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THE RELATIONSHIP BETWEEN SPIRITUAL BELIEF,
LIFE ATTITUDE, AND MENTAL HEALTH AMONG
PHYSICAL FITNESS PARTICIPANTS IN
NORTHERN INDIANA

A Dissertation Proposal
Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

by

Sharon K. Sacks

June 2002

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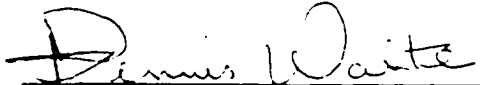
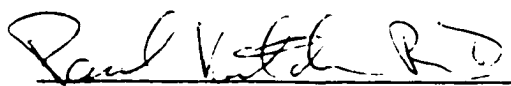
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A dissertation
presented in partial fulfillment
of the requirements for the degree
Doctor of Philosophy

by

Sharon K. Sacks

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ABSTRACT

THE RELATIONSHIP BETWEEN SPIRITUAL BELIEF,
LIFE ATTITUDE, AND MENTAL HEALTH AMONG
PHYSICAL FITNESS PARTICIPANTS IN
NORTHERN INDIANA

by

Sharon Sacks

Chair: Nancy J. Carbonell

ABSTRACT OF GRADUATE STUDENT RESEARCH

Dissertation

Andrews University

School of Education

Title: THE RELATIONSHIP BETWEEN SPIRITUAL BELIEF, LIFE
ATTITUDE AND MENTAL HEALTH AMONG PHYSICAL FITNESS
PARTICIPANTS IN NORTHERN INDIANA

Name of researcher: Sharon Sacks

Name and degree of faculty chair: Nancy J. Carbonell, Ph.D.

Date completed:

Problem

The purpose of this study is to explore spiritual beliefs as defined by an interconnectedness with self and others, generated from a relationship with a higher power, and consider its impact on attitude toward life and mental health.

Method

This study employed the survey research method to collect data investigating the relationships between spiritual beliefs, attitude toward life, and mental health.

A battery of three instruments was selected for this study. The Royal Free Questionnaire on Beliefs and Experiences, developed by King, Speck, and Thomas (1994), was used for measuring spiritual beliefs. The Optimism and Pessimism Questionnaire provided a global perspective of optimism and pessimism on the participants. The Mental Health Inventory (MHI) assessed the psychological distress or psychological well-being of the participants' focusing on the frequency or intensity of a psychological symptom during the past month.

Results

The relationship between spiritual belief and overall psychological well-being and the relationship between spiritual belief and depression were significant. As the commitment to a particular spiritual belief system strengthened, depression significantly decreased. The relationship between spiritual beliefs and loss of behavioral/emotional control was significant. Participants with a stronger commitment to a particular spiritual belief system reflected lower levels of uncontrollable behavior or emotion. General positive affect, emotional ties, and psychological distress also demonstrated significant relationships with spiritual belief. No relationships between spiritual beliefs and anxiety or life satisfaction were found.

Conclusions

There appeared to be no significant correlation between the spiritual beliefs scores and attitude toward life scores.

There was some indication that spiritual beliefs affected mental health. Participants presented with strong general positive affect, suffered significantly less psychological distress in their lives, were less depressed, more in control of their emotions and behaviors, and better able to establish emotional ties with others.

Spiritual belief, attitude toward life and mental health, as a set, were significantly related to age. Specific predictors include anxiety, loss of emotional/behavioral control, and psychological distress.

Only psychological distress and psychological well-being differentiated the men and women participants.

*Dedicated to my
two amazing sons,
Spencer and Aidan*

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Thank You!!

CHAPTER I

INTRODUCTION

Religion and spirituality are important in the lives of most Americans. National polls show that 9 out of every 10 Americans believe in God and consider religion important in their lives (Elkins, 1999; Kroll, 1995; Kroll & Sheehan, 1989). This is evidenced by nearly 500,000 churches, temples, and mosques in the United States, with a presence in virtually every community (Gallup, 1993). Surveys have found that 42% of Americans attend religious worship services somewhat regularly, while 67% are members of some local religious body (Gallup, 1993, 1995; Shafranske, 1996). Eighty-five percent of Americans have reported that religion is "very" or "fairly" important in their lives, while 95% profess a belief in God (Gallup, 1993; Shafranske, 1996). Clearly, these figures suggest that many individuals are seeking a spiritual connection at some level. However, despite the strong interest in spirituality, relatively few studies are found in this area compared to the need for understanding the impact of spirituality on mental health

(Shafranske, 1996). This may be in part due to the claim, by health professionals, that spirituality is a difficult concept to operationalize. Many researchers have suggested that spirituality cannot be defined, described fully, or researched and, therefore, is not a valid area of study (Goodloe & Arreola, 1992; Hawks, 1994; Hood, Spilka, Hunsberger, & Gorsuch, 1996; Ingersoll, 1998). This topic has often been criticized for fueling more controversy than valid research, effective interventions, or strategies (Elkins, 1999; Hamilton & Jackson, 1998; M. King, personal communication, August 20, 2000). Researchers know, as well, that there is probably little money available to study a topic such as spirituality. Additionally, it has been reported by the U.S. Department of Health and Human Services (1990) that the federal government spends more than 75% of its health-care dollars on chronic diseases while spending less than one half of 1% on preventive care for these diseases (Witmer & Sweeney, 1992).

Research shows that some mental health professionals may not feel as strongly about spirituality as most Americans. A survey conducted by Bergin and Jensen (1990) revealed that psychologists were among the least religious of the major mental health provider groups. Only 33% of clinical psychologists described faith as the most important

influence in their lives, as compared with 72% of the general population (Shafranske, 1996). Some health professionals, however, do view spirituality as a relevant area of inquiry with their clients. Shafranske and Maloney (1990) surveyed over 400 members of the American Psychological Association about their approach toward religion and psychology and found that nearly all respondents assessed the spiritual background of their clients. They also found that 57% used religious language or concepts with patients; 36% recommended participation in religion; 32% recommended religious or spiritual books; 24% prayed privately for a client; and 7% prayed with a client.

Although Hawks (1994) suggests that this is an area of health that is too often overlooked, Shafranske and Maloney's study (1990) suggests that more and more health professionals today believe that spirituality plays a relevant role, whether positively or negatively, in a person's mental health. Studies have often focused on religious attendance or religious involvement as a predictor of spirituality (Ellison & Levin, 1998). Chandler, Miner-Holden, and Kolander (1992) suggest that this may not be the best measure, claiming that spirituality is often independent of religion. Possibly, one might look to spiritual beliefs as a more accurate predictor of

spirituality. Many individuals may not profess a recognized religious faith or belong to an organized religious group, yet still consider themselves spiritual beings possessing spiritual beliefs. Therefore, studies focusing on only those affiliated with religious organizations may be excluding entire groups of individuals.

Richards and Bergin (1997) posit that "it is possible to be religious without being spiritual and spiritual without being religious" (p. 13). Taking all of this into consideration, for purposes of this study, spirituality is interpreted as an interconnectedness with self and others, generated from a relationship with a higher power. This is not to be misinterpreted as religiosity, which, for purposes of definition, tends to be more denominational, external, cognitive, behavioral, ritualistic, and public (Richards & Bergin, 1997).

As mentioned earlier, there has recently been an increased awareness of the impact of spirituality on mental health. A growing body of research now supports the health benefits of spirituality, prompting several authors to aggressively argue the need for spiritual health education in a variety of settings, including: the worksite (Bensley, 1991; Chapman, 1986), the university (Reichle, Vantrease, & Fink, 1989; Richardson & Nolan, 1984), the school system

(Hoyman, 1962; Jose, 1987; Osman & Russell, 1979), the community (Fahlberg & Fahlberg, 1991; Goodloe & Arreola, 1992; Seaward, 1991), and the primary care setting (Aldridge, 1991; McKee & Chappel, 1992).

Along with the awareness of the role spirituality plays in mental health, there has also been growing evidence that attitude may influence one's mental health (Seligman, 1998). It is suggested that individuals with an optimistic attitude are more apt to experience better health, less depression, higher achievement, and develop better health habits (Seligman, 1998). Thinking more optimistically has also been linked with better academic and work performance (Seligman, 1998).

Although, it may appear that life attitude and spiritual belief share common benefits with mental health, little data have been gathered that looks at the effects of spiritual belief on life attitude. It is my opinion that one's spiritual belief has a significant impact on one's outlook on life, affecting one's optimistic or pessimistic view. This perception, in turn, may create an attitude toward life that could be associated with a particular mental health profile.

Studies on how one's spiritual beliefs contribute to one's life attitude and to one's mental health are, thus, needed.

Purpose of the Study

The literature shows that spirituality has been an often overlooked dimension of mental health (Hawks, 1994) and may actually be an important component of optimum wellness. The purpose of this study is to explore this dimension of spirituality and assess its effects on one's attitude toward life and mental health.

Research Questions

This study examined the following questions:

1. Do people with higher levels of spirituality have a better attitude toward life?
2. Do people with higher levels of spirituality report better mental health?
3. Is age related to spiritual belief, attitude toward life, and mental health?
4. Is there a difference in spiritual belief, attitude toward life, and mental health between men and women?
5. Is there a linear relationship between spiritual belief, attitude toward life, and mental health?

Research Hypotheses

These research questions led to the following research hypotheses.

Hypothesis 1. There is a significant relationship between spiritual belief and attitude toward life.

Hypothesis 2. There is a significant relationship between spiritual belief and mental health.

Hypothesis 3. There is a significant relationship between spiritual belief, attitude toward life, mental health, and age.

Hypothesis 4. There is a significant difference in spiritual belief, attitude toward life, and mental health between men and women.

Hypothesis 5. There is a significant linear relationship between spiritual belief, attitude toward life, and mental health.

Significance of the Study

Because there is growing evidence that spiritual health exerts a major influence on the emotional, social, intellectual, and physical well-being of all persons (Goodloe & Arreola, 1992), it is believed that this study will provide a better understanding of the type of impact spirituality has on mental health. Informing health

professionals of the influences that spiritual beliefs play on one's attitude toward life and on one's mental health may aid them in the development of more effective strategies for intervention and preventive measures toward optimum mental health.

Conceptual Framework

Although spirituality continues to lack clarity in definition and application, many researchers agree that it is an essential element to wellness (Chandler et al., 1992; Goodloe & Arreola, 1992; Witmer & Sweeney, 1992). Many models of wellness (Chandler et al., 1992; Crose, Nicholas, Gobble, & Frank, 1992; Goodloe & Arreola, 1992; Hettler, 1979; Witmer & Sweeney, 1992) suggest that the spiritual component is as important as any other dimension of health.

Witmer and Sweeney (1992) go a step further by claiming that spirituality is not only an important component, but lies at the very core of wellness. They define spirituality as a "representation of values that reflect what is considered sacred and essential for the sustenance of life" (Witmer & Sweeney, 1992, p. 141). They consider several components as contributors to the dimension of spirituality: a sense of wholeness, inner wisdom, higher consciousness, meaning in life, hope or optimism for the future, values for

guiding human relationships, and decision making. They postulate that moral values guide one's behavior for well-being while demonstrating respect and compassion for the good of others.

Additionally, one's attitude toward life also appears to contribute significantly toward achieving optimum health and functioning (Seligman, 1998; Goodloe & Arreola, 1992). Maintaining a positive attitude toward life can often be difficult, especially when individuals are trying to meet the everyday demands of their hectic lives. Therefore, an awareness of one's attitude toward life and how it might affect one's mental health and well-being appears to be important. Studies suggest that individuals who perceive their lives to be more meaningful, purposeful, hopeful, and optimistic tend to experience better health (Goodloe & Arreola, 1992; Peterson, 2000; Seligman, 1998; Witmer & Sweeney, 1992). Witmer, Rich, Barcikowski, and Mague (1983) identified optimism as one of the prime variables that characterized individuals who experienced less anxiety and fewer physical symptoms.

