituality are often considered salient in QOL, an assessment of those components among the college population seems to be necessary (Zullig, Ward, & Horn, 2006).

The transition to college creates an adjustment that results in various stressors for most students. Studies have consistently shown an inverse relationship between an individual's religious commitment and stress (Lee, 2007), which ultimately would affect one's quality of mental health. One major health concern among the college population is mental health. A 2013 national survey revealed that 60 % of college students reported feeling very sad, and just over half of all students' surveyed reported feeling overwhelming anxiety throughout the last 12 months (American College Health

Association, 2013). Religion and spirituality may be useful in the improvement of mental health in the college population (Anye, Gallien, Bian, & Moulton, 2013). This dimension of wellness can act as a protective factor through improved coping strategies and psychological wellbeing (Lee, 2007).

Stress and level of religiosity is a topic of interest because acknowledging that there is a higher power than oneself may be an outlet for coping and to understand stressful situations. Religiosity can moderate the adverse effects of stress and help an individual reduce the impact of life stressors (Lee, 2007). Furthermore, it is clear that an individual's method of coping with stress can influence good health and wellbeing.

College is a time of transition and with that comes many expectations and pressures for students to excel. A sample of 95 college freshmen was surveyed to discover the relationship between one's personal beliefs and the contribution that college stressors have on health-compromising behaviors (Zaleski et al., 1998). The results indicate that religiosity, specifically church attendance and religious commitment, may act as a buffer to impact stress and coping (Ellison, 1991). This study has the potential to understand factors that enhance the wellbeing of students, address the gaps related to the understanding of religiosity and spirituality among university students, and further understand the relationship between religiosity and spirituality and QOL.

**Research Questions**

1. What are the levels of religiosity and spirituality among sampled students at a large, Midwestern university?

2. What is the subjective quality of life among sampled students at a large, Midwestern university?

3. What is the relationship between religiosity and spirituality and quality of life among sampled students at a large, Midwestern university?

**Limitations**

1. There was limited time (3 weeks) to collect data.

2. This was a cross-sectional study so the findings reflect one point in time.

3. It is a convenience sample.

4. A typical college aged (18-22) student does not have a lot of past QOL to measure.

5. The Ontological Wellbeing Scale is subjective in nature.

**Delimitations**

1. The participants selected for this research will be ages 18-22 and represent one university in Minnesota.

2. There are many ways to define religiosity and spirituality and for the purpose of this study religiosity and spirituality will be defined through specific criteria.

3. Data collection for this study was limited to spring semester 2015.

**Assumptions**

1. Participants answered survey questions honestly

2. Participants understood survey questions.

**Definitions**

Quality of life (QOL) – "individual perception of position in life in the context of the culture and value systems in which they live and in relation to their goals, expectations, standards and concerns" (World Health Organization, 1997, p. 1).

Criteria for religion

A. "The feelings, thoughts, experiences, and behaviors that arise from a search for the sacred. The term "search" refers to a divine being, divine object, Ultimate Reality, or Ultimate Truth as perceived by the individual (Hill et al., 2000, p. 71). AND/OR:

B. A search for non-sacred goals (such as identity, belongingness, meaning, health, or wellness) in a context that has as its primary goal the facilitation of (A). (Hill et al., 2000, p. 71). AND:

C. The means and methods (e.g., rituals or prescribed behaviors) of the search that receive validation and support from within an identifiable group of people (Hill et al., 2000, p. 71).

*For the purposes of this thesis, AND/OR will be used.*

Criterion for spirituality

A. "The feelings, thoughts, experiences, and behaviors that arise from a search for the sacred. The term "search" refers to attempts to identify, articulate, maintain, or transform. The term "sacred" refers to a divine being, divine object, Ultimate Reality, or Ultimate Truth as perceived by the individual" (Hill et al., 2000, p. 71).

## Chapter II

## Review of Literature

**Introduction**

The main purpose of this study is to identify selected university students' level of religiosity and spirituality. Second, this research will examine the relationship between selected students' level of religiosity and spirituality and quality of life (QOL). This chapter reviews relevant literature regarding the complexity of the variables and the connection between the variables and QOL. The following section will cover the definitions of religiosity and spirituality and QOL, the relationship between those two variables, and the health risks of college students.

**Definition of Religion and Spirituality**

According to Hill and colleagues, "the word religion comes from the Latin root *religio* which signifies a bond between humanity and some greater-than-human power" (2000, p. 56). Religion and spirituality are very complex variables that have been underrepresented in health education literature. The variables are complex and encompass several dimensions of health including intellectual, emotional, social, interpersonal and physiological (Hill & Pargament, 2003). There are many competing definitions of religiosity and spirituality because a consensus has yet to be reached by researchers on how specifically to define these multi-dimensional terms. Hill suggested that future researchers should use his criteria so that a benchmark for the two terms can be assessed (Hill et al., 2000).

Although religiosity and spirituality differ in meaning, spirituality can be a great addition to the practice of religion and the practice of religion can bring depth to spirituality. Therefore, the two terms are interconnected but not synonymous (Adams, Bezner, Drabbs, Zambarano, & Steinhardt, 2010). Hill and associates (2000) have done extensive research on the topic of religion and spirituality and have created a set of criteria for defining the terms. According to Hill and colleagues (2000), when researchers broadly define these terms it can "rob the study of religion and spirituality of their distinctive characteristics" (Hill et al., 2000, p. 71). For example, the term spiritual has been used in modern language to describe something that is fulfilling, moving, meaningful, or important (Hill & Pargament, 2003). Hill and colleagues argue that activities and lifestyles, which can be fulfilling, moving, meaningful, and important, are not spiritual unless there is a sense of sacredness. Sacred in this context is an individual, theory, or belief that surpasses one's self (Hill & Pargament, 2003). Additionally, dividing religion and spirituality in research may lead to unnecessary duplication in concepts and measures (Hill & Pargament, 2003).

Despite the fact that religiosity and spirituality have distinct definitions, Hill suggests using all criteria (A, B & C see below) to best assess religiosity and spirituality.

> Spirituality is defined as the feelings, thoughts, experiences, and behaviors that arise from a search for the sacred. The term 'search' refers to attempts to identify, articulate, maintain, or transform. The term 'sacred' refers to a divine being, divine object, Ultimate Reality, or Ultimate Truth as perceived by the individual In addition, religiosity is defined as A) the feelings, thoughts, experiences, and behaviors that arise from a search for the sacred. The term 'search' refers to a divine being, divine object, Ultimate Reality, or Ultimate Truth as perceived by the individual and B) a search for non-sacred goals (such as identity, belongingness, meaning, health, or wellness) in a context that has as its primary goal the facilitation of (A), and C) The means and methods (e.g., rituals or prescribed behaviors) of the search that receive validation and support from within an identifiable group of people (Hill, et al., 2000, p. 71).

An interesting report published by HERI, (2003) illustrated various indicators of students' religiousness and spirituality from 98,593 university and college students. According to the religiousness results, "79% of participants' believe in God, 69% pray, 81% occasionally or frequently attend religious services, 69% agree strongly or somewhat that his or her religious beliefs provided strength, support, and guidance, and 40% of participants' consider it essential or very important to follow religious teaching in everyday life" (p. 5). Further, the spirituality results indicated that "83% of students occasionally or frequently believe in the sacredness of life, 80% occasionally or frequently have an interest in spirituality, 76% of students occasionally or frequently search for meaning/purpose in life, 64% students agree strongly or somewhat to the statement that 'my spirituality is a source of joy,' and 47% of students consider it essential or very important to seek out opportunities to help them grow spiritually" (p. 5).

**Quality of Life**

Measuring health and QOL can be challenging because there are many ways to measure QOL and the concept has several dimensions (Sawatzky, Ratner, & Chiu, 2005). Objective life circumstances are highly significant when determining an individual's QOL, however subjective experiences are becoming more common in health studies. Anye and colleagues (2013) note that most QOL measures have focused on disease, illness, and negative concepts. Sawatzky, Ratner, & Chiu (2005) believe that more meaningful QOL measures may be appropriate, especially for a healthy population of individuals. More recently, health care studies have focused on the subjective experience through "perceived QOL, wellbeing and life satisfaction instead of indicators of morbidity and mortality" (Sawatzky, Ratner, & Chiu, 2005, p. 155).

The World Health Organization's definition of quality of life is widely used because it encompasses a holistic approach to health. The idea of quality of life (QOL) has been broadly used to signify an individual's wellbeing (Hag & Zia, 2013). Quality of life is defined as one's perceived place in life in terms of the culture and value systems the individual holds in relation to his or her aspirations, expectations, morals, and concerns (WHO, 1997). This definition implies that quality of life is a perceived evaluation of one's cultural, social, and environmental circumstance (Abdel-Khalek, 2010). QOL is a multidimensional term that has been extensively researched over the years in many disciplines. Since QOL is not easily defined nor easily measured it is generally conceptualized from two perspectives, which include subjective and objective (Zullig, Ward, & Horn, 2006). Objective QOL focuses on external contributions to QOL such as income level, social community, and access to healthcare services (Zullig, Ward, & Horn, 2006). In contrast, subjective QOL focuses on internal contributions to QOL such as a person's perceptions towards life satisfaction, family, and living situation, and overall health (Zullig, Ward, & Horn, 2006). Campbell and Rodgers (1972) advocate for subjective measures of QOL because they are directly related to QOL whereas objective indicators have limitations because they are indirect indicators of an individual's QOL (as cited in Renwick, Brown, & Nagler, 1996). Although, objective indicators are important in QOL, subjective interpretations tend to be more crucial in determining one's QOL (Abdel-Khalek, 2010).

QOL considers an individual's level of function and value system, which may impact how an individual reacts to a loss of function (McDowell, 2006). Katschnig and Krautgartner (2002) describe QOL as having three major components, which include

"subjective perceptions of one's wellbeing, objective functioning in self-care and social roles, and environmental opportunities, both social and material" (p. 175). Most subjective definitions require the consideration of the subject's preferences, interests, ideals, values and attitudes whereas objective definitions assume that the definition criteria can be met without those components (Haq & Zia, 2013).