Further, results from an intervention program that taught grade-school children to be more optimistic suggested that subsequent episodes of depression were less likely (Peterson, 2000). Optimism has also been linked to positive

mood and good morale; to perseverance and effective problem solving; to academic, athletic, military, occupational, and political success; to popularity; and to long life (Peterson, 2000).

These studies, along with personal observation and experience, lead me to believe that an individual is more likely to achieve a fulfilling life if one's perspective toward life encompasses hope for the future, strong spiritual beliefs, and a strong sense of self. These perspectives formed the theoretical foundation for this study.

Definitions of the Terms

Spirituality: An interconnectedness with self and others generated from a relationship with a higher power.

Spiritual belief: A culmination of one's convictions and perceptions gained through one's spiritual and life experiences.

Spiritual commitment: Abiding to one's spiritual belief system through application in everyday life (You are living what you believe).

Spiritual experience: An occurrence that precedes a connection between an individual and a higher being generated from one's spiritual commitment, spiritual

beliefs, or a plethora of other spiritual happenings.

Religion: The actual practice of faith; observance of rituals and requirements (e.g., church attendance).

Positive attitude toward life: The perception that one will experience promising outcomes to events and circumstances.

Negative attitude toward life: The perception that one will experience bleak outcomes to events and circumstances.

Mental health: A state of mind reflecting one's overall level of psychological well-being and/or psychological distress.

View of life: The strength of one's commitment to a particular spiritual belief system.

Practice of belief: The importance of practicing one's belief system.

Day-to-day influences: The level of belief in a spiritual force that influences daily decisions.

Cope with events: The level of belief that a spiritual force enables one to cope with what life bestows.

World Affairs: The level of belief that a spiritual force influences world affairs, e.g., wars.

Natural disasters: The level of belief that a spiritual force influences natural disasters.

Delimitation

The sample was delimited to individuals who were current or past members of a particular fitness center located in Northern Indiana.

Limitations

Limitations of this study include: not knowing whether or not the members would respond to the survey, how members might respond to the survey questions, and whether or not respondents would understand the meaning of the terms used within the instruments.

Organization of the Study

This study contains five chapters, which are arranged in the following manner:

Chapter 1 introduces the research topic, provides a statement of the problem, indicates the purpose, significance, and theoretical framework of the study, as well as provides the research questions, delimitations, limitations, and an outline of the study.

Chapter 2 contains a review of the literature related to spirituality and its impact on life attitude and mental health.

Chapter 3 outlines the methodology of the research, including a description of the population, sampling procedures, procedures used for data collection, the reliability and validity of the instrument, research questions, and statistical analysis.

Chapter 4 describes the demographic data, the analysis of the data, and the summary of the results of data analysis.

Chapter 5 provides a summary of the findings, conclusions, implications, and recommendations for future research.

CHAPTER II

REVIEW OF THE LITERATURE

*Science without religion is
lame, religion without science
is blind. --Albert Einstein*

The review of the literature is divided into three sections. The first section discusses the spiritual dimension and its impact on mental health. The second section discusses attitude toward life with an emphasis on optimism and pessimism. And, lastly, the third section discusses mental health and wellness.

Spiritual Dimension

Today, national polls show that 9 out of every 10 Americans believe in God and consider religion either "very" or "fairly important" in their lives (Elkins, 1999; Gallup, 1993; Hill et al., 2000; Larson, Pattison, Blazer, Omran, & Kaplan, 1986; Shafranske, 1996). It has also been reported that a major source of personal strength for many people is drawn from their spiritual beliefs and practices (George, Larson, Koenig, & McCullough, 2000). Spirituality, however, still appears to lack the credibility needed for meaningful

research (Elkins, 1999). The field of psychology has produced very little research that supports the importance of spirituality from a clinical stance (Mack, 1994). It is believed by some that spirituality is an area of study that often fuels more controversy than valid research (Elkins, 1999). In fact, past decades of research have resulted in disagreement and confusion about what is actually meant by the term *spirituality* (Elkins, 1999; Hill et al., 2000; Zinnbauer et al., 1997). Regardless of the definition, however, the empirical research that has been conducted has repeatedly shown that a commitment to a spiritual relationship is usually associated with healthy physical, emotional, intellectual, occupational, and social functioning (Chandler et al., 1992; Ellison & Levin, 1998; Hawks, 1994; Maher & Hunt, 1993; Witmer & Sweeney, 1992).

A great majority of the literature in the area of spirituality focuses on the need for a comprehensive definition, instruments that are psychometrically sound, and researchers who are willing to embark on an area of controversial study.

The literature often refers to religion and spirituality as interchangeable constructs. Even the American Psychological Association's *Diagnostic and Statistical Manual of Mental Disorders* (1994) identifies

religion and spirituality problems under the same diagnosis code. The following criteria are classified under spiritual or religious problems: "distressing experiences that involve loss or questioning of faith, problem association with conversion to a new faith, or questioning of spiritual values that may not necessarily be related to an organized church or religious institution" (p. 685). Research has continually defined both religion and spirituality largely in terms of religiosity (King & Dein, 1998; Mahoney & Graci, 1999 Westgate, 1996; Zinnbauer et al., 1997). Westgate (1996) postulates that this may exist because the construct religion is easier to operationalize. Researchers often look to frequency of religious attendance or acceptance of or satisfaction with certain religious beliefs for a more accurate measurement of the construct. In general, religion is often seen as a more narrow construct focusing on behavior, making it easier to define (Kroll, 1998; Westgate, 1996; Zinnbauer et al., 1997), whereas spirituality is often viewed as a broader, more abstract construct making it difficult to define. Chandler et al. (1992), however, suggest that spirituality is often independent of religion claiming that "spirituality can occur in or out of the context of religion, and not all aspects of religion are assumed to be spiritual" (p. 170).

Mahoney and Graci (1999) conducted a study that attempted to distinguish religiosity from spirituality. They posited that religiosity and spirituality were separate, contrasting constructs, rather than interchangeable. Further, they maintained that the meanings of these two terms change constantly. They drew upon leading authorities in the areas of death studies and spiritual studies to help examine the dimensions of spirituality and religiosity. The results of this study revealed several common themes among both groups of experts. Both considered themselves spiritual but not religious and were in general agreement that spiritual experiences were meaningful learning opportunities. Common themes most strongly associated with spirituality were charity, connectedness, compassion, forgiveness, hope, meaning, and morality. More than 80% in both groups believed that spirituality involved forgiveness. Nearly 90% of each group agreed that compassion was a dimension of spirituality. Further, spiritual individuals tended to be more hopeful and to experience more meaning or purpose in life than their nonspiritual or, in this case, religious peers. The authors suggested further research in the clarification of what people mean by spirituality and how it is expressed in daily life.

In agreement with Mahoney and Graci, Pargament (1999) also sees the need for researchers to clearly identify what is meant by the terms *spirituality* and *religiosity*. In contrast, however, Pargament posits that although the literature appears to be attempting to distinguish religion from spirituality, he sees no need for the distinction between terms. In fact he claims that separating these concepts operationally would be impossible, largely because most individuals perceive religion and spirituality as encompassing similar components. Both focus on the sacred or divine, beliefs about the sacred, the effects of those beliefs on behavior, practices used to attain or enhance a sense of the sacred, and experiences of spiritual or religious states of consciousness. The major difference appears to be how these two terms are viewed and, thus, interpreted by researchers. Often religion is described as, and confined to, institutional settings, whereas, spirituality is often linked with more individualized religious expression. Pargament suggests that by categorizing the two constructs in this manner, the relationship between them may be threatened. He believes that, the difference between broadband religion and narrowband religion must be made clear; that religion is not a synonym for institution, dogma, or ritual; and that

religion is not a dry, static, dead-end construct. "We must make it clear that our field is vitally concerned with spirituality and all that matters sacred" (p. 15).

In a recent study by Zinnbauer et al. (1997), a group of participants was asked whether they considered themselves to be religious and not spiritual, spiritual and not religious, both religious and spiritual, or neither religious nor spiritual. The majority (74%) defined themselves as both religious and spiritual. Findings indicated that this group was more likely to view religiousness in a positive light, more likely to engage in traditional forms of worship such as church attendance and prayer, more likely to hold orthodox or traditional Christian beliefs, less likely to be independent from others, less likely to engage in group experiences related to spiritual growth, less likely to hold non-traditional "new age" beliefs, less likely to have had mystical experiences, and less likely to differentiate religiousness and spirituality as different and non-overlapping concepts, compared to those who identified themselves as "spiritual but not religious." This study supports Pargament's (1999) theory of no separation needed between terms. However, the findings also suggest that these particular participants are more characteristic of spiritual persons

than religious persons, as described by the current literature.

With due respect to Pargament's perspective, the need for a unified definition of spirituality appears to be overwhelming in the literature. The problem, however, is how to come to a unified definition with so many different concepts of spirituality. Many believe that there are several contributing factors which make this task insurmountable. Studies show that although Americans may desire spirituality, it may not be in the form of organized religion (McGovern, 1998; Zinnbauer et al., 1997). As stated earlier, spirituality is largely measured in terms of religious constructs. Therefore, theoretically, if people are not participating in organized religion, the measurement of spirituality becomes increasingly more difficult. Further, over the past several decades the interest in spirituality has appeared to increase, while reassurance in religion and religious leadership has decreased. Roof (1993) found in his study that baby boomers dropped out of organized religion in large numbers from the following religious persuasions: 84% were Jewish, 69% were mainline Protestants, 61% were conservative Protestants, and 67% were Catholic (Zinnbauer et al., 1997). Because their spiritual needs were not being met, many left the churches and

synagogues in search of a more individual or personal spiritual experience. Many of the non-traditional practices sought were: yoga groups, 12-step programs, meditation groups, Jungian psychology, Greek mythology, new age philosophies, and Eastern practices. Pargament (1999) posits that these are just new forms of spiritual institutions in the guise of healing groups. It appears that what they are truly in search of are places where they are able to share their views and receive support of other like-minded people. For some, this created a whole new dimension to spirituality and its meaning for many people. For others, it added validity to the concept that religion and spirituality are similar in nature and that it is the perception of the individual constructs that is relevant to meaningful religious or spiritual experiences.

Another prevalent area of concern is the lack of active contributors to research in the area of spirituality (Bergin & Jensen, 1990; Goodloe & Arreola, 1992; Hill et al., 2000; Shafranske, 1996). Goodloe and Arreola (1992) postulate several reasons as to why this may exist.

Spiritual health cannot be defined and researched and therefore, cannot be a legitimate area of study; spirituality is a part of the mental/emotional psychological dimension of health and does not need to be recognized as a separate entity within health education; and, recognition of spiritual health implies

a recognition of religiosity which evades the issue of the separation of church and state in education.
(p. 222)

Shafranske (1996) posits, and is heavily supported by the literature (Bergin & Jensen, 1990; McGovern, 1998), that spirituality seems to play a minimal role in the lives of most psychologists in the United States. A study by Bergin and Jensen (1990) concluded that psychologists were the least religious of the major mental health provider groups. Only 33% of clinical and counseling psychologists described faith as the most important influence in their lives, as compared to 72% of the general population. Further, a 1989 Gallup poll found nearly 50% of psychiatrists and psychologists in the United States to be atheistic or agnostic, as compared to 6% of the general population. This same Gallup poll revealed that 66% of health professionals' raised in religious homes, abandoned their faith in adult years (McGovern, 1998). Thus, it could be surmised, that if religion plays an unimportant part in the lives of most researchers, it would most likely be an unimportant area of study for them.