A good QOL exists when the hopes of a person are fulfilled and achieved through experience. Therefore, the opposite is also true that a poor QOL exists when the hopes do not align with the experience (Calman, 1984).

When measuring QOL, researchers must acknowledge the influence of internal and external conditions. QOL results from an interaction between a person's external circumstances and his or her perceptions of those circumstances (Browne et al., 1994). QOL is often used as an outcome variable in health care research. The focus of the holistic approach of health care is on the subjective experience of health, which is often measured through perceived QOL, wellbeing, and life satisfaction "as opposed to indicators of morbidity and mortality" (Sawatzky, Ratner, & Chiu, 2005, p. 155).

One component of subjective QOL is perceived satisfaction with life. Diener, Emmons, Larsen, and Griffin (1985) describe life satisfaction as a "cognitive, judgmental process" (p. 71). Life satisfaction may be judged based upon how satisfied an individual is with his or her present life based upon any personal standards that the individual has set (Diener, Emmons, Larsen, & Griffin, 1985). Individuals place different values on aspects of life based upon how desirable he or she believes it is (such as health, energy, and so forth). Therefore, researchers must examine an individual's perception of his or

her life as a whole, rather than using specific domains to obtain a measurement of overall life satisfaction (Diener, Emmons, Larsen, & Griffin, 1985, p. 71).

Another component of QOL that researchers often measure is happiness. Recently, Şimşek has revisited the concept of happiness with a theory called ontological wellbeing, which is based upon the construct of subjective wellbeing. Further, Ivey (1986) defines ontology as "the state of being, our total experience of the present, past, and future" (p. 3). Şimşek looked at SWB as a concept of a goal, which he defines as a life project. A life project is a personal evaluation of one's life through the perspective of time including past, present, and future (Şimşek, 2009). Moreover, an individual's life as a whole is viewed as a goal or a project. A life project is a journey that is always developing.

Şimşek describes emotional wellbeing and life satisfaction as personal goals and projects in an individual's life. Şimşek views life as a personal goal/project that is a component of SWB and is measured through a new theory called ontological wellbeing, which measures the individual's whole life (OWB) (Şimşek, 2009). 'Whole' in this context refers to one's life as a personal project (Şimşek, 2009). The concept of happiness in the perspective of one's whole time (entire lifetime) has not been taken into consideration yet according to Şimşek. Specifically, there is a gap between emotional wellbeing and life satisfaction (Şimşek, 2009). Time is a key factor in viewing "life as a project of becoming" (Şimşek, 2009, p. 511). When an individual evaluates life through a 'whole time perspective' he or she will consider the past, present, and future (Şimşek, 2009). Therefore, an individual is always growing, hence a life project. The ontological wellbeing scale allows the individual to reflect on personal emotions concerning the

aspects of life already experienced, the aspects in the process of being experienced, and the aspects that have not been experienced (Şimşek & Kocayörük, 2013). The ontological approach that Şimşek and Kocayörük (2013) use is similar to religious and spiritual traditions. More specifically, religiosity and spirituality involve change and encourage growth just as a life project should.

An individual's life experiences are related to total wellbeing. As Seligman and Csikszentmihalyi (2000) state, positive psychology consists of valued personal experiences such as one's wellbeing, contentment, feelings of satisfaction when considering the past, hope and confidence when looking to the future and happiness for his or her present circumstances. Research on time perspective has proven a close relationship to wellbeing. Multiple studies on the perspective of time reveal this relationship. Zimbardo and Boyd (1999) note the relationship between past, present, and future and health behaviors. Past experiences are associated with depression, anxiety, self-reported unhappiness, and self-esteem. Present experiences are associated with depression, anxiety, and aggression. Future experiences are associated to desire and motivation to succeed.

Additional research has been conducted regarding perceived life satisfaction and personal projects. Palys and Little (1983) found that high life satisfaction was associated with the involvement of personal projects or goals that are enjoyable and moderately difficult and a social support system that was involved in the projects. Makinen and Pychyl (2001) concluded that individuals tend to be more satisfied with life when their projects are "meaningful, socially supported, non-stressful, and progressing according to

plan" (p.1). Conversely, any obstacles throughout the life project may increase stress
factors and therefore resulting in decreased life-satisfaction (Makinen & Pychyl, 2001).

**Relationship between Religiosity, Spirituality, and Quality of Life**

The relationship between religiosity and spirituality and QOL has been a topic of
interest among many researchers. Religiosity can be an important component that
influences QOL and subjective wellbeing (Abdel-Khalek, 2010). According to a study of
Muslim college students, there is a strong positive correlation between religiosity and
happiness when examining life satisfaction. Although some negative implications may be
present in a study concerning religiosity and spirituality, few studies "have found a
negative relationship between religiosity and spirituality and subjective wellbeing"
(Ferriss, 2002, p. 202). A large European study revealed a positive relationship between
life satisfaction and an individual's commitment to frequent church attendance (Greene &
Yoon, 2004). Further, Maselko and Kubanzsky also found a significant statistical
association between weekly public religious activities and better health and wellbeing.
Those findings demonstrated a stronger association for men than women and were also
influenced by religious denomination (Maselko & Kubzanksy, 2006). Research has also
found a strong subjective relationship between religiosity and wellbeing. Findings from
1400 survey responses reveal statistical associations between religious individuals and
levels of happiness. Religious individuals are generally "happier and more satisfied than
non-believers and atheists" (Vinson & Ericson, 2012, p. 7). Other studies have shown
that individuals with a more elaborate and encompassing religious orientation are likely
to experience health benefits (Hill & Pargament, 2003).

Research demonstrates the relationship between religiosity and spirituality and QOL, but why and how does religiosity and spirituality influence health (Hill & Pargament, 2003)? Hill and Pargament (2003) dissected this question and suggested the attachment theory to explain the link between a connection with God and better wellbeing. This theory proposes that individuals who perceive and experience a secure closeness and connection with God will also find comfort in the midst of stressful encounters, more strength and confidence on a daily basis, decreased levels of physiological stress and loneliness (Hill & Pargament, 2003). Maton (1989) also discovered health related benefits of spirituality, which included less depression and higher self-esteem.

Pargament and Mahoney state that when an individual views aspects of life through a religious and spiritual light, he or she tends to treat those dimensions of life with respect and care (Hill & Pargament, 2003). Pargament and Mahoney identify specific health dimensions as physical health, where the body is viewed as a temple, and psychological health, a person's sense of meaning in life (as cited in Hill & Pargament, 2003). religiosity and spirituality can provide individuals with a sense of direction for their life.

The pursuit of spiritual growth is also associated with mental and physical health. The individual tends to be more apt to avoid vices such as gluttony, lust, envy and pride and more apt to practice the virtues such as compassion, forgiveness, gratitude, and hope (Hill & Pargament, 2003). Individuals tend to invest additional time, care, and energy into specific areas of life that are viewed as sacred. This results in fewer conflicts, and an

increased meaning and satisfaction with those aspects of life (as cited in Hill &

Pargament, 2003).

Empirical studies show that religious and spiritual struggles can be associated

with both positive and negative health outcomes for individuals. Living a religious and

spiritual lifestyle does not guarantee a smooth, struggle free lifestyle. Even some of the

most renowned founders from the world's greatest religions like Buddha, Moses,

Mohammed, and Jesus Christ faced difficulty. Religious and spiritual struggles and trials

are pivotal times because they can lead the "individual on or off the path toward spiritual

growth" (Hill & Pargament, 2003, p. 69). Religious and spiritual struggles have been

categorized by psychologists as interpersonal struggles, intraindividual struggles, and

struggles with God. Interpersonal struggles generally involve a conflict between the

individual and individuals involved in his or her social life such as a spouse, family

member or church community (Hill & Pargament, 2003). Intraindividual struggles tend to

involve tension experienced from an individual's feelings or behavior or with virtues the

individual supports (Hill & Pargament, 2003). Struggles with God may include a struggle

regarding the divine, questioning God's presence, compassion, sovereignty, or plan for

the individual (Hill & Pargament, 2003). These religious and spiritual struggles are

important because they hold implications for health and wellbeing. Krause, Chatters,

Meltzer, & Morgan (2000) argue that when an individual experiences disappointments

with others, specifically with clergy members, it can lead to doubt regarding faithfulness

and trustworthiness in other relationships (as cited in Hill & Pargament, 2003). Inner

conflicts can also affect an individual's self-worth, self-confidence and self-efficacy (Hill

& Pargament, 2003). An individual's struggle with God's character and relationship can

also create fear and distrust for the individual (Hill & Pargament, 2003). In conclusion, an individual's search for the divine can be helpful or harmful based upon the kind of God the individual discovers and the relationship that is formed with that God (Pargament & Mahoney, 2002).

Implications of those struggles can lead to both negative and positive outcomes. The negative outcomes include those involved with psychological distress including anxiety and depression (Krause, Ingersoll-Dayton, Ellison, & Wulff, 1999), negative mood (Hays, Meador, Branch, & George, 2001), poorer quality of life (Pargament, Koenig & Perez, 2000), panic disorder (Trenholm, Trent, & Compton, 1998), suicidality (Exline, Yali & Sanderson, 2000) and physical health declines in physical recovery for rehabilitation patients (Fitchett, Rybarczyk, DeMarco, & Nicholas, 1999). The positive outcomes of religious and spiritual struggles include stress-related growth, spiritual growth (Pargament, Koenig & Perez, 2000), open-mindedness and self-actualization (Ventis, 1995). These outcomes are important to note because these struggles represent a crucial 'fork in the road' for individuals, which can ultimately determine if growth occurs or if significant health problems occur (Hill & Pargament, 2003).

**University Students and Health Risks**

There has been a paradigm shift from religion to spirituality in the college and university population (Montomery-Goodnoug & Gallagher, 2007). Empirical data also reveals a decline in organized religion because students are more interested in spirituality throughout college. During the college years, students are seeking to develop themselves and that search may contribute to a spiritual quest. This quest for this population can be summed up in five big questions. 1) "Identity: Who am I? 2) Destiny or Calling: Where

am I Going? 3) Personal Faith: What Can I Believe in? 4) Wholeness: How Can I be

Happy? 5) Mattering: Will My Life Make a Difference? (Dalton, Eberhardt, Bracken &

Echols, 2006, p. 5). The search for identity is commonly linked to a spiritual quest. An

individual may search for this identity through taking to time reflect, examine, and focus

on the inmost parts of one's being. The individual may also reevaluate the foundation of

his or her beliefs, values, and purposes (Dalton, Eberhardt, Bracken, & Echols, 2006).

The direction or path is also an important factor in this spiritual quest. It involves a search

for purpose and significance in the world (Dalton, Eberhardt, Bracken, & Echols, 2006).

Next, a spiritual quest involves putting trust or faith in something. This is a process that

involves self-exploration of oneself, identity, and purpose (Dalton, Eberhardt, Bracken, &

Echols, 2006). Seeking happiness through social, financial, and academic challenges in

college can create a lot of pressure and expectations. The spiritual quest entails

discovering wholeness in the midst of those circumstances and finding personal

fulfillment and significance. Spirituality can assist in unifying the disjointed life and lead

to personal discovery that leads to happiness and purpose (Dalton, Eberhardt, Bracken, &

Echols, 2006). Lastly, university students desire to live a meaningful life and make a

difference and when seeking clarity and direction spirituality can bring guidance and

direction (Dalton, Eberhardt, Bracken, & Echols, 2006).

Students describe spirituality as "an inward search for purpose, meaning,

fulfillment, depth, wholeness, and authenticity" (Dalton, Eberhardt, Bracken, & Echols,

2006, p.1). Additionally, they describe that a journey of discovery is about understanding

themselves at a deeper and more authentic level and also learning their purpose and

understanding how these connect to what they believe is sacred and divine (Dalton, Eberhardt, Bracken, & Echols, 2006),

Spirituality may be useful in the improvement of mental health in the college population (Anye, Gallien, Bian, & Moulton, 2013). One health concern of importance among the college population is mental health. In a recent 2013 national survey, 60% of college students reported feeling very sad, and just over half of all students' surveyed reported feeling overwhelming anxiety throughout the last 12 months (American College Health Association, 2013).

The transition to college creates an adjustment that results in various stressors for most students. These stressors may include but are not limited to "time management, academics, finances, work responsibilities, social pressures and expectations, environmental and cultural changes, family structure, relationship changes, loss of comfort etc." (LSU Center for Academic Success, n.d., p. 1). The way an individual copes with stress can be negative or positive. Folkman and Lazarus (1980) defined coping as both a cognitive and behavioral effort of managing internal challenges and demands. Studies have consistently shown that there is an inverse relationship between an individual's religious commitment and stress (Lee, 2007). Johnson and Larson (1998) found that individuals who are religiously committed experience lower stress levels than the less committed individuals. The findings conclude that religion is a powerful way to manage and adjust oneself to life stressors (Lee, 2007). Religiosity and spirituality is powerful because of the sacredness that can signify an individual's source of "strength, meaning, and coping" (Hill & Pargament, 2003, p. 68).

Additionally, a large university study found religiosity and spirituality as protective resources against unhealthy health behaviors. Specifically, subjects who had a religious and spiritual identity had lower levels of alcohol, tobacco, and marijuana use (Burke, Van Olphen, Eliason, Howell & Gonzalez, 2012). Interventions have been an effective way to promote religiosity and spirituality and improve healthy behaviors. Hawk and colleagues assessed a mindfulness meditation intervention (group support, imagery, yoga, body scan, and mindful awareness) to understand the influence that is exerted on spiritual behavioral and health outcomes. The intervention's spiritual impact included connectedness with self, self-awareness, improved body image, and greater life purpose. The behavioral impact included regular use of stress reduction techniques, less need for medication, and fewer doctor visits. The interventions' health impact included reduced anxiety, pain, depression, panic attacks, medical symptoms and improved psychologic attitudes (Hawks, Hull, Thalman, & Richins, 1995).

**Summary**

Religiosity and spirituality are very complex and multidimensional terms. There is evidence that supports health risks among the university population and how religiosity and spirituality can be a factor in determining health and life satisfaction. Extensive literature reviews continually reveal an association between religiosity and spirituality and better health. Implications for health education professionals may include placing greater emphasis on the religiosity and spirituality dimension of health due to the influence it has on health behaviors and outcomes, which influence other dimensions such as, emotional and physical health (Hawks, Hull, Thalman, & Richins, 1995).

Attempting to define religiosity and spirituality has been an ongoing struggle among many different domains of research (such as psychology or public health). Setting a benchmark for these complex definitions will help guide research and create more opportunities to promote holistic wellbeing amongst college-aged individuals. Hill's criteria for defining religiosity and spirituality encompass the major themes revealed in research including the feelings, thoughts, and experiences, the sacred, and rituals. Spirituality can be a great addition to the practice of religion and the practice of religion can bring more depth to spirituality. Research supports that the promotion and understanding of mind, body, and soul is crucial in QOL and life satisfaction. Taking a time perspective is helpful in assessing one's QOL.

**Chapter III**

**Methodology**

**Introduction**

The purpose of this study was to identify the relationship between university students' level of religiosity and spirituality as it relates to QOL. The level of religiosity and spirituality was assessed through one's existential, spiritual and religious wellbeing. QOL will be measured through one's past, present, and future perceptions of life. This chapter will cover the research design, sample selection, data collection procedures, instrumentation, data analysis and a table of specifications, which analyzes three research questions, survey items, level of data and type of data analysis that will be used for this study.

**Research Questions**

This study addressed the following research questions regarding sampled students, ages 18-22:

1. What are the levels of religiosity/spirituality among sampled students at a large, Midwestern university?

2. What is the subjective quality of life among sampled students at a large, Midwestern university?

3. What is the relationship between religiosity/spirituality and quality of life among sampled students at a large, Midwestern university?

**Research Design**

A descriptive, cross-sectional, and correlational research design was used for this study. Descriptive data was collected through a survey and assessed the participant's current "thoughts, feelings, or behaviors" regarding religiosity, spirituality, and quality of life (Stangor, 2012, para. 2). An advantage of using this type of research entails acquiring a vast amount of information through description. It is also advantageous for identifying variables (Southern Utah University, n.d.). Additionally, descriptive research can provide a representation of what is happening at a specific time (Stangor, 2012).

A cross-sectional design was chosen because the research was collected at one point in time. Further, the correlational research design allowed an analysis of relationships (See Table1) between variables in a single study. It also determined the degree of relationship between quantitative variables. The advantage of using correlational research is that it can assess any relationships between the variables in daily activities (Stangor, 2012). Additionally, this design was chosen due to limited time to study and collect data and the limited budget for this study.

**Sample Selection and Data Collection Procedures**

This study included a convenience sample of undergraduate students, ages 18-22 years of age, who were enrolled at Minnesota State University, Mankato, spring semester, 2015. The data collection took place during the month of February 2015. The student researcher contacted Professors/Instructors from various courses at Minnesota State University, Mankato by email or in-person dialogue for permission to distribute surveys in their respective classes.

A selection of courses was obtained through public domain information from the university website. Courses containing large numbers of students with a high probability of containing students from diverse backgrounds were selected The various courses included Health and Environment, Consumer Health, First Aid and CPR, Structural Kinesiology and Biomechanics, Psycho-Social Aspects of Sport, Food, Culture, and You, Sports Activities: Yoga and Rock Climbing, Introduction to Sport Management, Introduction to Communication Studies, Introduction to Composition, Beginning Sign Language, Dental Hygiene Community Practicum, Introduction to Psych Science, Introduction to Sociology, Introduction to Philosophy, Nursing Care: Family Crisis,  and College Algebra. The courses were chosen based upon 12 required general education classes by goal areas at Minnesota State University, Mankato. The research was conducted in person at Minnesota State University, Mankato by collecting data from participants attending selected classes, during class time, throughout the university. Participants were asked to complete a traditional paper-pencil survey instrument. This instrument is comprised of three sections. Section #1 is the *Spiritual Wellbeing Scale*. This scale is intended to measure the participants' level of spirituality/religiosity and is comprised of 20, Likert-type items. Section two is the *Ontological Wellbeing Questionnaire*, which is intended to measure the participants' quality of life (past, present, and future). This scale is comprised of 24, modified Likert-type items. Section three assesses demographics of the sample including age, biological sex, race, ethnicity, and religious/spiritual affiliation. These items were adapted (in-part) from the United States Census Bureau. The sample included males and females ages 18 to 22 years old.

All students above 22 years of age and below 18 years of age were excluded from this study.

**Instrumentation**

Two self-report instruments, the Spiritual Well Being Scale and the Ontological Wellbeing Scale, were used to assess religiosity and spirituality and QOL. Permission to use both instruments was obtained either through personal communication with the author or through legal purchase from the copyright holder. The institutional review board approved the research prior to implementation of the study. (See Appendix C).

**Spiritual wellbeing scale.**

The Spiritual Well Being Scale (SWBS) was initially developed as a general indicator of subjective wellbeing (Paloutzian & Ellison, 2009). This scale includes 20 items on a 6-point Likert scale that ranges from strongly agree to strongly disagree. The scale contains two subscales that measure *Religious Wellbeing* (RWB) and *Existential Wellbeing* (EWB). The ten items measuring RWB assessed an individual's relationship with God (such as "I have a personally meaningful relationship with God"). The remaining ten items, that make no reference to religiosity, measured EWB and assessed an individual's sense of life purpose and satisfaction (such as "I feel very fulfilled and satisfied with life") (Ellison & Paloutzian, 2009).