Not all studies have painted such a negative picture of the relationship between religion and mental health. Religious beliefs and psychotherapeutic orientations were examined in a national sample of 237 clinical and counseling

psychologists. Interestingly enough, findings in this particular study suggested American psychologists did take religion seriously and perceived it relevant both personally and professionally. Sixty-six percent believed in the transcendent, 72% believed their religious beliefs influenced their practice of psychotherapy, and 66% believed their practice of therapy influenced their religious beliefs (Bilgrave & Deluty, 1998).

There also appears to be a lack of interest in addressing spiritual issues and mental health in many training programs. A review of quantitative research studies published between 1991 and 1995 in three major mental health nursing journals revealed that only 5% of clinical psychologists and 30% of psychiatrists claimed to have had religious or spiritual issues addressed in their professional training programs (Weaver, Flannelly, Flannelly, Koenig, & Larson, 1998; Larson, Larson, & Puchalski, 2000). Now more than 40 U.S. medical schools are incorporating faith in medicine in their school curriculums. As of January 1996, all psychiatric residency programs in the U.S. are required to address spiritual issues in their training programs. "Emphasis is on teaching medical students to inquire into the patient's belief system and see how it can enhance or slow the process of healing"

(McGovern, 1998, p. 23). This could be a giant leap for the field of psychology, as it appears that the medical model has been viewed by most researchers as the predominant model used and respected in the area of mental health research.

Witmer and Sweeney (1992) present a non-medical model that they believe represents the pathway to optimum health. They postulate 11 characteristics necessary for obtaining optimal health and wellness. These characteristics are grouped into five "life task" categories: (1) spirituality, (2) self-regulation, (3) work, (4) friendship, and (5) love.

The first life task, spirituality, is viewed by Witmer and Sweeney (1992) as the center of wholeness. It encompasses oneness and inner life, and purposiveness, *optimism*, and values. The second life task, self-regulation, includes such characteristics as sense of worth, sense of control, realistic beliefs, spontaneous and emotional responsiveness, intellectual stimulation, problem solving, and creativity; a sense of humor, and physical fitness and nutrition. The third life task, work, is a fundamental life task that provides psychological, social, and economic benefits to one's well-being. Friendship is the life task characterized through social interests and connectedness with others, outside of intimate relationships. The final life task is love.

It is important to note that Witmer and Sweeney (1992) view these forces as crucial components of optimum mental health, noting that spirituality is at the center of wholeness and the catalyst of well-being. They posit that these forces ultimately impinge on the health and well-being of every individual.

Attitude Toward Life

Growing evidence suggests that positive emotional states may influence mental health (Peterson, 2000; Salovey, Rothman, Detweiler, & Steward, 2000; Seligman, 1998), promoting healthy perceptions, beliefs, and physical well-being. Studies show that individuals who possess a positive outlook on life or a more optimistic attitude do better in their personal and professional lives than those who do not (Lee & Seligman, 1997; Peterson, 2000; Seligman, 1998). They are more apt to experience better health, less depression, higher achievement, better health habits, contentment, and a greater sense of coherence or resilience (Adams & Bezner, 2000; Dember & Brooks, 1989; Seligman, 1998). Optimism has been linked to positive mood and good morale; to perseverance and effective problem-solving; to academic, athletic, military, occupational, and political success; to

popularity; to good health; and to long life and freedom from trauma (Peterson, 2000).

The literature suggests that an optimistic attitude about the future may be health protective. Individuals with a positive sense of self-worth, belief in personal control, and an optimistic outlook appear to experience better health habits, find meaning in life, develop better coping skills, enhance social resources, and recognize the value of social relationships (Taylor, Kemeny, Bower, Gruenewald, & Reed, 2000). Seligman and Csikszentmihalyi (2000) posit that individuals today often lack the positive features that make life worth living: hope, wisdom, creativity, future mindedness, courage, spirituality, responsibility, and perseverance. They also suggest that society chooses to focus on the pathology of the individual rather than on the prevention. Their theory of Positive Psychology represents change in the perception of psychology, focusing on positive qualities of the individual as opposed to the preoccupation of repairing life's crises.

The psychological and emotional state of an individual appears to be important enough to sound mental health that the American Psychological Association's journal, *American Psychologist* (2000), devoted an entire special issue to this topic. Happiness, excellence, optimal human functioning,

subjective well-being, the future of optimism, self-determination, positive psychology, creativity, and positive youth development were only a few of the areas addressed. One particular author, Myers (2000), addressed the scientific pursuit of happiness. Researchers examined possible associations between happiness and (1) economic growth and personal income, (2) close relationships, and (3) religious faith. Myers revealed, through his review of the research, that age, gender, and income really produced very little insight into why people were happy, whereas a supportive network of close relationships and faith that encompassed social support, purpose, and hope did contribute to why people were happy. Myers suggested that a possible reason for the correlation between faith and well-being was the sense of meaning and purpose that was derived from one's faith. People of faith tended to retain or recover greater happiness after suffering divorce, unemployment, serious illness, or bereavement (Ellison & Smith, 1991; McIntosh, Silver, & Wortman, 1993).

Several studies have looked at optimism and pessimism as they relate particularly to mental health (Adams & Bezner, 2000; Dember & Brooks, 1989; Lee & Seligman, 1997; Reilley & Dember, 1998; Seligman, 1998).

Adams and Bezner (2000) conducted a study that explored the relationship between spiritual and psychological dimensions. Undergraduate college students were administered a series of survey instruments which resulted in several noteworthy implications. Optimism, a sense of coherence, and a meaningful purpose in life directly affected overall wellness. The findings suggested that an optimistic outlook and a sense of coherence must be present to enhance a sense of overall well-being. Further, the authors found that optimism and a sense of coherence might be internal resources that enable individuals to fulfill their own life purpose. They concluded that individuals with high levels of optimism and a strong sense of coherence possessed an enduring sense of personal control.

Dember and Brooks (1989) assessed the test-retest reliability of the Optimism/Pessimism Questionnaire and revealed several additional correlations in the study. One finding of particular interest was the correlation between optimism and pessimism scores and the two measures of happiness. It was revealed that people who reported themselves as content with their lives tended to be both high in optimism and low in pessimism.

Lee and Seligman (1997) studied optimism among White Americans, Chinese Americans, and Mainland Chinese.

Differences between the groups were studied with respect to success attribution. Among the findings, it was suggested that optimism was related to higher rates of academic and financial accomplishment, psychological confidence and persistence, and physical health among the Mainland Chinese.

It is worth noting that one's attitude toward life may very well impact one's mental health as well as one's spiritual beliefs, yet, scant data have been gathered that examine this relationship.

Mental Health and Wellness

Recent empirical research (Chandler et al., 1992; Ellison & Levin, 1998; Hawks, 1994; Maher & Hunt, 1993; Marquand, 1995; Witmer & Sweeney, 1992) strongly suggests that a commitment to a spiritual relationship is usually associated with healthy physical, emotional, intellectual, occupational, and social functioning. According to Hettler (1979) these six major dimensions conceptualize wellness. Still, others claim that these dimensions must be in balance to achieve optimum wellness (Chandler et al., 1992; Hawks, 1994; Maher & Hunt, 1993; Witmer & Sweeney, 1992). Several wellness models even suggest that the spiritual dimension is the one component that is interactive with all the other dimensions (Chandler et al., 1992; Crose et al., 1992;

Goodloe & Arreola, 1992; Hettler, 1979; Witmer & Sweeney, 1992), stressing the importance of spirituality to mental health. Some go a step further to view spirituality as not only an important component to the balance, but at the very core of wellness (Goodloe & Arreola, 1992; Witmer & Sweeney, 1992). The literature suggests that the degree to which one is religiously committed is also important. One study, in particular, found that uncommitted believers suffered higher levels of anxiety than those who were either religiously committed or non-believers (McGovern, 1998). Religiously or spiritually involved persons have been shown to have fewer chronic conditions; lower functional disability; lower blood pressure; fewer strokes, less depression; anxiety, suicide, and alcoholism; higher life satisfaction; higher academic and work performance, and greater well-being (Chandler et al., 1992; Chirban, 1992; Ellison & Levin, 1998; Hawks, 1994; Koenig, 1995; Kroll, 1998; McGovern, 1998; Seligman, 1998; Thoresen, 1999). However, mixed opinions still exist on whether the relationship between religion and mental health is beneficial or detrimental to the individual. In a meta-analysis of results across studies, Bergin (1983) found that 23% of studies reported a negative relationship between religion and mental health, 47% reported a positive

relationship, and 30% reported no relationship. The majority of studies reflected a positive relationship between religion and mental health, again noting the importance of religion/spirituality in mental health.

Several studies also suggest a relationship between spiritual wellness and depression (Bilgrave & Deluty, 1998; Ellison & Levin, 1998; Koenig, George, & Peterson, 1998; Westgate, 1996). Depression appears to be one of the most common, more debilitating mental disorders of today, affecting anywhere from 5% to 30% of the U.S. population. Over the past decade adults have been living longer and more healthy lives, and it is expected that by the year 2030 older adults (85+) will make up 20% of the entire population (U.S. Bureau of the Census, 1993).

In a recent study, Koenig et al. (1998) interviewed 87 sick, elderly, depressed patients and found that the more religious patients recovered significantly faster from their depression. For every 10-point increase in religiosity, there was a 70% faster recovery (p. 540). Koenig (1994) suggests that religion and spirituality are particularly helpful in combating depression among the elderly. He posits that both religion and spirituality are particularly helpful to the elderly in that they provide meaning to death; hope at the end of the life cycle; and are effective

in coping with disability, illness, and negative life events. Studies are showing that physical health, specifically exercise, is only one dimension that researchers believe contributes to living longer, healthier lives. Healthy aging must also encompass the emotional, mental, social, spiritual, and environmental dimensions (Marinelli & Plummer, 1999).

As stated earlier, spirituality is often viewed as an abstract concept defined largely in terms of religious construct. Thus, measurement of spirituality may be often reliant on observable, measurable, religious behavior (i.e., church attendance, tithing). Gartner, Larson, and Allen's (1991) extensive review of approximately 200 studies on the relationship between religious commitment and psychopathology, indirectly addressed each of the above-mentioned dimensions of wellness. The results of the review were divided into three sections: literature that suggested religion was associated with mental health, literature that suggested an ambiguous or complex relationship, and literature that suggested religion was associated with pathology (Shafranske, 1996). The first section discussed studies associated with physical health, mortality, suicide, drug use, alcohol abuse, delinquency and criminal behavior, divorce and marital satisfaction, well-being, outcome, and

depression. The second section included studies related to health, anxiety, psychosis, self-esteem, sexual disorders, intelligence/education, and prejudice. The final section presented studies that included authoritarianism, dogmatism, tolerance and rigidity, suggestibility and dependence, self-actualization, and temporal lobe epilepsy. Of the multitude of studies reviewed by Gartner et al. (1991), four trends evolved:

1. Most studies linking religious commitment to psychopathology employed mental health measures called soft variables (paper/pencil personality tests that measure theoretical constructs). In contrast, most research linking religion to positive mental health studied hard variables (real life behavioral events which can be observed and measured).

2. Low levels of religiosity are most often associated with disorders related to undercontrol of impulses, whereas high levels of religion are most often associated with disorders of overcontrol (p. 15)

3. Behavioral measures of religious participation are more powerfully associated with mental health than are attitudinal measures.

4. Distinctions such as that between intrinsic and extrinsic religion explain some inconsistent findings.

These finding may attribute to the figures revealed in Bergin's (1983) meta-analysis.

CHAPTER III

METHODOLOGY

The purpose of this study was to determine if a relationship could be found between spiritual belief, attitude toward life, and mental health among members of a physical fitness club in Northern Indiana. This chapter discusses the design of the study, the research sample, instrumentation, procedures, null hypotheses, and methods of analysis.

Design of the Study

This study employed the survey research method in which the data were gathered by using three surveys: the Royal Free Questionnaire on Beliefs and Experiences, the Optimism and Pessimism Questionnaire, and the Mental Health Inventory. These data were analyzed statistically using either multiple regression analysis, canonical correlation analysis, or t- test analysis to examine spiritual belief, attitude toward life, and mental health.

Sample

The sample for this study consisted of individuals who were members of a co-ed health club located in Northern Indiana with approximately 1,600 members. Both male and female participants were randomly selected from the database provided by the Northwest Athletic Club. This population was chosen for this study for several reasons: diversity in age (ranging from upper teens to 80+); good representation of both genders; members were not affiliated with any particular religious organization (thus, minimizing religious bias); membership number large enough to obtain a good sample; and the manager of the facility was willing to participate, making the population easily accessible. Also, the literature supports the concept of a natural relationship between the mind, body, and soul (Chandler et al., 1992; Ellison & Levin, 1998; Myers, 1992; Witmer & Sweeney, 1992), thus, making individuals willing to make the commitment toward good physical health emerge as a worthy selection for this study. Few studies, if any, have researched this particular population.

Instrumentation

A battery of three instruments was used in this study: the Royal Free Questionnaire on Beliefs and Experiences, the

Optimism and Pessimism Questionnaire, and the Mental Health Inventory (MHI).

The Royal Free Questionnaire on Beliefs and Experiences

This instrument was developed by King, Speck, and Thomas in 1994 and has been refined twice since its development. Originally titled the Royal Free Interview for Religious and Spiritual Beliefs, it is now called the Royal Free Questionnaire on Beliefs and Experiences. It was first refined as a result of a study conducted at the Royal Free Hospital of London involving 300 patients. More recently, King states that they again "refined and extended the instrument a little, based on our experience with it" (M. King, personal communication, August 2000). The current form of the instrument is now in a questionnaire format. The questionnaire is being used in at least two other studies, neither of which have been published. One is a study on the outcome of bereavement and the other is a national study on ethnic minority mental health in Britain involving 7,000 to 10,000 people (M. King, personal communication, August 2000). The author hoped to submit both these studies for publication.

The Royal Free Questionnaire on Beliefs and Experiences is an 18-item instrument using a Semantic-Differential type

response format measuring spiritual belief. It begins by obtaining demographic information and a brief self-description from each individual. Within the instrument are instructions as well as definitions of religion and spiritual beliefs or experiences that will be used by the individual as he or she takes the survey. Some of the questions require individuals to respond quantitatively by indicating on an 11-point scale (0 - 10) how strongly he or she holds a particular belief (Hill & Hood, 1999). Cut-off scores were derived by dividing the 11-point scale roughly into thirds and placing the individual responses into three groupings. Low scores of 0, 1, 2, or 3 fell in the first grouping of weak spiritual beliefs. Moderate scores of 4, 5, or 6 fell in the second grouping of moderate spiritual beliefs. High scores of 7, 8, 9, or 10 fell in the third grouping of strong spiritual beliefs.

Spiritual and Philosophical Scales

This questionnaire is composed of two scales: the spiritual scale, obtained from the sum answers to questions 3, 9, 10, 11, and 12, and the philosophical scale, obtained from the sum answers to questions 3, 15, 16, and 17. In the questionnaire format, the answers that sum the spiritual scale are 3, 8, 9, 10, and 11 instead of 3, 9, 10, 11, and

12. Only the sequencing of the questions changed, not the content (Hill & Hood, 1999).

Reliability and Validity

Internal reliability was computed for the spiritual and philosophical scales. The alpha coefficient for the spiritual scale was 0.81, and 0.60 for the philosophical.

Test-retest reliability was measured by assessing 103 of the hospital staff subjects a second time 1 week later. Correlation coefficients for the questions scored using the 11-point scale were high and ranged from 0.76 to 0.93: five correlations were above .90, four were above .85, and four were below .85 (Hill & Hood, 1999).

Concurrent validity was unknown as comparisons with other measures of religious or spiritual belief were not made.

Criterion validity was assessed in two ways: (1) measuring the strength of the association between spiritual belief (spiritual scale score) and religious observance, and (2) comparing the spiritual scale score of a third reference group (the individuals strongly associated with a religious faith) with the spiritual scores of the other two reference groups (Hill & Hood, 1999).

The Pearson correlation for the association between the spiritual scores and religious observance was 0.41 ($p < .0005$). A linear relationship between frequency of religious observance and strength of belief was found (Hill & Hood, 1999).

The Optimism and Pessimism Questionnaire

The Optimism and Pessimism Questionnaire, also known as the Optimism and Pessimism Instrument, was developed by Dember, Martin, Hummer, Howe, and Melton in 1989. The instrument consists of 56 Likert-type items, each rated on a 4-point scale: (1) strongly agree, (2) disagree, (3) agree, and (4) strongly disagree. It is composed of two separate 18-item scales. One set measures optimism and implies an optimistic outlook, while the other set measures pessimism implying a pessimistic outlook. The items are reverse-scored with 20 filler items added to mask the intent of the instrument. Scores for each scale can range from 18 to 72 (Hummer & Dember, 1992; Lewis & Dember, 1995).

Reliability and Validity

The two scales, optimism and pessimism, are only moderately correlated, with the value of r over a series of studies ranging from $-.52$ to $-.65$ (Dember & Brooks, 1989; Dember et al., 1989; McConnell & Bill, 1993).

Internal consistency is satisfactory, with Cronbach's alpha .86 for optimism and .88 for pessimism (Dember et al., 1989).

The test-retest reliability was .75 for optimism and .84 for pessimism after 2 weeks (Dember & Brooks, 1989).

Of the instruments available for measuring an optimistic attitude, the Optimism/Pessimism scale is the most recent instrument (Lewis & Dember, 1995), providing a global perspective of optimism and pessimism, both of which are considered an important attribute of human thought and expression (McConnell & Bill, 1993).

Mental Health Inventory

The Mental Health Inventory is a 38-item survey instrument fielded by RAND's Health Insurance Experiment which focuses on psychological distress and psychological well-being. This instrument is self-administered by individuals 14 years of age or older. The items in the MHI yield six subscales: anxiety, depression, loss of behavioral/emotional control, general positive affect, emotional ties, and life satisfaction; two global scales: psychological well-being and psychological distress; and an overall mental health index. Eight additional items are interspersed among the MHI items because of similar content. Each of the 38 items asks about the frequency or intensity

of a psychological symptom during the past month. All but two items are accompanied by a six-choice response scale; two use 5-point response scales.

Reliability and Validity

The reliability of the mental health index scores, based on combined sites ($n = 5089$), was high at 0.96. Although the coefficients varied across the health insurance experiment sites, the lowest reliability estimate was 0.93. The stability of the mental health index has been estimated for intervals of 1, 2, and 3 years between administrations. One-year stability coefficients ranged from 0.60 to 0.76; 2-year stability coefficients ranged from 0.54 to 0.69; and 3-year stability coefficients from 0.54 to 0.58. validity.

Mental Health Subscales

The mental health subscales are scored in two steps: (1) item scoring; and (2) the subscales themselves. Of the 38 mental health items, 35 are used to score the six mental health subscales (55, 80, and 99 are not included). Each item appears in only one subscale. Item scoring depends on two things: (1) whether the scores on the precoded-item responses indicate more frequent or intense occurrence or favorable or unfavorable mental health symptoms, and (2) whether the item belongs to a positively or negatively

scored mental health subscale. All subscales are scored so that higher scores indicate more of the construct named by the subscale's label. Thus, higher scores on three of the subscales indicate positive states of mental health: general positive affect, emotional ties, and life satisfaction. Higher scores on the other three subscales indicate negative states of mental health: anxiety, depression, and loss of behavioral/emotional control. The object of item scoring is to ensure that higher scores on each item reflect more of the construct named by the scale to which it belongs. Items are scored and then summed to calculate each subscale score.

Global Mental Health Scales

All 38 items are used to score the global mental health scales. The first global scale, psychological distress, contains 25 items. While 14 items are used to score the second global scale, psychological well-being. As stated earlier, item-scoring rules depend on, (1) whether the scores on the precoded-item responses indicate more frequent or intense occurrence or favorable or unfavorable mental health symptoms, and (2) whether the item belongs to a positively or negatively scored mental health subscale. Both global scales are scored so higher scores indicate more of the construct named by the scale's label. Higher scores

on psychological distress indicate negative states of mental health, whereas higher scores on the psychological well-being scale indicate positive states.

Mental Health Index

All 38 mental health items are used to score the mental health index. Higher scores on each item reflect more frequent occurrence of favorable mental health symptoms, indicating greater psychological well-being. Thus, precoded responses for all favorably worded items on which higher precoded response scores indicate infrequent occurrence are recoded, as are all unfavorably worded items on which higher precoded response scores indicate frequent occurrence.

Item scores are summed to calculate the index score ranging from 38 to 226, with higher scores indicating an absence of psychological distress and frequent experiences of psychological well-being during the past month.

Procedure

A list from the Northwest Athletic Club was obtained. Approximately 700 out of 1,600 individuals were randomly selected by the manager of this facility. The manager was asked to provide names and addresses, eliminating duplicate addresses and family members from the pool. Upon receiving

the list of names and addresses of the members, each individual was sent a packet containing the following: a cover letter from the researcher with instructions, the Royal Free Questionnaire on Beliefs and Experiences, the Optimistic/Pessimistic Questionnaire, and the Mental Health Inventory. The cover letter explained the purpose of the study, what respondents' involvement would be, and a note of appreciation for their participation. In an effort to elicit the maximum possible response rate, the first 200 individuals to return their packet were entered in a drawing for a 3-months-free membership. Each participant received a numbered ticket that corresponded with the number on their survey. They were asked to keep this ticket and return their completed surveys to the front desk at the Northwest Athletic Club. Two weeks later a follow-up letter was sent to those individuals who did not respond to the survey, along with a stamped, self-addressed envelope to my home address. Two individual ticket numbers were then chosen from the free membership offer on October 4, 2000, by the manager. The numbers were posted at the front desk, and the winners were to present their winning tickets within 5 days of the drawing. Only one member claimed his or her free membership.

The participants ranged in age from 18 to 84 years. Females represented 67% of the sample and males represented 33%. The majority of the participants were married (69%), while slightly more than 30% were either living with a partner, divorced, widowed, separated, or single. Nearly 95% were self-described as Caucasian, with the remaining 5% described themselves as either African American, Asian, Hispanic, or other. Slightly less than 80% were employed at the time of the survey, 10% were retired, and 10% were described as either a home manager, a student, or unemployed and seeking work.

Null Hypotheses

The research questions for this study led to the following Null Hypotheses:

Research Question 1. Do people with higher levels of spirituality have a better attitude toward life?

Null Hypothesis 1: There is no relationship between spiritual belief and attitude toward life as measured by optimism and pessimism.

Research Question 2. Do people with higher levels of spirituality report better mental health?

Null Hypothesis 2: There is no relationship between spiritual belief and mental health.

Null Hypothesis 2a: There is no relationship between

spiritual belief and anxiety.

Null Hypothesis 2b: There is no relationship between spiritual belief and depression.