SWB scores according to this scale can range from 20 to 120. Scores in the range of 20 to 40 reflect low spiritual wellbeing, scores that range from 41 to 99 reflect moderate spiritual wellbeing, and scores falling in the range of 100 to 120 reflect high spiritual wellbeing (Anye, Gallien, Bian, & Moulton, 2013). The results from the scale are divided into two subscales. These include a religious wellbeing subscale score, a

existential wellbeing subscale score, and a total for the SWBS. The religious wellbeing score measures one's relationship with God. "A score in the range of 10-20 reflects a sense of unsatisfactory relationship with God, a score in the range of 21-49 reflects a moderate sense of religious wellbeing, and a score in the range of 50-60 reflects a positive view of one's relationship with God" (Ellison & Paloutzian, 2009, p. 6). The existential wellbeing score indicates one's level of life satisfaction and purpose. A score ranging from 10-20 indicates a "low satisfaction with life and possible lack of clarity about one's purpose in life, a score in the range of 21-49 indicates a moderate level of life satisfaction and purpose, and a score in the range of 50-60 indicates a high level of life satisfaction with one's life and a clear sense of purpose" (Ellison & Paloutzian, 2009, p. 6).

An extensive literature search performed by Paloutzian, Bufford, and Wildman (2012) (as cited in Cobb, Puchalski, & Rumbold, 2012) document the use of the Spiritual Wellbeing Scale in over "300 published articles and chapters, 190 doctoral dissertations and Masters theses, 35 posters and presentations, and 50 unpublished papers" (p. 353). There is adequate face validity, and internal consistency reliability, which is revealed in the coefficient alphas including .89 (SWB), .87 (RWB), and .78 (EWB). The SWBS was used in a laboratory study administered by Edmondson, Lawler, Jobe, Younger, Piferi, and Jones (as cited in Cobb, Puchalski, & Rumbold, 2012), to assess the physical health effects of perceived stress after an induced stress experience where subjective wellbeing, heart rate, and systolic blood pressure were measured. EWB results indicated an inverse relationship between an individual's perceived stress and physical health symptoms whereas RWB results revealed an inverse relationship to perceived stress (Cobb,

Puchalski, & Rumbold, 2012). Additionally, during a purposeful stress-induced interview EWB was related to lower heart rates and RWB was inversely related to an increased systolic blood pressure (Cobb, Puchalski, & Rumbold, 2012). The scale was also used to assess mental health effects and those studies revealed an inverse relationship between RWB or EWB and depression (Cobb, Puchalski, & Rumbold, 2012). Two studies assessing college students revealed a strong relationship between EWB and negative moods (Cobb, Puchalski, & Rumbold, 2012). Addtionally, "a major advantage of the scale is that it is not based upon one specific religious or ideological orientation" (Genia, 2001, p. 25).

**The ontological wellbeing scale.**

The Ontological Wellbeing Scale (OWBS) (Şimşek & Kocayörük, 2013) designed to assess QOL or 'life satisfaction', is comprised of 24 questions on a 5-point modified-Likert scale with responses that range from "very slightly or not at all" to "extremely." This scale was developed in 2009 and was tested in five different studies that revealed that the OWBS had "good psychometric qualities regarding factor structure, reliability, and incremental validity" (Şimşek & Kocayörük, 2013, p. 310). Cronbach's alpha coefficient was .91 for the entire scale (Şimşek & Kocayörük, 2013). This scale measures subjective wellbeing through a framework of time in three dimensions including past, present, and future. Time is important because it makes every experience involving one's self, possible (Şimşek & Kocayörük, 2013). The scale has three characteristics including subjective evaluations, which can be described as one's perception of happiness in relation to his or her life, positive measures such as cognitive

and affective components which include positive evaluations of one's life (thoughts and feelings) and total assessment of one's life (Şimşek & Kocayörük, 2013).

This scale evaluates the individual's emotional reactions to his or her life projects or personal story through the lens of time (Şimşek & Kocayörük, 2013) because an individual's life project is always developing. The scale assesses feelings when looking at the completed aspects of his or her life (past), the current (present) and the potential aspects of his or her project (Şimşek & Kocayörük, 2013).

Şimşek & Kocayörük found that the approximate administration time for the survey was ten minutes (2013). The structure of the survey includes emotional adjectives based upon the Levels of Emotional Awareness scale to adequately describe emotions for the three time dimensions.

> Ten adjectives are used to describe the past dimension and all adjectives are related to the theme of 'regret' including: proud, disappointed, satisfied, regretful, upset, guilty, incompetent, lucky, successful and gladness. To describe the present time perspective there were twelve adjectives to describe the theme of pursuing a life project including tired, under pressure, enthusiastic, aimless, lost, motivated, energetic, excited, irresponsible, empty, anxious and helpless. Twelve adjectives were used to describe the future dimension on the theme of hopefulness which included pessimistic, hopeful, strong, doubtful, scared, tense, confident, courageous, looking forward, determined, uneasy, ambitious (Şimşek & Kocayörük, 2013, p. 315).

The results are examined through four components, specifically *Regret, Nothingness, Activation,* and *Hope* (Şimşek & Kocayörük, 2013). Nothingness is defined, as being involved in a circumstance in which there is no possible way of progression and measures the present perspective. This factor comprises of only negative emotions including *aimless, lost, empty, and anxious* (Şimşek & Kocayörük, 2013). Activation is defined by an individual's motivation to fulfill his or her life project and measures the present perspective. This factor comprises of both positive adjectives like *energetic,*

*excited, enthusiastic* and *motivated* and one negative factor, *tired* (Şimşek & Kocayörük, 2013). Regret is defined as an individual's evaluation of past experiences and measures the past perspective. This factor is comprised of both negative adjectives like *regretful, guilty* and *disappointed*, and positive like *proud and satisfied*. (Şimşek & Kocayörük, 2013). Lastly, hope is defined as an individual's ability to pursue his or her life project and measures the future perspective. This factor is comprised of solely positive adjectives, which include *forward-looking, confident, ambitious, and hopeful*. (Şimşek & Kocayörük, 2013).

**Data Analysis**

Participant's responses to individual items along with participants' summated totals for all subscales were analyzed using descriptive statistics. Pearson correlations will be used to assess the relationships between total survey scores for both the SWBS and the OWBS as well as the relationships between total survey scores and specified subscales. Eight total correlations will be analyzed from the data collected (Table 1).

Table 1

*Table of Specifications*

| Research Question (RQ) | Survey items or scales used to assess RQ'S | Level of Data (Nominal, Ordinal, Interval/Ratio)* | Analysis needed to assess RQ |
|---|---|---|---|
| What are the levels of religiosity/spirituality among sampled students at a large, Midwestern university? | - Individual items of the Spiritual Wellbeing Scale <br> - Total summated score of Spiritual Wellbeing Scale | - Ordinal data (individual survey items) <br> - Interval/Ratio data (total summated score) | - Descriptive Statistics including frequencies, percentages, and measures of central tendency and dispersion |

Table 1 (continued)

*Table of Specifications*

| Research Question (RQ) | Survey items or scales used to assess RQ'S | Level of Data (Nominal, Ordinal, Interval/Ratio)* | Analysis needed to assess RQ |
|---|---|---|---|
| What is the relationship between religiosity/spirituality and quality of life among sampled students at a large, Midwestern university? | - Total summated score of Spiritual Wellbeing Scale<br>- Total summated score of :<br>  (A) Total summated score of the Ontological Wellbeing Scale<br>  (B) Total summated score of the four subscales of the Ontological Wellbeing Scale (Hope, Activation, Nothingness, and Regret)<br>  (C) Total summated score of the three time factors (past, present, and future) of the Ontological Wellbeing Scale | - Interval/Ratio data | - Pearson Correlation |

*Note.* *Indicates level of data for survey items, not RQ's

**Summary**

Data was collected from two self-report instruments from a non-random convenience sample of university students to assess religiosity and spirituality and QOL. The SWBS assessed the participant's perception of his or her spiritual and religious life by measuring one's relationship with God and life purpose and satisfaction. The OWBS assessed the participant's perception of QOL through viewing his or her life project as a whole (past, present, & future). Data was analyzed using descriptive statistics and Pearson correlations were used to assess the relationships (See Appendix C). The analysis of the variables assisted in answering the levels of religiosity and spirituality, QOL, and

the relationship between those two variables among sampled university students at a

large, Midwestern university.

**Chapter IV**

**Results**

**Introduction**

The purpose of this study was to assess the levels of religiosity/spirituality among sampled students, aged 18-22, at a large, Midwestern university. Further, the researcher sought to investigate the quality of life among sampled students at this university. In addition, this research examined whether there was a relationship between religiosity/spirituality and quality of life among sampled students. A total of 741 surveys were collected from potential participants and 548 surveys (73.95%) were included in the data analysis. The remainder of the surveys (26.04%; *n*=193) were discarded due to incomplete/missing data or the participant was outside the required age range (< than 18 or < 23 years of age).

**Demographics of the Sample**

The sample of 548 adults consisted exclusively of university students' aged 18 to 22 years who were enrolled in undergraduate courses in the Spring Semester of 2015. The sample was predominantly female (61.5%), Caucasian (87.8%), and non-Hispanic (94.4%). While the age distribution of the sample was diverse, approximately half of the participants were between 19-20 years of age (49.8%). Please refer to Table 2 for additional demographic data.

Table 2

*Description of Participants Demographics (n = 548)*

| Item | n(%) | Item | n(%) |
|---|---|---|---|
| Gender* | | Age* | |
| Male | 210(38.3) | 18 Years | 84(15.3) |
| Female | 337(61.5) | 19 Years | 147(26.8) |
| I do not wish to disclose my sex | 1(0.2) | 20 Years | 126(23.0) |
| Race* | | 21 Years | 101(18.4) |
| White/Caucasian | 481(87.8) | 22 Years | 89(16.2) |
| Black/African American | 18(3.3) | I do not wish to answer | 1(0.2) |
| American Indian/Native American/Alaska Native | 1(0.2) | Ethnicity* | |
| Asian | 18(3.3) | Hispanic | 16(3.2) |
| Other | 6(1.1) | Non-Hispanic | 473(94.4) |
| Two or more races | 19(3.5) | I do not wish to disclose my ethnicity | 12(2.4) |
| I do not wish to disclose my race | 5(0.9) | | |

*Note.* *Totals not equaling 100% indicates missing data

The sample was diverse in terms of religious and spiritual affiliations (Table 3), however the majority of the participants identified their religious/spiritual affiliation as Catholic (33.4%), Lutheran (29.6%) and Non-denominational (6.3%).