Null Hypothesis 2c: There is no relationship between spiritual belief and loss of behavioral/emotional control.

Null Hypothesis 2d: There is no relationship between spiritual belief and general positive affect.

Null Hypothesis 2e: There is no relationship between spiritual belief and emotional ties.

Null Hypothesis 2f: There is no relationship between spiritual belief and life satisfaction.

Null Hypothesis 2g: There is no relationship between spiritual belief and psychological distress.

Null Hypothesis 2h: There is no relationship between spiritual belief and psychological well-being.

Research Question 3. Is there a relationship between spiritual belief, attitude toward life, mental health, and age?

Null Hypothesis 3: There is no difference between spiritual belief, attitude toward life, mental health, and age.

Research Question 4. Is there a difference in spiritual belief, attitude toward life, and mental health between men and women?

Null Hypothesis 4: There is no difference in spiritual belief, attitude toward life, and mental health between men and women.

Research Question 5. Is there a linear relationship between spiritual belief, attitude toward life, and mental health?

Null Hypothesis 5: There is no significant canonical correlation between any linear combination of the six spiritual belief variables, the two attitude toward life variables, and the eight mental health variables.

Data Analysis

Hypotheses 1 through 4 were tested by zero-order correlation analysis and regression analysis. In each instance, spiritual belief involved six variables, attitude toward life involved two variables, and mental health involved eight variables. Spiritual belief variables included: view of life, importance in practice of belief, influences of beliefs on world affairs, day-to-day life, natural disasters, and coping with life events. The following components of mental health were measured by the Mental Health Inventory: anxiety, depression, loss of emotional/behavioral control, general positive affect, emotional ties, and life satisfaction. Two additional components were measured also using the MHI: psychological

distress and psychological well-being. Two variables, optimism and pessimism, were measured by the Optimism/Pessimism Scale. Hypothesis 5 was tested by canonical correlation analysis to determine the relationship between two sets of variables, spiritual belief and mental health. All five hypotheses offered several possible combinations of variables or sets of variables to be tested.

Summary

This chapter presented the research design, sample, instruments and procedures used, research questions, null hypotheses, and the statistical techniques used to test each hypothesis. It postulates the relationships between variables comprising spiritual beliefs, attitude toward life, and mental health as measured by the Spiritual Belief Scale, Optimism/Pessimism Scale, and the Mental Health Inventory. This chapter presents the statistical analyses performed for each hypothesis.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

The primary purpose of this study was to examine the relationships between spirituality, attitude toward life, and mental health. This chapter presents the findings from the analyses of the sample data. The information is organized into three sections: (1) description of the participants in the study, (2) descriptive results of the survey, and (3) statistical analyses of the tested hypotheses.

Description of the Sample

A total of 690 surveys were randomly distributed to both male and female members of a Northwest Indiana health club located approximately 60 miles east of Chicago situated in a town of 35,000 people. Of the 690 surveys distributed, 187 (27%) were returned and all were used in the analysis of the data. The participants' range of age was 18 to 84 years (Table 1). Females represented 66% of the sample and males represented 33%. The majority of the participants were married (69%), while slightly more than 30% were either

living with a partner, divorced, widowed, separated, or single. Nearly 95% were self-described as Caucasian, with the remaining 5% described as either African American, Asian, Hispanic, or other. Slightly less than 80% were employed at the time of the survey, 10% were retired, and 10% were described as either a home manager, a student, or unemployed and seeking work (Table 2). Eighty individuals (43%) reported having a religious understanding of their life, 47 (25%) reported a spiritual understanding of life, 48 (26%) reported both a religious and a spiritual understanding, and 11 (6%) reported neither a religious understanding nor a spiritual understanding of life (Table 3). Forty-eight percent of the respondents reported their faith as Catholic; 16% were either Methodist, Lutheran, Jewish, Baptist, or Buddhist; 6% were Presbyterian, and 30% represented the "other" category (Table 4).

Table 1

Percentage of Participants by Age and Gender

Gender	18 - 39		40-59		60 +		Total	
	N	%	N	%	N	%	N	%
Men	18	27.69	29	32.22	14	48.28	61	32.62
Women	47	72.30	61	67.78	15	51.72	123	65.78
Total	65	34.76	90	48.65	29	15.51	184	100.00

Note. Three female respondents did not give age.

Table 2

Demographics of the Participants

Variable	n	%
Marital Status		
Married	129	68.98
Living with partner	7	3.74
Divorced	10	5.35
Widowed	4	2.16
Separated	3	1.62
Single	32	17.30
Missing	2	1.08
Race		
Caucasian	177	94.65
African American	2	1.08
Hispanic	1	0.05
Other	4	2.16
Missing	3	1.62
Employment		
Employed	149	79.68
Unemployed	1	0.05
Student	4	2.16
Retired	19	10.16
Home Manager	14	7.48
Total	187	100.00

Table 3

Distribution of Religious and Spiritual Understandings of Life

Variable	<i>n</i>	%
Religious understanding	80	43.01
Spiritual understanding	47	25.26
Neither religious nor spiritual understanding	11	5.91
Both religious and spiritual understanding	48	25.81
Total sample	186	100.00

Table 4

Frequency Distribution of Religious Affiliations of the Respondents

Variable	<i>n</i>	%
Catholic	82	43.85
Other	51	27.27
Methodist	11	5.88
Baptist	10	5.35
Presbyterian	10	5.35
Buddhist	3	1.60
Judaism	3	1.60
No response	16	8.56
Total	187	100.00

Descriptive Results of Survey

Both males and females reported high levels of spirituality. Table 5 presents the percentages of levels of spirituality among participants. Of the 187 respondents, 172 (92%) reported moderate or high levels of spiritual beliefs, while 15 (8%) reported low levels of spiritual beliefs (see p. 36). As reflected in Table 6, 157 (83.95%) respondents stated they prayed either alone, with others, or both. Slightly less than 50% participated in some type of ceremony, while slightly more than 50% reported that meditation was a part of their lives, either alone, with others, or both. One hundred and eight individuals (60%) stated they read and studied as part of practicing their faith, while 113 of those who responded (63%) claimed that contact with a religious leader did not necessarily play a part in their beliefs.

Additionally, 127 (70%) of those who responded reported that they communicated with a spiritual power (prayer or via a medium), 130 (70%) believed in life after death, and 89 (49%) had an intense experience in which they felt some deep meaning in life. An almost equal number of individuals, 69 (38%), reported never having had an intense experience in which they felt some deep new meaning in life. For those

individuals who did report this intense experience, it occurred more than once for 55 (60%) of them, only once for 36 of them (40%), and 96 (51%) did not report the frequency of their experience. This intense experience in which they felt some deep new meaning in life lasted only minutes (54%) for the majority of the participants. It lasted only seconds for 14 respondents (16%), hours for 11 respondents (13%), and days for only 15 (17%). One hundred and sixty-four respondents (93%) reported never having had an intense experience described as a near-death experience (Table 7).

Table 8 presents the means, standard deviations, and scale ranges for the different measures of spiritual belief and mental health scales. It can be observed that the mean scores for view of life, influence in day-to-day-life, ability to cope with life events, and importance in practicing beliefs were 7.94, 7.82, 8.00, and 7.28, respectively. These participants embodied a strong belief in religious or spiritual views of life; in spiritual influence on daily life; in spiritual power that helps one cope with personal events in life; and in the importance of practicing beliefs. Belief that a spiritual force or power influenced world affairs or natural disasters was moderate

among participants, with mean scores of 6.07 and 5.68, respectively.

Table 5

Level of Spiritual Belief of Participants

Belief	<i>n</i>	%
High	83	44.39
Moderate	89	47.59
Low	15	8.02
Total	187	100.00

Table 6

Variables That Play a Role in Belief

Variable N (187)	Alone		With Others		Both		Neither	
	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%	<i>N</i>	%
Prayer	50	27.78	8	4.44	99	55.00	23	12.78
Ceremony	4	2.22	60	33.33	18	10.00	98	54.44
Meditation	70	38.89	1	.56	26	14.44	83	46.11
Reading	43	23.89	19	10.56	46	25.56	72	40.00
Contact religious leader	10	5.56	34	18.89	22	12.22	113	62.78

Note. Missing cases = 4%

Table 7

Frequency Distribution of Questions Not Included in Total Spiritual Belief Scale

Variable	Near Death Intense Exp.		Frequency of Intense Exp.		Length of Intense Exp.	
	N	%	N	%	N	%
None	164	93				
Only Once			36	39.56		
> Than Once			55	60.44		
Seconds					14	16.09
Minutes					47	54.02
Hours					11	12.64
Days					15	17.24

Table 8

*Mean Scores, Standard Deviations, and Scale Ranges for
Spiritual Belief Scale and Mental Health Scales*

Variable	Mean	SD	Scale Ranges
Mental Health			
Satisfaction	4.34	1.08	1 - 6
Depression	8.05	3.00	4 - 24
Emotional Ties	8.80	2.65	3 - 12
Loss	16.07	6.54	9 - 63
Anxiety	19.33	6.53	9 - 63
Affect	41.20	8.52	10 - 10
Psych Distress	48.60	15.75	24 - 104
Well-being	58.49	11.91	14 - 84
Spiritual Beliefs			
View of Life	7.94	2.27	0 - 10
Day-to-Day	7.82	2.69	0 - 10
Cope w/ Events	8.00	2.64	0 - 10
World Affairs	6.07	3.26	0 - 10
Natural Dis	5.68	3.54	0 - 10
Practice Faith	7.28	2.95	0 - 10

Note. $n = 187$

The participants, in the month preceding the study, reported being generally happy, satisfied, or pleased with their personal life. They reported being involved in full and complete relationships a good bit of the time. Low levels of depression, and infrequent mood swings, low spirits, and downheartedness were also characteristic of the participants during the past month. Respondents reported being emotionally stable most of the time, in firm control of their behavior, thoughts, and feelings. Mean scores also revealed low levels of anxiety among participants. They almost never experienced nervousness when faced with excitement of unexpected situations; were almost never rattled, flustered, or upset; and were only a little restless, fidgety, impatient, anxious, or worried during the past month. Respondents reported that the future looked hopeful and promising and expected to have interesting days more often than not. A good bit of the time participants were relaxed and tension free; generally enjoyed the things they did; and viewed life as a wonderful adventure. Most days, during the past month, participants woke up feeling fresh and rested. Little psychological distress was reported among participants during the past month. They reported feeling strained, stressed, pressured, or lonely,

only a little of the time. The psychological well-being of the participants was strong, reporting that most of the time they were able to relax without difficulty. The exercise at the club could have aided in the reduction of anxiety, tension, and stress.

The zero-order intercorrelation matrix (Table 9) shows several significant correlations. View of life or the strength of one's commitment to a particular belief system correlated positively with general positive affect, emotional ties, and psychological well-being. View of life correlated negatively with depression, loss of emotional/behavioral control, and psychological distress. The importance of practicing one's spiritual beliefs correlated positively with general positive affect, emotional ties, and psychological well-being. The level of belief in a spiritual force that influences daily decisions and world affairs resulted in a positive correlation with emotional ties. The level of belief in a spiritual force that enables one to cope with what life bestows correlated positively with general positive affect, and psychological well-being. Overall, individuals with a strong spiritual view of life were more likely to experience better mental health.

Table 9

Inter-correlation Matrix Between the Six Spiritual Belief Variables, Two Life Attitude Variables, and Eight Mental Health Variables

Variable	3	7	8	9	10	11	A	D	L	AF	E	S	DP	O	P	WB
3. View	1.00															
7. Belief	.71	1.00														
8. Day-to-day	.67*	.66*	1.00													
9. Cope	.73*	.77*	.80*	1.00												
10. World Aff	.42*	.45*	.61*	.60*	1.00											
11. Disaster	.35*	.39*	.53*	.49*	.75*	1.00										
A. Anxiety	-.11	-.10	.04	.01	.09	.08	1.00									
D. Depression	-.19*	-.11	.02	.02	.04	.07	.70	1.00								
L. Loss	-.22*	-.18*	.02	.01	.08	.10	.63	.73	1.00							
AF. Affect	.32*	.28*	.09	.19*	.08	.07	-.53	-.69	-.60	1.00						
E. Emotion	.25*	.25*	.20*	.19*	.15*	.10	-.30	-.45	-.40	.59	1.00					
S. Satisfaction	.11	.11	-.04	.03	-.01	-.02	-.38	-.60	-.49	.70	.63	1.00				
DP. Distress	-.19*	-.15	.04	.01	.08	.10	.89	.86	.90	-.67	-.43	-.55	1.00			
O. Optimism	.21*	.16*	.09	.15*	.05	.12	-.23	-.33	-.31	.52	.21	.39	-.33	1.00		
P. Pessimism	-.22*	-.19*	-.06	-.12	-.01	-.01	.43	.50	.47	-.59	-.36	-.42	.53	-.61	1.00	
WB. Well-being	.32*	.29*	.13	.21*	.09	.07	-.54	-.71	-.61	.97	.75	.77	-.69	.48	-.57	1.00

*Significant at the .05 level.

There were significant correlations between optimism and pessimism and several spiritual belief variables. View of life, practice of faith, and belief in a spiritual force that influences one's ability to cope with life events positively correlated with optimism while negatively correlating with pessimism. The stronger one's view of life, practice of faith, and spiritual influences, the more likely respondents were to have an optimistic attitude.

Statistical Analysis for Hypothesis Testing

Five hypotheses were formed for this study in an effort to explore the relationship between spiritual beliefs, attitude toward life and mental health. The statistical results appearing in this section of the research relate to the five hypotheses forming the basis of this study. Direct-method multiple regression analyses were used to examine the relationships between the variables in Hypotheses 1 through 4. Hypothesis 5 sought to establish the relationship between spiritual beliefs, attitude toward life, and mental health variables. Canonical correlation analysis was used for testing this hypothesis. Significance was set at the .05 level.

The following null hypotheses looked at the individual scores of the Optimism/Pessimism Instrument and their

relationships with the six independent variables used to measure spiritual belief.

Null Hypothesis 1 states: There is no relationship between spiritual belief and attitude toward life, as measured by optimism and pessimism.

A direct-method regression analysis was used to determine the relationship between optimism and six measures of spiritual beliefs: view of life, importance in practice of belief, influences of beliefs on world affairs, day-to-day life, natural disasters, and coping with life events. Table 10 shows the results of regression analysis. The six measures of spiritual beliefs accounted for 7% of the variance in optimism. At an alpha level of 0.05, this was not significant. Thus, no statistically significant linear relationship was found between optimism and the six measures of spiritual beliefs ($F(6,145) = 1.828, p = 0.098$). Based on the analysis, the hypotheses was retained.

Table 10

Multiple Regression Analysis of Spiritual Beliefs on Optimism

Variable	B	SE	Beta	t	Sig.
(constant)	(51.434)	(1.855)			
View of life	.582	.345	.220	1.688	.094
Practice of belief	.189	.262	.096	.720	.473
Day-to-day	-.431	.323	-.192	-1.335	.184
Cope events in life	.140	.384	.061	.366	.715
World affairs	-.321	.237	-.178	-1.358	.176
Natural disaster	.330	.201	.202	1.644	.102

Note. $R^2=0.070$; $F(6,145)=1.828$; $p=0.098$.

A direct method regression analysis was used to determine the relationship between pessimism and six measures of spiritual beliefs: view of life, importance in practice of belief, influences of beliefs on world affairs, day-to-day life, natural disasters, and coping with life events. The results presented in Table 11 show this regression analysis. The six measures of spiritual beliefs accounted for less than 8% of the variance in pessimism. At an alpha level of 0.05, this was not significant. Thus, no statistically significant relationship was found between pessimism and the six measures of spiritual beliefs ($F(6,138) = 1.863$, $p=0.091$). Based on the analysis, the

hypotheses was retained. It is interesting to note, however, that view of life, defined as the strength of one's commitment to a particular spiritual belief system, was a significant predictor in the model ($B = -.286$). The weaker the view of life, the more negative the state of mental health appeared to be for the participant.

Null Hypothesis 2 states: There is no relationship between spiritual belief and mental health.

There was some indication that spiritual beliefs affected mental health. Significant correlations were observed between spiritual belief and depression, loss of behavioral/emotional control, general positive affect, emotional ties, psychological distress, and psychological well-being.

Table 11

Multiple Regression Analysis of Spiritual Beliefs on Pessimism

Variable	B	SE	Beta	t	Sig.
(constant)	(21.125)	(2.041)			
View of life	-.865	.370	-.286	-2.337	.021
Practice of belief	-.257	.284	-.115	-.904	.367
Day-to-day	.507	.357	.202	1.421	.157
Cope events in life	.247	.417	.095	.594	.554
World affairs	.128	.257	.063	.497	.620
Natural disaster	.054	.218	.029	.246	.806

Note. $R^2=0.075$, $F(6,138)=1.863$, $p=0.091$.

Sub null hypothesis 2a states: There is no relationship between spiritual belief and anxiety.

To determine the relationship between one's spiritual belief and anxiety, multiple regression was used. The results in Table 12 show that the predictor variables were not significant predictors of anxiety. The six measures of spiritual beliefs, as a set, explained only 7% of the variance in the criterion variable, anxiety. Based on this analysis, the null hypothesis was retained.

Table 12

Multiple Regression Analysis of Spiritual Beliefs on Anxiety

Variable	B	SE	Beta	t	Sig.
(constant)	(36.825)	(2.311)			
View of life	-.751	.416	-.230	-1.807	.073
Practice of belief	-.579	.316	-.241	-1.831	.069
Day-to-day Cope events in life	.273	.388	.101	.704	.483
World affairs	.467	.464	.166	1.006	.316
Natural disaster	.141	.294	.065	.481	.631
	.036	.260	.002	.014	.989

Note. $R^2=0.071$; $F(6,153)=1.946$; $p=0.077$.

Sub null hypothesis 2b states: There is no relationship between spiritual belief and depression.

Multiple regression analysis was used to determine the relationship between spiritual beliefs and depression. As a set, the six measures of spiritual beliefs were a significant predictor of depression. The measures accounted for slightly more than 10% of the variance in depression. This was significant at the .05 level ($F(6, 154)=3.04$, $p=0.008$). View of life was the most important predictor in the regression model ($B=-.378$), followed by coping with live events, approaching significance at .054. A stronger view

of life resulted in a less depressive state of mental health. There was a statistically significant relationship found between depression and the six measures of spiritual beliefs (Table 13). Thus, the null hypothesis was rejected.

Table 13

Multiple Regression Analysis of Spiritual Beliefs on Depression

Variable	B	SE	Beta	t	Sig.
(constant)	(9.092)	(.887)			
View of life	-.506	.161	-.378	-3.143	.002
Practice of belief	-.166	.124	-.168	-1.345	.180
Day-to-day Cope events in life	.138	.155	.123	.888	.376
World affairs	-.034	.112	-.038	-.308	.759
Natural disaster	.077	.095	.095	.810	.419

Note. $R^2=0.106$; $F(6,154)=3.040$; $p=0.008$.

Sub null hypothesis 2c states: There is no relationship between spiritual belief and loss of behavioral/emotional control.

Table 14 shows the results of the regression analysis used to determine the relationships between loss of behavioral/emotional control and spiritual belief. The six

measures of spiritual belief accounted for nearly 18% of the variance in loss of behavioral/emotional control. At an alpha level of 0.05, this was significant. There were three significant predictors within the regression model. View of life was the most important predictor in this model ($B = -.445$), followed by coping with life events ($B = .351$) and practice of belief ($B = -.259$). These results suggested that weak spiritual view of life, disbelief that a spiritual force enables one to cope with life events, and the lack of importance in practicing beliefs were relevant predictors of loss of behavioral or emotional control. Based on the analysis, the null hypothesis was rejected.

Table 14

Multiple Regression Analysis of Spiritual Beliefs on Loss of Behavioral/Emotional Control

Variable	B	SE	Beta	t	Sig.
(constant)	(19.801)	(1.981)			
View of life	-1.378	.355	-.445	-3.877	.000
Practice of belief	-.594	.274	-.259	-2.172	.031
Day-to-day Cope events in life	.373	.342	.145	1.091	.277
World affairs	.936	.400	.351	2.339	.021
Natural disaster	.010	.246	-.005	.043	.966
	.202	.209	.108	.964	.336

Note. $R^2 = 0.175$; $F(6, 153) = 5.391$; $p = 0.000$.

Sub null hypothesis 2d states: There is no relationship between spiritual belief and general positive affect.

Table 15 presents the relationship between general positive affect and spiritual beliefs. The six measures of spiritual beliefs accounted for slightly more than 15% of the variance in general positive affect. This was significant at the 0.05 alpha level. Thus a statistically significant relationship was found between general positive affect and the six measures of spiritual beliefs ($F(6,152)=4.623, p=0.000$). Two independent variables were significant predictors within this model; view of life, the more important of the predictors ($B=.421$), followed by day-to-day spiritual influence on life ($B=-.264$). View of life was of moderate importance in predicting general positive affect, defined as an emotion or feeling distinguished from cognition, thought, or action, while belief that a spiritual force or power influences what happens in day-to-day life was of low importance in predicting general positive affect. The null hypothesis was rejected.

Table 15

Multiple Regression Analysis of Spiritual Beliefs on General Positive Affect

Variable	B	SE	Beta	t	Sig.
(constant)	(32.961)	(2.551)			
View of life	1.630	.456	.421	3.576	.000
Practice of belief	.439	.375	.152	1.170	.244
Day-to-day	-.849	.429	-.264	-1.981	.049
Cope events in life	-.099	.509	-.030	-.195	.845
World affairs	-.083	.311	-.032	-.266	.790
Natural disaster	.059	.265	.025	.222	.825

Note. $R^2=0.154$; $F(6,152)=4.623$; $p=0.000$.

Sub null hypothesis 2e states: There is no relationship between spiritual belief and emotional ties.

Table 16 shows the results of regression analysis used to determine the relationships between spiritual belief and emotional ties. The six measures of spiritual belief accounted for only 8% of the variance in emotional ties. At an alpha level of .05, this was significant. Thus, there was a significant relationship found between emotional ties and the six measures of spiritual beliefs ($F(6,155)=2.243$, $p=0.042$). However, though the set of predictors was significant, no significant individual predictors were

revealed. This may be in part due to the strong inter-correlations among the predictor variables, shown in Table 9. Based on the analysis, the null hypothesis was rejected.

Table 16

Multiple Regression Analysis of Spiritual Beliefs on Emotional Ties

Variable	B	SE	Beta	t	Sig.
(constant)	(6.679)	(.801)			
View of life	.266	.145	.222	1.827	.070
Practice of belief	.147	.112	.167	1.321	.189
Day-to-day Cope events in life	.073	.140	.074	.522	.602
World affairs	-.209	.164	-.202	-1.274	.205
Natural disaster	.058	.101	.073	.578	.564
	-.042	.086	-.059	-.498	.619

Note. $R^2=0.080$; $F(6,155)=2.243$; $p=0.042$.