Table 3

*Religious and Spiritual Affiliations of University Students (n=527)*

|  | Frequency (*n*) | Percentage (%) |
|---|---|---|
| Catholic | 176 | 33.4 |
| Lutheran | 156 | 29.6 |
| Non-denominational | 33 | 6.3 |
| No religious/spiritual affiliation | 29 | 5.5 |
| Methodist/Wesleyan | 20 | 3.8 |
| Evangelical | 18 | 3.4 |
| Agnostic | 17 | 3.2 |
| Baptist | 16 | 3.0 |
| Atheist | 14 | 2.7 |
| Other | 8 | 1.5 |
| Other Christian | 6 | 1.1 |
| Assemblies of God | 5 | 0.9 |
| Presbyterian | 5 | 0.9 |
| Buddhist | 3 | 0.6 |
| Unitarian/Universalist | 3 | 0.6 |
| Protestant | 2 | 0.4 |
| Pentecostal | 2 | 0.4 |
| Churches of Christ | 2 | 0.4 |
| Muslim | 2 | 0.4 |
| United Church of Christ | 1 | 0.2 |
| Episcopalian/Anglican | 1 | 0.2 |
| Orthodox (Eastern) | 1 | 0.2 |
| Hindu | 1 | 0.2 |
| Native American | 1 | 0.2 |
| Humanist | 1 | 0.2 |
| I do not wish to disclose my religious/spiritual affiliation | 4 | 0.8 |

**Assessment of Research Questions**

**What are the levels of religiosity/spirituality among sampled students at a large, Midwestern university?**

The Spiritual Wellbeing Scale (Table 4) was used to assess the level of spirituality and religiosity among university students at a Midwestern university. An examination of the data revealed that 30.7% of participants strongly disagreed to the statement "I don't find much satisfaction in private prayer with God," 42% strongly disagreed to the

statement that "I believe that God is impersonal and not interested in my daily situations," and 50.7% strongly disagreed to the statement "I don't know who I am, where I came from, or where I am going." Further, 13.3% disagree to the following statement "I believe that God loves me and cares about me."

Additionally, 33.6% of participants agreed that their relationship with God contributes to their sense of wellbeing and 36.1% agreed to feeling very fulfilled and satisfied with life, and 25.7% agreed that "I feel unsettled about my future." Further, over half of the participants (54.5%) strongly agreed to the statement "I believe that God loves me and cares about me," and nearly 60% of participants indicated that they strongly agreed that life is a positive experience and a majority of the participants (59.7%) strongly agreed to the statement "I believe that there is some real purpose for my life." Please refer to Table 4 for additional data from the Spiritual Wellbeing Scale.

Table 4

*Spiritual Wellbeing in University Students*

| | *n* | Strongly Agree *n*(%) | Moderately Agree *n*(%) | Agree *n*(%) | Disagree *n*(%) | Moderately Disagree *n*(%) | Strongly Disagree *n*(%) |
|---|---|---|---|---|---|---|---|
| I don't find much satisfaction in private prayer with God | 548 | 49(8.9) | 41(7.5) | 54(9.9) | 130(23.7) | 106(19.3) | 168(30.7) |
| I don't know who I am, where I came from, or where I am going | 548 | 7(1.3) | 20(3.6) | 24(4.4) | 101(18.4) | 118(21.5) | 278(50.7) |
| I believe that God loves me and cares about me | 548 | 293(54.5) | 62(11.3) | 120(21.9) | 27(4.9) | 12(2.2) | 34(6.2) |

Table 4 (continued)

*Spiritual Wellbeing in University Students*

| | n | Strongly Agree n(%) | Moderately Agree n(%) | Agree n(%) | Disagree n(%) | Moderately Disagree n(%) | Strongly Disagree n(%) |
|---|---|---|---|---|---|---|---|
| I feel that life is a positive experience | 548 | 320(58.4) | 121(22.1) | 93(17.0) | 7(1.3) | 5(0.9) | 2(0.4) |
| I believe that God is impersonal and not interested in my daily situations | 548 | 29(5.3) | 27(4.9) | 55(10.0) | 131(23.9) | 76(13.9) | 230(42.0) |
| I feel unsettled about my future | 548 | 27(4.9) | 48(8.8) | 141(25.7) | 135(24.6) | 108(19.7) | 89(16.2) |
| I have a personally meaningful relationship with God | 548 | 113(20.6) | 86(15.7) | 182(33.2) | 74(13.5) | 36(6.6) | 57(10.4) |
| I feel very fulfilled and satisfied with life | 548 | 152(27.2) | 153(27.9) | 198(36.1) | 33(6.0) | 7(1.3) | 5(0.9) |
| I don't get much personal strength and support from my God | 548 | 41(7.5) | 31(5.7) | 61(11.1) | 154(28.1) | 101(18.4) | 160(29.2) |
| I feel a sense of wellbeing about the direction my life is headed in | 548 | 151(27.6) | 169(30.8) | 190(34.7) | 28(5.1) | 7(1.3) | 3(0.5) |
| I believe that God is concerned about my problems | 548 | 166(30.3) | 86(15.7) | 162(29.6) | 69(12.6) | 19(3.5) | 46(8.4) |

Table 4 (continued)

*Spiritual Wellbeing in University Students*

| | n | Strongly Agree n(%) | Moderately Agree n(%) | Agree n(%) | Disagree n(%) | Moderately Disagree n(%) | Strongly Disagree n(%) |
|---|---|---|---|---|---|---|---|
| I don't enjoy much about life | 548 | 0(0.0) | 3(0.5) | 11(2.0) | 70(12.8) | 106(19.3) | 358(65.3) |
| I don't have a personally satisfying relationship with God | 548 | 46(8.4) | 27(4.9) | 86(15.7) | 123(22.4) | 108(19.7) | 158(28.8) |
| I feel good about my future | 548 | 193(35.2) | 159(29.0) | 162(29.6) | 27(4.9) | 6(1.1) | 1(0.2) |
| My relationship with God helps me not to feel lonely | 548 | 108(19.7) | 80(14.6) | 159(29.0) | 104(19.0) | 36(6.6) | 61(11.1) |
| I feel that life is full of conflict and unhappiness | 548 | 16(2.9) | 35(6.4) | 106(19.3) | 146(26.6) | 123(22.4) | 122(22.3) |
| I feel most fulfilled when I'm in close communion with God | 548 | 95(17.3) | 69(12.6) | 152(27.7) | 117(21.4) | 48(8.8) | 67(12.2) |
| Life doesn't have much meaning | 548 | 2(0.4) | 2(0.4) | 8(1.5) | 78(14.2) | 70(12.8) | 388(70.8) |
| My relationship with God contributes to my sense of wellbeing | 548 | 111(20.3) | 82(15.0) | 184(33.6) | 80(14.6) | 27(4.9) | 64(11.7) |
| I believe there is some real purpose for my life | 548 | 327(59.7) | 101(18.4) | 110(20.1) | 4(0.7) | 3(0.5) | 3(0.5) |

The Spiritual Wellbeing Scale has three primary sub-scales, including Spiritual Wellbeing (SWB), Religious Wellbeing (RWB), and Existential Wellbeing (EWB). A total SWB was calculated using the sum of all 20 items. The SWB scores ranged from 30 to 120 and indicate that the sample mean score for SWB was 91.62 (SD=17.30). According to the scale authors, this falls into the moderate range of perceived overall wellbeing (Paloutzian & Ellison, 2009). The RWB results indicate a sample mean score of 42.27(SD=13.52), indicating a moderate sense of satisfaction and connection with God. Further, scores from EWB indicate a sample mean score of 49.35(SD=7.18), which suggests a high level of life satisfaction and purpose. For more descriptive information regarding the SWBS and subscales, see Table 5.

Table 5

*Descriptive Statistics for Spiritual Wellbeing Scale and Subscales*

|  | *n* | Range | Minimum | Maximum | Mean | Std. Deviation | Variance |
|---|---|---|---|---|---|---|---|
| Spiritual Wellbeing | 548 | 90.00 | 30.00 | 120.00 | 91.62 | 17.30 | 299.42 |
| Religious Wellbeing | 548 | 50.00 | 10.00 | 60.00 | 42.27 | 13.52 | 182.80 |
| Existential Wellbeing | 548 | 47.00 | 13.00 | 60.00 | 49.35 | 7.18 | 51.52 |

**What is the quality of life among sampled students at a large, Midwestern university?**

The Ontological Wellbeing Scale (Table 8) was used to assess perceived quality of life among university students at a Midwestern university. An examination of the data revealed that a nearly 80% participants reported feeling proud of their past, and 70% of participants indicated feeling satisfied when looking at the completed part of their life

project. In contrast, over one-third (36.3%) felt disappointed when looking at the completed part of their life project.

Participants were asked about how they felt when looking at the ongoing part of their life project, nearly 25% of participants indicated feeling tired, nearly 70% of participants reported feeling enthusiastic, and a majority of participants (70%) reported feeling motivated. The analysis also revealed that 33.4% of participants indicated feeling anxious in their present life project.

An analysis of data from the future perspective reveals that 87.6% of participants indicated feeling hopeful when looking at their future life project. A majority of participants (75%) indicated feeling confident when considering their future life project. In addition, nearly four out of five (79.6%) participants reported feeling ambitious when they look at their future life project. For more descriptive information regarding the OWBS see Table 6.

Table 6

*Ontological Wellbeing in University Students*

|  | *n* | Very Slightly or not at all 1 *n*(%) | 2 *n*(%) | 3 *n*(%) | 4 *n*(%) | Extremely 5 *n*(%) |
|---|---|---|---|---|---|---|
| Proud | 548 | 0(0.0) | 18(3.3) | 96(17.5) | 291(53.1) | 143(26.1) |
| Disappointed | 548 | 262(47.8) | 199(36.3) | 69(12.6) | 15(2.7) | 3(0.5) |
| Satisfied | 548 | 8(1.5) | 27(4.9) | 120(21.9) | 256(46.7) | 137(25.0) |
| Regretful | 548 | 214(39.1) | 204(37.2) | 91(16.6) | 32(5.8) | 7(1.3) |
| Upset | 548 | 361(65.9) | 128(23.4) | 50(9.1) | 7(1.3) | 2(0.4) |
| Guilty | 548 | 348(63.5) | 134(24.5) | 51(9.3) | 10(1.8) | 5(0.9) |
| Incompetent | 548 | 404(73.7) | 89(16.2) | 42(7.7) | 10(1.8) | 3(0.5) |
| Tired | 548 | 122(22.3) | 163(29.7) | 135(24.6) | 90(16.4) | 38(6.9) |
| Enthusiastic | 548 | 9(1.6) | 31(5.7) | 130(23.7) | 218(39.8) | 160(29.2) |
| Aimless | 548 | 304(55.5) | 153(27.9) | 68(12.4) | 19(3.5) | 4(0.7) |

Table 6 (continued)

*Ontological Wellbeing in University Students*

| | n | Very Slightly or not at all 1 n(%) | 2 n(%) | 3 n(%) | 4 n(%) | Extremely 5 n(%) |
|---|---|---|---|---|---|---|
| Motivated | 548 | 4(0.7) | 35(6.4) | 112(20.4) | 214(39.1) | 183(33.4) |
| Energetic | 548 | 5(0.9) | 48(8.8) | 152(27.7) | 202(36.9) | 141(25.7) |
| Excited | 548 | 4(0.7) | 25(4.6) | 88(16.1) | 207(37.8) | 224(40.9) |
| Irresponsible | 548 | 305(55.7) | 162(29.6) | 58(10.6) | 15(2.7) | 8(1.5) |
| Empty | 548 | 409(74.6) | 76(13.9) | 44(8.0) | 15(2.7) | 4(0.7) |
| Anxious | 548 | 76(13.9) | 107(19.5) | 179(32.7) | 117(21.4) | 69(12.6) |
| Helpless | 548 | 382(69.7) | 113(20.6) | 41(7.5) | 11(2.0) | 1(0.2) |
| Hopeful | 548 | 3(0.5) | 14(2.6) | 51(9.3) | 161(29.4) | 319(58.2) |
| Strong | 548 | 1(0.2) | 25(4.6) | 80(14.6) | 209(38.1) | 233(42.5) |
| Confident | 548 | 2(0.4) | 36(6.6) | 87(15.9) | 208(38.0) | 215(39.2) |
| Courageous | 548 | 6(1.1) | 29(5.3) | 115(21.0) | 197(35.9) | 201(36.7) |
| Looking Forward | 548 | 1(0.2) | 18(3.3) | 63(11.5) | 198(36.1) | 268(48.9) |
| Ambitious | 548 | 5(0.9) | 20(3.6) | 87(15.9) | 191(34.9) | 245(44.7) |

The Ontological Wellbeing Scale has three primary scales including past, present, and future, and four subscales including nothingness, hope, regret, and activation. The OWB total results indicate that the sample mean score for OWB was 99.41 (SD = 12.98). This indicates a moderate to high QOL. The past project results indicate a sample mean score of 29.88 (SD = 3.98). This falls into the high range of QOL. The present project results indicate a sample mean score of 44.34 (SD = 6.57). This falls into the high range of QOL. The future project results indicate a sample mean score of 25.20 (SD = 4.41). This falls into the high range of QOL. For more descriptive information regarding the OWBS and subscales, see Table 7.

Table 7

*Descriptive Statistics for Ontological Wellbeing (OWB) Scale and Subscales*

| | $n$ | Range | Minimum | Maximum | Mean | Std. Deviation | Variance |
|---|---|---|---|---|---|---|---|
| OWB Total | 548 | 64.00 | 56.00 | 120.00 | 99.42 | 12.98 | 168.52 |
| Nothingness | 548 | 18.00 | 6.00 | 24.00 | 10.88 | 3.68 | 13.55 |
| Hope | 548 | 21.00 | 9.00 | 30.00 | 25.20 | 4.41 | 19.44 |
| Regret | 548 | 21.00 | 7.00 | 28.00 | 12.12 | 3.98 | 15.84 |
| Activation | 548 | 19.00 | 6.00 | 25.00 | 19.22 | 3.84 | 14.74 |
| Past Project | 548 | 21.00 | 14.00 | 35.00 | 29.88 | 3.98 | 15.84 |
| Present Project | 548 | 34.00 | 21.00 | 55.00 | 44.34 | 6.57 | 43.15 |
| Future Project | 548 | 21.00 | 9.00 | 30.00 | 25.20 | 4.41 | 19.44 |

**What is the relationship between religiosity/spirituality and quality of life among sampled students at a large, Midwestern university?**

A total of 24 total Pearson correlations were conducted to examine the association between all scales and subscales. The relationship between OWB and SWB revealed a moderately positive, statistically significant relationship ($r(546) = .503$, $p<0.5$).

Additionally, a weak, positive, statistically significant relationship ($r(546) = .246$, $p<0.5$) existed between OWB and RWB. Further, a strong positive statistically significant relationship ($r(546) = .747$, $p<0.5$) existed between OWB and EWB. For more descriptive information regarding the correlations between the SWBS and OWBS and subscales, see Table 8.

Table 8

*Correlations Between Spiritual Wellbeing Scale and The Ontological Wellbeing Scale*

|  | Nothingness | Hope | Regret | Activation | Past Project | Present Project | Future Project | Ontological Wellbeing |
|---|---|---|---|---|---|---|---|---|
| Spiritual Wellbeing | -.324* | .438* | .-358* | .515* | .358* | .483* | .438* | .503* |
| Religious Wellbeing | -.120* | .206* | .-171* | .305* | .171* | .246* | .206* | .246* |
| Existential Wellbeing | -.553* | .670* | -.540* | .669* | .540* | .701* | .670* | .747* |

*Note.* *p<0.5

**Summary**

An assessment of the data collected revealed that Midwestern university participants have moderate levels of religiosity and spirituality according to the SWBS. Further, participants have a moderate sense of perceived overall wellbeing (SWB), a moderate sense of satisfaction and connection with God (RWB), and a high level of life satisfaction and purpose (EWB).

Further, an assessment of the OWBS responses revealed that sampled Midwestern university participants have a moderate to high QOL. Participants indicated a high level of QOL when looking at the past, present, and future aspects of their life.

Based upon the 24 total Pearson correlations that were conducted to examine the association between religiosity and spirituality and QOL, the relationship between OWB and SWB indicated a moderately positive statistically significant relationship. The examination of the OWB and RWB results indicated a weak positive statistically significant relationship. Further, the examination of the OWB and EWB indicated that a

strong positive statistically significant relationship existed between the variables. The

summary, conclusions, and future recommendations of this research are provided in

chapter five.

**Chapter V**

**Interpretation of Findings**

**Introduction**

The purpose of this study was to identify sampled university participants levels of religiosity and spirituality using the Spiritual Wellbeing Scale and to identify levels of quality of life using the Ontological Wellbeing Scale. Further, this study examined the relationship between religiosity and spirituality and subjective quality of life in sampled university students, 18-22 years of age.

This research focused on identifying the selected sample's level of religiosity and spirituality and the relationship of that level to their overall quality of life or life satisfaction. This chapter includes an interpretation and explanation of the research findings, conclusions, discussion, and recommendations for future research.

**Interpretation and Explanation of the Research Questions**

Data for this study was collected using a supervised format through a traditional paper-pencil survey instrument. Through a non-random convenience sample of undergraduate courses, 548 participants completed the survey. The survey included demographic items, and items assessing spiritual wellbeing, and ontological wellbeing.

The findings indicate that sampled university participants have a moderate spiritual wellbeing mean score. Additionally, most students have a moderate sense of religious wellbeing and life satisfaction and purpose. College can be stressful and a time of transition where finding happiness can be difficult. Common stressors for university students range from finances and work responsibilities to social pressures and

expectations and relationship changes. Students' are often striving to find sources of happiness. Many students may look for ways to cope with the daily stress from school, work, or even relationship stress and may be constantly under the influence of drugs to suppress their feelings and/or to fit in. Common college behaviors include "hooking up", or engaging in casual sexual encounters (Holman and Sillars, 2011), or chemical misuse or abuse. For some, these behaviors can be a refreshing means of a temporary escape from stress. Thus, the researcher anticipated a low SWB among this sample population because of the common coping mechanisms of this specific population.

The weak correlation ($r(546) = .246$, $p<0.5$) in this study between religious wellbeing and quality of life may be explained by recent research from Montomery-Goodnough and Gallagher (2007) that there has been a paradigm shift from religion to spirituality in the university student population. The weak correlation between religious wellbeing and quality of life may indicate that although the individual identifies with a religious/spiritual affiliation, he or she is not actively seeking and growing in that faith. The researcher expected a weak relationship between religious wellbeing and quality of life because of previous research. Krause and colleague's (2000) research may also explain this weak correlation through the implications of religious and spiritual struggles. For example, if an individual has experienced disappointments from others, specifically clergy members, it may lead to doubt regarding faithfulness and trustworthiness in other relationships (as cited in Hill & Pargament, 2003). An individual's search for the divine can be helpful or harmful based upon personal experiences and the kind of God the individual discovers and the relationship that is formed with that God. This too could explain the weak correlation between religious wellbeing and quality of life and also

aligns with prior research from Pargament and Mahoney (2002). Further, the weak positive correlation does not coincide with all research. A recent study found that individuals who were more religiously involved tended to have positive associations with psychological wellbeing indicators such as overall satisfaction with life, happiness, and confidence and experienced less depression, suicidal thoughts and behavior and drug use/abuse (Moreira-Almeida, Neto, & Koenig, 2006).