Sub null hypothesis 2f states: There is no relationship between spiritual belief and life satisfaction.

Multiple regression analysis was used to determine the relationship between spiritual belief, defined as a culmination of one's convictions and perceptions gained through one's spiritual and life experiences, and life

satisfaction. The analysis, presented in Table 17, showed no significant relationship between life satisfaction and spiritual belief. The set of variables explained only 4% of the variance in the criterion variable life satisfaction ($F(6,153)=1.249$, $p=.285$). Therefore, the null hypothesis was retained.

Table 17

Multiple Regression Analysis of Spiritual Beliefs on Life Satisfaction

Variable	B	SE	Beta	t	Sig.
(constant)	(4.035)	(.332)			
View of life	.116	.063	.237	1.840	.068
Practice of belief	.043	.063	.121	.933	.352
Day-to-day	-.080	.058	-.200	-1.377	.170
Cope events in life	-.028	.069	-.068	-.412	.681
World affairs	-.032	.042	-.010	-.077	.939
Natural disaster	-.064	.035	-.022	-.182	.856

Note. $R^2=0.047$, $F(6,153)=1.249$, $p=0.285$.

Sub null hypothesis 2g states: There is no relationship between spiritual belief and psychological distress.

A direct-method regression analysis was used to determine the relationships between psychological distress and the six measures of spiritual beliefs. The results of the analysis are presented in Table 18. The six measures of spiritual beliefs accounted for 14% of the variance in psychological distress. This was significant at the 0.05 alpha level. Therefore, a statistically significant relationship was found between psychological distress and the six measures of spiritual beliefs ($F(6,151)=4.170$, $p=001$). View of life resulted in the strongest predictor of psychological distress. Participants who held strong views of life revealed less psychological distress or more positive states of mental health. Based on the analysis, the null hypothesis was rejected.

Sub null hypothesis 2h states: There is no relationship between spiritual belief and psychological well-being.

Table 19 presents the regression analysis for psychological well-being and spiritual beliefs. As a set, the six predictors of spiritual beliefs were a significant predictor of psychological well-being. The measures accounted for slightly more than 13% of the variance in psychological well-being. This was significant at the 0.05 level ($F(6,150)=3.872$, $p=0.001$). View of life was the only

significant predictor in the model. The stronger the view of life, the more positive the state of mental health for the participant. Based on the analysis, the null hypothesis was rejected.

Table 18

Multiple Regression Analysis of Spiritual Beliefs on Psychological Distress

Variable	B	SE	Beta	t	Sig.
(constant)	(55.771)	(4.787)			
View of life	-3.009	.858	-.411	-3.509	.001
Practice of belief	-1.117	.660	-.206	-1.691	.093
Day-to-day	1.098	.826	.180	1.329	.186
Cope events in life	1.688	.966	.268	1.748	.082
World affairs	.130	.594	.027	.218	.828
Natural disaster	.353	.505	.080	.699	.486

Note. $R^2=0.142$, $F(6,151)=4.170$, $p=0.001$.

Table 19

Multiple Regression Analysis of Spiritual Beliefs on Psychological Well-Being

Variable	B	SE	Beta	t	Sig.
(constant)	(141.638)	(3.415)			
View of life	1.888	3.415	.366	2.974	.003
Practice of belief	.699	.502	.185	1.395	.165
Day-to-day	-.797	.576	-.189	-1.383	.169
Cope events in life	-.263	.694	-.060	-.380	.705
World affairs	.036	.418	.011	.087	.931
Natural disaster	-.106	.352	-.035	-.301	.763

Note. $R^2=0.134$, $F(6,150)=3.872$, $p=0.001$.

Null Hypothesis 3 states: There is no significant relationship between spiritual belief, attitude toward life, mental health, and age.

A direct-method regression analysis was used to determine the relationship between spiritual belief, attitude toward life, and mental health, among age. Because the analysis of independent variables for spiritual belief, attitude toward life, and mental health, was explored in hypotheses 1 and 2, hypothesis 3 looks at the global score of spiritual belief and its relationship with attitude, mental health, and age. The results presented in Table 20

show the analysis. Spiritual belief, attitude toward life, and mental health, as a set, were significantly related to age. The linear combination among these variables accounted for slightly over 21% of the variance in age ($F(11,128)=3.155, p=0.000$). Specific predictors include anxiety ($B=2.82$), loss of emotional/behavioral control ($B=3.01$), and psychological distress ($B=-2.80$). The older the subject, the more likely they are to experience higher levels of anxiety, higher levels of loss of emotional and behavioral control, and lower levels of psychological distress. Therefore, the null hypothesis was rejected.

Null Hypothesis 4 states: There is no difference in spiritual belief, attitude toward life, and mental health between men and women.

An independent t-test was used to determine the difference between six measures of spiritual belief: view of life, importance in practice of belief, influences of beliefs on world affairs, day-to-day life, natural disasters, and coping with life events, and attitude toward life: optimism and pessimism, among men and women. Table 21 shows the results of the analysis. Females were slightly higher than males in all measures excluding one, pessimism. At the significance level of .05, females seem to have a slightly greater belief in a spiritual power or force that

influences what happens in day-to-day life. They also appear to embrace the idea that a spiritual power or force enables one to better cope with personal life events.

Table 20

Multiple Regression Analysis of Spiritual Beliefs, Attitude Toward Life, and Mental Health among Age

Variable	B	SE	Beta	t	Sig.
(constant)	(70.176)	(19.904)	.125	1.451	.150
Spirit	.153	.105	-.058	-.546	.586
Optimism	-.140	.257	.014	.131	.896
Pessimism	.027	.209	1.401	2.768	.007
Anxiety	2.818	1.018	.397	1.623	.107
Depression	1.749	1.078	1.520	2.970	.004
Loss	3.009	1.013	-.144	-.179	.859
Affect	-.228	1.278	-.084	-.308	.759
Emotion	.437	1.418	-.299	-1.915	.058
Satisfaction	-3.973	2.075	-3.316	-3.073	.003
Psych Distres	-2.797	.910	.362	.344	.732
Well-being	.415	1.207			

Note. $R^2 = 0.213$, $F(11, 128) = 3.155$, $p = 0.000$.

Table 21

Mean Levels and Standard Deviations of Spiritual Beliefs and Attitude by Gender

Variable	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
View of life	8.21	2.10	7.39	2.52	-2.29	176	.067
Practice of belief	7.58	2.86	6.62	3.06	-1.97	166	.517
Day-to-day	8.19	2.43	7.02	3.07	-2.74	176	.033*
Cope events in life	8.87	6.01	7.21	2.87	-2.84	178	.045*
World affairs	6.21	3.15	5.76	3.49	-.88	177	.224
Natural disaster	5.90	3.51	5.22	3.60	-1.20	177	.826
Optimism	55.14	5.81	54.42	6.18	-.75	173	.723
Pessimism	33.55	7.03	33.76	7.20	.18	162	.972

Note. Female $n=123$; male $n=61$.

*Significant at the .05 level.

Table 22 shows the differences between men and women on the mental health subscales. These results indicated that only two variables, psychological distress and psychological well-being, differentiated the two groups significantly. Females had significantly higher psychological distress than males. Perhaps, for this reason, females had significantly lower levels of psychological well-being than males.

From these scores it would appear that the group participants were a fairly homogenous group. The majority

of the sample were happy most of the time, psychologically fit, possessed high general positive affect, and had a spiritual or religious understanding of their life.

Table 22

Mean Levels and Standard Deviations of Mental Health Variables by Gender

Variable	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>t</i>	<i>df</i>	<i>p</i>
Anxiety	20.32	6.72	17.22	5.59	-3.08	182	.085
Depression	8.56	3.07	6.98	2.55	-3.45	183	.344
Loss	17.24	7.02	13.63	4.59	-3.62	182	.070
Affect	40.54	8.87	42.53	7.65	1.49	182	.059
Emotion	8.85	2.67	8.68	2.61	-.41	185	.888
Satisfact	4.28	1.11	4.46	1.01	1.05	182	.296
Psych. Distress	51.38	16.29	42.68	12.76	-3.58	179	.024*
Psych. Well-being	152.02	11.78	154.47	9.75	1.51	179	.031*

Note. Female $n=123$; male $n=61$.

*Significant at the .05 level.

Null Hypothesis 5 states: *There is no significant canonical correlation between any linear combination of the six spiritual belief variables, the two attitude toward life variables, and the eight mental health variables.*

The first function was found to be statistically significant at the .05 level. This function yielded a canonical correlation of $r = .487$ ($R^2 = .238$), with $X^2 = 612.82$ and $p < .0073$. The null hypothesis was rejected. Table 23 presents the canonical variable loadings in the two sets of variables for this function. Determining the cutoff for interpretation of the loadings is based on personal preference. However, it is common procedure to initially note only variables whose weights are at least half the value of the greatest weight. These variables are ranked and considered significant in the canonical analysis. Variables with loadings below .30 are usually not interpreted (Tabachnick & Fidell, 1996).

As indicated in Table 23, the significant canonical function suggested that participants with a strong view of life, feel a need for practicing beliefs, and believe that a spiritual force or power enables one to cope with personal events in life, have better psychological well-being, general positive affect, emotional and behavioral control, and less psychological distress, experience better emotional ties with others, less depression, more satisfaction in life and less anxiety.

Table 23

Canonical Correlation Function 1

Spiritual Beliefs and Life Attitude Variables Set 1			Mental Health Variables Set 2		
Variable	Weight	Rank	Variable	Weight	Rank
View of life	.455	1	Anxiety	-.396	8
Practice	.371	2	Depression	-.495	6
Day-to-day	.207		Loss	-.730	3
Cope	.307	3	Affect	.784	2
World affair	.101		Emotion	.560	5
Natural disaster	.040		Satisfaction	.453	7
			Distress	-.643	4
			Well-being	.817	1
			Optimism	.362	
			Pessimism	-.394	

Summary

This chapter dealt with the findings of the research that examined the relationship between spiritual belief, attitude toward life, and mental health. Two of the five null hypotheses had subhypotheses, and all were tested. A descriptive analysis of the sample was provided, including age, marital status, level of spiritual belief, distribution of religions, and spiritual understanding of life. Descriptive results of the survey were given, including the mean, standard deviation, and the minimum and maximum values of each spiritual belief measure (life satisfaction, depression, emotional ties, loss of behavioral/emotional control, anxiety, and general positive affect). Psychological distress and psychological well-being were additional subscales utilized in the study.

A direct-method multiple regression analysis was used to test hypotheses 1, 2, and 3. An independent *t*-test was run for hypothesis 4, and a canonical correlation analysis was used for hypothesis 5. Additionally, an inter-correlation matrix was run for hypothesis 2 in an effort to examine the relationship between the six predictor variables and the 10 criterion variables.

The research hypotheses analyses presented six significant relationships. The relationship between

spiritual belief and depression was significant. As view of life increased, depression significantly decreased in this group of participants. The results indicated that approximately 94% of the participants experienced depression only some of the time while 87% reported being happy most of the time. Furthermore, depression had a significant negative correlation with psychological well-being.

The relationship between spiritual beliefs and loss of behavioral/emotional control was significant. Participants with higher views of life revealed lower levels of uncontrollable behavior or emotion. A surprising 98% felt in control of their emotions most of the time. General positive affect, emotional ties, psychological distress, and psychological well-being also demonstrated significant relationships with spiritual belief.

The study revealed no relationship between spiritual belief and attitude toward life. However, view of life, a subcomponent used to measure spiritual beliefs, was significant. The results also indicated no relationships between spiritual beliefs and anxiety or life satisfaction.