The strong relationship between existential wellbeing and quality of life indicates that the participants' may feel a strong sense of life purpose and satisfaction. This also indicates that a majority of participant's happiness or satisfaction is coming from a source other than his/her faith. Therefore, additional research could be done to identify where this other element of happiness is coming from.

The analysis of the Ontological Wellbeing Scale indicates that a majority of the participant's had a moderate to high quality of life (M=99.42; SD=12.98), when looking at the past, present, and future aspects of life. However, the findings do not coincide with the student researcher's assumptions. The assumption was that university students' would have a low to moderate quality of life, indicating a lack of satisfaction and purpose in life. This assumption was based upon the WHO definition of quality of life and the idea that most people interpret their quality of life based upon their expectations of where they are in this stage of their life. Further, most university students expect to be involved in partying, have a social life, build friendships or relationships, get involved around campus, and succeed academically. Therefore, the expectations are not solely based on his or her faith but rather satisfaction.

In addition, the assumption is that a majority of participants have the ability and opportunity to be surrounded by others, which can help a person feel loved and cared for. Based upon this notion of quality of life, one would anticipate that most students should have a high quality of life because their expectations are being met and therefore feel satisfied. Additionally, college students may have different quality of life indicators than other populations. This may explain why the strongest correlation from the results was between existential wellbeing and quality of life because they are meeting their expectations. This alludes that there is a perception among these students that there is no need to pursue a higher power in this stage of one's life. That notion would explain the weak relationship between religious wellbeing and quality of life. The correlation between religious wellbeing and quality of life may have been weak because many students identify with a religious/spiritual affiliation but do not put it into practice.

**Conclusions**

Based on findings, the researcher concluded that there is a positive statistical association between quality of life and spiritual wellbeing. Interestingly, the strongest positive correlation was between ontological wellbeing and existential wellbeing. This indicates that the majority of the participants' had a moderately close relationship to God and a strong sense of life purpose or satisfaction. A majority of participants' felt they had a sense of whom they were, where they came from, and where they were going and that there is some real purpose for their life. Additionally, it was concluded that most students believe that God is concerned about their problems.

 It was also concluded that the majority of participants felt proud and satisfied when considering the completed aspects of their lives. In addition, the majority of

participants felt excited, motivated, and enthusiastic about their present life project. Further, when asked about one's future life project, most participants indicated feeling confident, hopeful, and forward looking. It is also crucial to note that all analyzed relationships were statistically significant though they varied in strength.

**Discussion**

Analysis of the collected data revealed that nearly 80% of participants' indicated feeling proud of their past and 70% of participants' indicated feeling satisfied. However, 36.3% of participants' felt somewhat disappointed when looking at the completed part of their life project. Further, as spiritual wellbeing increased, nothingness and regret decreased and hope and activation increased. As spiritual wellbeing increased, so did one's outlook on the present project of life. Additionally, as religious wellbeing increased, regret decreased which is what the researcher hypothesized.

Two components of the ontological wellbeing subscale measured the present perspective including nothingness and activation. Activation is defined by the participants' motivation to fulfill his or her life project. In addition, nothingness is described by being involved in a circumstance in which there is no possible way of progression. The analysis revealed that 33.4% of participants indicated feeling anxious in their present life project. Additionally, findings from this study show that 7% of participants reported feeling lost in their present life project. This is fairly consistent with a 2013 national survey reporting that just over half of all participants surveyed felt overwhelming anxiety over the last 12 months (American College Health Association, 2013). This indicates that a majority of students feel a strong sense of direction in their daily lives. This is consistent with previous findings, which indicate that religiosity and

spirituality can provide individuals with a sense of direction for their life. When seeking

clarity and direction, spirituality can bring guidance and direction to one's life (Dalton,

Eberhardt, Bracken & Echols, 2006). Although most university students are seeking

happiness through social, financial, and academic challenges, pressure, and expectations

(Dalton, Eberhardt, Bracken, & Echols, 2006), only 3% of participants indicated strong

feelings of emptiness. This finding indicates the importance of the spiritual quest to

discover wholeness in the midst of those circumstances and offers personal fulfillment

and significance. Spirituality can assist in unifying a chaotic life and lead to personal

discovery that leads to happiness and purpose (Dalton, Eberhardt, Bracken, & Echols,

2006). Almost half (46%) of participants strongly or moderately agreed to the statement

"I believe that God is concerned about my problems." This finding aligns with Holman

and Sillars' (2011) who reported that religious and spiritually mature individuals often

turn to a higher power for support and direction in critical times.

The findings related to one's future dimension are related to the theme of

hopefulness. Hope in this context is the participants' ability to pursue his or her life

project.  An analysis of data from the future perspective reveals that nearly 80% of

participants indicated feeling hopeful when looking at their future life project. A majority

of participants (75%) indicated feeling confident when considering their future life

project. These results coincide with other research that found that individuals who were

more religiously involved tended to have positive associations with psychological

wellbeing indicators such as overall satisfaction with life, happiness, and confidence.

Additionally, there have been other positive associations such as optimism, hope, self-

esteem, and meaning and purpose in life (Moreira-Almeida, Neto, & Koenig, 2006).

**Recommendations for Health Educators**

Based on findings from this study, recommendations for health educators include methods that promote and explore religiosity and spirituality among the college population. Health educators may encourage universities to actively pursue opportunities to promote self-exploration and the practice of existential wellbeing and religious wellbeing. Health educators may promote the exploration of views and belief systems (religious and spiritual), assist university students in understanding their "greater purpose," and answering life questions such as "who am I, where am I going, what can I believe in, how can I be happy, and will my life make a difference" (Dalton, Eberhardt, Bracken & Echols, 2006, p. 5). Further, health educators provide opportunities for students' to find a sense of meaning and belonging and identify their sources of pleasure and happiness. Opportunities for existential wellbeing exploration include course selection (such as philosophy), engagement in discussions, and understanding self-worth and self-esteem (such as volunteer opportunities). Opportunities for religious wellbeing exploration include exploring religion and religious views (such as student groups) and providing opportunities for students' to practice.

A health educator can use this data to improve mental and spiritual health among the university population. This research indicated that 33.4% of participants indicated feeling "anxious" in the ongoing part of their life. A health educator should be concerned with the coping mechanisms of this population when considering the number of individuals who feel anxious. Health educators can play an active role in the Healthy People 2020 public health goal to improve quality of life by focusing on this dimension of wellness (Centers for Disease Control and Prevention, 2011).

Additionally, the findings indicate that a majority of students are motivated, excited, fulfilled and feel a sense of direction. Health educators can promote spiritual wellbeing by providing opportunities to implement religiosity and spirituality into university curriculum and programs. Religiosity and spirituality can provide motivation and life direction. Opportunities for health educators include the exploration of a variety of views and belief systems (religious and nonreligious). In addition, an individual search for truth, meaning and purpose. Health educators may provide activities that allow the student to appreciate his or her potential and identify the path that will lead to success. These activities provide opportunities to develop strong, lasting relationships and awareness with one's self, others, and a higher power (Hawks, Hull, Thalman, & Richins, 1995).

Further, health educators can promote religiosity and spirituality by providing students with resources to increase their knowledge and level of religiosity and spirituality. Practical implications include offering and promoting alternative spring break trips, mission trips, a mindfulness meditation intervention, concerts, and speakers and forums where university students can examine and discuss religiosity and spirituality.

Quality of life may be enhanced or diminished in the transition to college. Health educators can play an active role in promoting religiosity and spirituality. Research findings reveal that religiosity and spirituality can serve as protective resources against unhealthy behaviors. Therefore, promoting religious and spiritual identity to decrease levels of alcohol, tobacco, and marijuana use (Burke, Van Olphen, Eliason, Howell & Gonzalez, 2012). A mindfulness meditation intervention may greatly impact university students'. The intervention's spiritual impact could improve connectedness with self,

self-awareness, body image, and greater life purpose. The behavioral impact could improve stress reduction techniques and decrease need for medication. Specific health impacts could include reduced anxiety, pain, depression, panic attacks, and improved psychologic attitudes (Hawks, Hull, Thalman, & Richins, 1995).

Further, practical implications for health educators are to provide students' opportunities to explore religious and existential wellbeing. However, research does show that there is a positive, healthy, correlation between spiritual wellbeing and quality of life. Therefore, health educators may consider opening up opportunities for university students to explore this. Promoting religious wellbeing and existential wellbeing can be as simple as discovering practical ways to provide students opportunities to increase religious wellbeing and existential wellbeing scores. For example, consider a question from the existential wellbeing scale, "I don't know who I am, where I came from, or where I am going." Health educators may take an active approach to this by encouraging students to explore their purpose in life. This may include taking philosophical courses or promoting in-depth discussions among other students about where they are going. Further, promoting involvement in established clubs or organizations might be beneficial to this population. On the other hand, health educators may help students discover a more purposeful and meaningful relationship with God by opening up opportunities for students to explore various religions to see what they have to offer. This could be done by joining a club or organization, attending conferences or speakers, or reading books.

**Recommendations for Future Research**

Recommendations for future research are to include an additional item to the survey instruments to explore the participant's behavioral expression of spirituality to

assess the frequency of religious activities. Examples of this may include but are not limited to time spent in personal prayer, mindfulness meditation, attending church, practicing yoga or reading spiritual literature. This study focused primarily on intrinsic religiosity so additional research on extrinsic religiosity could add to these results. Further research may want to focus on creating guidelines for spiritual health such as those placed for physical activity. Recommendations could include acts of service such as volunteering, engaging in community, meditating, starting a gratitude journal to reflect and give thanks, or any other interventions that may enhance spirituality in ones life.

Additionally, further research may use a tool that captures the true essence of all the dimensions of spirituality and religiousness. Higher Education Research Institute has developed an instrument made up a combination of 12 scales that measures spirituality and religiousness. This scale more appropriately measures the multidimensionality of spirituality and religiousness. The items that comprise each scale include but are not limited to a spiritual quest, equanimity, religious engagement, religious/social conservatism, religious skepticism and charitable involvement (HERI, 2003). This scale more broadly encompasses the dimensions of religiosity and spirituality however it is an extensive survey to complete. Further, the amount of data that can be analyzed and interpreted would greatly add to research.

Another way to add to this research is to implement an experimental intervention on a university campus instead of descriptive research. A previous assessment of a mindfulness meditation intervention (group support, imagery, yoga, body scan, and mindful awareness) demonstrated the influence of spiritual behavior on health outcomes. Spiritually, there was an increase in connectedness with self, self-awareness, body image,

and greater life purpose. The intervention's health impact included decreased anxiety, depression, and improved psychological attitudes (Hawks, Hull, Thalman, & Richins, 1995).

Additionally, future research should examine different measures of religiosity, spirituality, and quality of life. Further, examination of other quality of life variables such as occupation, relationships, and financial wellbeing may be beneficial to future researchers. In addition, a more diverse sample is needed. A majority of the study sample consisted of individuals who were female, Caucasian, non-Hispanic, ages 19-20 years old and dominantly Christian. Therefore, further research needs to be done with other racial/ethnic groups, different religious or spiritual affiliations and more male participants. However, it is worth noting that a typical religious composition of Minnesota indicates the top three traditions as Catholic (28%), Evangelical Protestant (21%) and Mainline Protestant (32%) (Pew Research, 2013). Further, examining non-university students between the ages of 18-22 may be beneficial. Additionally, a longitudinal approach may be beneficial to see if quality of life or personal beliefs change following college.

Future researchers may want to consider conducting a regression analysis on the variables to identify where the other elements of happiness are coming from. A prediction model would help identify what other variables need to be examined to better understand the weak significant correlation between religion and quality of life. Additionally, other components of quality of life must be examined to better identify quality of life. Future researchers may look beyond religion and spirituality and consider relationships, socio-economic status, and jobs.

**Summary**

As noted earlier, just as health is more than blood pressure, spirituality is more than feeling connected to life, and religiousness is more than attending church services (Plante & Sherman 2001). Measuring religiosity and spirituality and developing interventions can be a challenging task for health educators because of the depth of this dimension of wellness. However, this study has proven that that spiritual wellbeing is related to one's subjective quality of life. Therefore, the next step for health educators is to create and implement opportunities for students to find personal meaning in life and relationships and provide tools that will help increase the participants' level of religiosity and spirituality.

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**Appendices**

**Appendix A**

**Permission to Use Survey Instrument**

← ≪ →

Kreitlow, Abby A

Mon 11/24/2014 3:13 PM

Sent Items

Mark as unread

Hello,

My name is Abby and I am a graduate student at Minnesota State University, Mankato. I am in the process of writing my Master's Thesis on Religiosity/Spirituality and Quality of Life in Undergraduate Students.

I recently discovered some of your work and was extremely impressed with the content and the ideas you presented on the life project.

As I am seeking out a scale to measure students overall quality of life, I have yet to find one quite like The Ontological Well-Being Scale. I like that it includes the past, present, and future. I think that it would be a great scale to use to assess the relationship between high/low levels of religiosity/spirituality and an individual's quality of life.

This instrument would be very helpful to my research. I would like to ask permission to use the scale in order to conduct my research needed to complete my thesis and graduate.

Thank you for your time and consideration.
Sincerely,
Abby

Inquiry about Ontological Well-Being Scale

≫

← REPLY    ≪ REPLY ALL    → FORWARD    •••

Omer Faruk Simsek <simsekof@gmail.com>

Tue 11/25/2014 2:46 AM

Mark as unread

To: ☐Kreitlow, Abby A;

Action Items    + Get more apps

Dear Abby,
thank you very much for your interest in the OWB Scale. You can sure use the scale and please let me know if you need something about statistics or anything about your project.
Best
Omer

**Appendix B**

**Print Copy of Informed Consent**

**Title:** Religiosity/Spirituality and Quality of Life Among Selected University Students
**Faculty advisor:** Dr. Joseph D. Visker, Department of Health, Science Minnesota State University, Mankato
**Student investigators:** Ms. Abby A. Kreitlow, Graduate Student, Department of Health Science, Minnesota State University, Mankato
**IRBNet #: 717352**

What is the purpose of the study?
You are being invited to take part in a survey research study designed to assess the relationship between spirituality/religiosity and quality of life among selected university students.

What is the purpose of this form?
This consent form gives you the information you will need to help you decide whether to be in the study or not.  Please read the form carefully.  You may ask any questions about the research, the possible risks and benefits, your rights as a volunteer, and anything else that is not clear.  When all of your questions have been answered, you can decide if you want to be in this study or not.

Why am I being invited to participate?
You are being invited to take part in this study because you are a student at Minnesota State University, Mankato.  If you choose not to take the survey or are not eligible, you need not proceed through the survey. You may turn it in blank. Only individuals ages 18 years of age and above are permitted to take the survey.

What will happen during this study and how long will it take?
If you agree to take part in this study, your involvement will last for approximately 20-25 minutes. You are being asked to complete a survey that will assess religiosity/spirituality, quality of life, and selected demographic items. Your completion of the survey marks the end of participation in this study.

What are the risks of this study?
There are few reasonably foreseeable risks in completing the survey. However, the study of religiosity/spirituality is a sensitive issue, as many perceive these to be private matters. Further, while the risk is extremely low, when collecting demographic data (such as age and race) there is a minute probability of a breach in confidentiality/anonymity. You are free to skip ANY question you do not feel comfortable answering.  Please also do not put your names or any other identifying marks on the survey. Your responses will remain anonymous.

Should anyone feel uncomfortable after completion of the survey, please contact the Minnesota State University Counseling center at 507-389-1455 or 507-625-9034 for after-hours emergencies.

What are the benefits of this study?
There are no benefits to you the participant for completing this study. However, it is hoped that the information gained from this study will allow health professionals to better understand the dynamic nature of the relationship between religiosity/spirituality and quality of life and therefore understand factors that could improve the lives of students.

Who will see the information?

The information you provide during this research study will be kept confidential to the extent permitted by law.  To help protect your confidentiality, we will ensure that only the principle researcher and student-researcher will have access to the completed surveys. Your name will NOT be attached to the survey nor will any other information capable of personally identifying you. Surveys will be stored in a secure location and all surveys will be destroyed within 5 years of completion of this study. We will take all reasonable steps to protect your identity. If the results of this project are published your identity will not be made public.

Do I have a choice to take part in this study?
If you decide to take part in the study, it should be because you really want to volunteer.  You will not lose any benefits or rights you would normally have if you choose not to volunteer.  You can stop at any time during the study and still keep the benefits and rights you had before volunteering.  You will not be treated differently if you decide to stop taking part in the study.  Participation or nonparticipation will not impact your relationship with Minnesota State University, Mankato. If you have questions about the treatment of human participants and Minnesota State University, Mankato, contact the IRB Administrator, Dr. Barry Ries, at 507-389-2321 or barry.ries@mnsu.edu.

Under Federal regulations, you have the right to have your name associated with this study, however this is not a requirement for participation and is not recommended as this would be the only thing linking you to the study. If you wish to have your name associated with this study, please sign below and turn in this document with your completed survey. Those who want their name associated with this study may obtain a copy of this document by contacting Dr. Joseph Visker (joseph.visker@mnsu.edu). Your names will remain confidential and the documents will be kept in the locked office of Dr. Joseph Visker for a period of three years. Those who wish to participate and do not wish to have their names associated with this study may simply complete the survey and keep this unsigned document for your records, as completion of the survey will imply informed consent. Thank you for your time and if you have any questions or concerns, please free to contact the Minnesota State University, Mankato Institutional Review Board or Dr. Joseph Visker (Primary Investigator).

**Your Name (Print):**      _____

**Your Signature:**        _____

**Contact Information:**
**Joseph D. Visker, PhD, MCHES**
**Department of Health Science**
**Minnesota State University, Mankato**
**Email:** joseph.visker@mnsu.edu
**Phone: 507-389-2757**

Wording adapted from: Truman State University. (2014). *Institutional Review Board Forms*. Retrieved from http://irb.truman.edu/forms.asp.

**Appendix C**

**Institutional Review Board Letter of Approval**

**MINNESOTA STATE UNIVERSITY**
**MANKATO**

February 11, 2015

Dear Joseph Visker, PhD:

Re: IRB Proposal  entitled "[717352-3] Religiosity/Spirituality and Quality of Life Among Selected University Students"
Review Level: Level [I]

Your IRB Proposal has been approved as of February 11, 2015. On behalf of the Minnesota State University, Mankato IRB, we wish you success with your study. Remember that you must seek approval for any changes in your study, its design, funding source, consent process, or any part of the study that may affect participants in the study. Should any of the participants in your study suffer a research-related injury or other harmful outcome, you are required to report them to the Associate Vice-President of Research and Dean of Graduate Studies immediately.

The approval of your study is for one calendar year less a day from the approval date.  When you complete your data collection or should you discontinue your study, you must submit a Closure request (see http://grad.mnsu.edu/irb/continuation.html). Please include your IRBNet ID number with any correspondence with the IRB.

The Principal Investigator (PI) is responsible for maintaining signed consent forms in a secure location at MSU for 3 years. If the PI leaves MSU before the end of the 3-year timeline, he/she is responsible for following "Consent Form Maintenance" procedures posted online (see http://grad.mnsu.edu/irb/storingconsentforms.pdf).

Sincerely,

Mary Hadley, Ph.D.
IRB Coordinator

Julie Carlson, Ed.D.
IRB Co-Chair

- 1 -

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Jeffrey Buchanan, Ph.D.
IRB Co-Chair

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