CHAPTER V

SUMMARY, DISCUSSION, CONCLUSION, AND RECOMMENDATIONS

The final chapter presents a summary of the study, which includes the statement of the problem, purpose of the study, and an overview of the literature. The methodology utilized in the study, the analysis of the data results, and the conclusions and recommendations for further study are also presented.

Summary of the Study

Religion and spirituality are important in the lives of most Americans. National polls show that 9 out of every 10 Americans believe in God and consider religion important in their lives (Elkins, 1999; Kroll, 1995; Kroll & Sheehan, 1989). It has become apparent that individuals are thinking about their spirituality or belief system, and may even be a bit curious as to the impact it has in their lives. More and more health professionals are also acknowledging that spirituality plays a relevant role, whether positively or negatively, in mental health (Elkins, 1999). In fact, over

the past decade, there has been an increased awareness of the impact of spirituality on mental health. Additionally, there has been growing evidence that attitude may also influence mental health (Seligman, 1998). Although it appears that attitude toward life and spiritual beliefs share common benefits for mental health, scant data have been gathered that look at this relationship. Studies on how one's spiritual beliefs contribute to one's life attitude and one's mental health are thus needed.

Purpose of the Study

Therefore, this study investigated spirituality and its relationship with life attitude and mental health. It was the purpose of this study to look at a group of individuals and examine the relationship between spirituality, attitude toward life, and mental health.

The overall goal of this study was to provide a better understanding of spirituality and its relationship with mental health and inform health professionals of the role spiritual beliefs play in life attitude and mental health. Hopefully this will aid in the development of more effective strategies when working with clients seeking better mental health.

Overview of the Literature

The field of psychology has produced very little research that supports the importance of spirituality, from a clinical stance (Mack, 1994). Some believe that spirituality is an area of study that often fuels more controversy than valid research (Elkins, 1999). However, the empirical research that has been conducted has repeatedly shown that a commitment to a spiritual relationship is usually associated with healthy physical, emotional, intellectual, occupational, and social functioning (Chandler et al., 1992; Ellison & Levin, 1998; Hawks, 1994; Maher & Hunt, 1993; Witmer & Sweeney, 1992). The unfortunate problem is the lack of an accurate, universal definition of spirituality, thus making the task of measurement of spirituality an enormous challenge. Some suggest this has had an impact on active contributors to research in the area of spirituality (Elkins, 1999).

Over the past several decades the interest in spirituality has appeared to increase, yet, reassurance in religion and religious leadership has continued to decrease. Studies show that although Americans may desire spirituality, it may not be in the form of organized religion (McGovern, 1998; Zinnbauer et al., 1997). Researchers have postulated several reasons why this may

exist:

"Spiritual health cannot be defined and researched and therefore, cannot be a legitimate area of study; spirituality is a part of the mental/emotional psychological dimension of health and does not need to be recognized as a separate entity within health education; and, recognition of spiritual health implies a recognition of religiosity which evades the issue of the separation of church and state in education" (Zinnbauer et al., 1997; p. 550).

Also supported by the literature is the view that spirituality seems to play a minimal role in the lives of most psychologists in the United States (Shafranske, 1996). A mere 33% of clinical psychologists have reported their faith as the most important influence in their lives, compared to 72% of the general population (Shafranske, 1996).

Several wellness models suggest that the spiritual dimension is the one component that is interactive with all the other dimensions (Adams & Bezner, 2000; Chandler et al., 1992; Crose et al., 1992; Goodloe & Arreola, 1992; Hettler, 1979; Witmer & Sweeney, 1992), indicating the importance of spirituality to mental health. It is believed, by some, that in order to experience wellness at an optimum level there must be a balance among the six dimensions of health (Adams & Bezner, 2000; Chandler et al., 1992; Hawks, 1994; Kolander & Chandler, 1990; Maher & Hunt, 1993; Witmer & Sweeney, 1992). Some have gone a step further and viewed

spirituality as not only an important component to the balance, but at the very core of wellness (Goodloe & Arreola, 1992; Kolander & Chandler, 1990; Witmer & Sweeney, 1992).

While some studies exist that explore the relationship of spirituality and mental health, little has been reported on the relationship of spiritual belief, attitude toward life, and mental health.

Methodology

A sample of 690 individuals was obtained from the Northwest Athletic Club in Northwest, Indiana. Surveys were randomly distributed to club members, yielding a total of 187 (27% return rate) participants for the study. The data from these respondents were analyzed by zero-order correlation, multiple regression, or canonical correlation analyses, as seen appropriate.

Findings and Discussion

Five research questions were addressed in this study. The analysis revealed that several questions resulted in significant relationships. Among the more important findings were the significant relationships found between spiritual beliefs, and the following: depression, loss of behavioral/emotional control, general positive affect,

emotional ties, psychological distress, psychological well-being, and age.

Research question 1: Do people with high levels of spirituality have a better attitude toward life?

There was no statistically significant relationship found between attitude toward life, as measured by optimism and pessimism, and spiritual beliefs. This study did not support the studies that suggested that an optimistic outlook on life provides enrichment to life, both personally and professionally (Lee & Seligman, 1997; Peterson, 2000; Seligman, 1998). This group did not appear to have better attitudes toward life even though they reported feeling happy most of the time and experienced very little depression. Further, nearly 90% reported moderate to high levels of spirituality. A possible explanation for this finding could be that only those participants who felt secure with their spirituality responded to the survey, making them a fairly homogenous group. It should be noted that several non-participants (approximately 15%) indicated feeling hesitant about answering the spiritual experience instrument, stating this was personal information they were unwilling to share. Therefore, the opportunity for exploration of spiritual diversity may have been somewhat limited.

Research question 2: Do people with high levels of spirituality report better mental health?

There was some indication that spiritual beliefs affected mental health. Significant correlations were observed between spiritual belief and depression, loss of behavioral/emotional control, general positive affect, emotional ties, psychological distress, and psychological well-being. View of life emerged as the one consistent predictor variable in nearly every regression model that proved statistically significant. The findings in this study suggested that individuals with strong commitments to a particular spiritual belief system were generally: less depressed, more in control of their behavior or emotions, better able to establish emotional ties with others, and more psychologically fit. It is important to note the observation that many individuals use exercise as a means of reducing stress, tension, or anxiety in everyday life. It seems that those who regularly participate in exercise benefit from their efforts, and obtain a healthy body and mind.

It could also be speculated that "soft variables" may have played a part in the lack of significant correlations between spiritual beliefs and some mental health subscales. The literature refers to "soft variable" measures (i.e.,

paper-pencil personality tests) as measures that are typically limited by psychometric properties. Items such as self-actualization, rigidity, spirituality, or tolerance of ambiguity are only a few examples (Gartner et al., 1991). In contrast, "hard variables" are those variables that can be directly observed, reliably measured, value-neutral, and of unquestionable validity. Thus, falling under the category of soft variables, spirituality or spiritual belief is often difficult to measure.

Research question 3: Is age related to spiritual belief, attitude toward life, and mental health?

Spiritual beliefs, attitude toward life, and mental health, as a set, were significantly related to age. The strongest predictors included: anxiety, loss of emotional/behavioral control, and psychological distress. The older the subject, the more likely they were to experience higher levels of anxiety, higher levels of loss of emotional and behavioral control, and lower levels of psychological distress. This was a surprising finding because one might expect that with age comes a stronger, more balanced sense of self, encompassing spirituality. Another hypothesis might be that older participants were much less realistic in their thinking and more honest with themselves. Yet, for whatever reason, the older

participants in this study reported moderate to high levels of spirituality, yet appeared more anxious and less in control of their emotions or behaviors.

Research question 4: *Is there a difference in spiritual belief, attitude toward life, and mental health between men and women?*

There were three variables that were statistically significant and were supported by the hypothesis: the belief that a spiritual power or force has an influence on day-to-day life, the belief that a spiritual power or force helps one cope with personal events in life, and psychological distress. Females presented as slightly more distressed than males and held slightly stronger beliefs in a spiritual power or force.

Given that the makeup of the participants resulted in a fairly homogeneous group, these findings were somewhat expected. The majority of the sample were happy most of the time, psychologically fit, possessed high general positive affect, and had a spiritual or religious understanding of their life. Had there been less homogeneity among individuals, a stronger difference between variables may have emerged. Clearly, the group as a whole presented as psychologically fit and spiritually sound, making it more

difficult to identify how the variables were related to each gender.

Research question 5: Is there a linear relationship between spiritual belief, attitude toward life, and mental health?

The first set of variates was statistically significant, revealing that a strong commitment to a particular belief system, practicing spiritual beliefs, and spiritual influences in personal events and in day-to-day life were associated with lower anxiety, depression, loss of behavioral and emotional control, psychological distress, and pessimism. These beliefs were also associated with higher general positive affect, emotional ties, life satisfaction, psychological well-being, and optimism.

Again, these findings suggested that individuals who present as psychologically and spiritually sound are generally representative of healthy physical, emotional, social, intellectual, and occupational functioning. This is a concept heavily supported by the current literature (Chandler et al., 1992; Ellison & Levin, 1998; Hawks, 1994; Maher & Hunt, 1993; Marquand, 1995; Witmer & Sweeney, 1992).

Conclusions

This research led to the following conclusions.

1. Although both male and female participants reported either a moderate or high level of spirituality, there appeared to be no significant correlation between spiritual belief and attitude toward life, as measured by optimism and pessimism.

2. There was some indication that spiritual beliefs affected mental health. This study revealed that participants with strong spiritual beliefs appeared psychologically sound. They presented with strong general positive affect and appeared to suffer significantly less psychological distress in their lives. Further, they appeared to be less depressed, more in control of their emotions and behaviors, and better able to establish emotional ties with others.

3. Spiritual belief, attitude toward life, and mental health, as a set, were significantly related to age. Specific predictors include anxiety, loss of emotional/behavioral control, and psychological distress. The older the participant, the more likely they were to experience high levels of anxiety and loss of behavioral/emotional control, and lower levels of psychological distress.

4. There appeared to be a linear relationship in spiritual belief, attitude toward life, and mental health between men and women. Females seemed to have a slightly greater belief that their day-to-day lives were influenced by a spiritual force or power, while embracing the idea that this force enabled them to better cope with personal events in life. Only psychological distress and psychological well-being differentiated the two groups, showing that females experienced higher psychological distress than males.

Implications

The following implications were a result of this research.

1. Although no significant relationship was found between spiritual beliefs and attitude toward life, this study suggested that the level of spiritual commitment might influence one's negative perception toward life. The more connected one was to a spiritual belief, the less negative they perceived life. Research which suggests that a negative attitude or negative perception of life impacts mental health (Peterson, 2000; Seligman & Csikszentmihalyi, 2000) seems to support this. As in this study, individuals who possess this negative attitude suffer with depression, low achievement, and bad health habits. Because census

reports suggest that the majority of Americans consider spirituality important in their lives, it is encouraged that clinicians find it relevant to investigate or explore the spiritual levels or the spiritual connections of their clients. Although many clinicians appear to remain hesitant to broach the subject with their clients, this study supports the literature that finds spirituality to be a key component to a balanced state of mental health.

2. Overall, the participants in this study held strong convictions for their spiritual beliefs while also appearing mentally sound. In some capacity, these participants' spiritual beliefs contributed to their strong mental health. Understanding what spirituality means to a client and how it impacts the social, intellectual, occupational, emotional, and physical dimensions of their lives might prove beneficial for clinicians. Assessing the level of commitment to and the meaning of one's spiritual belief system is essential information that should be included in the intake. Unfortunately, it is information often ignored by clinicians.

3. It appeared from this study that individuals with a strong commitment to a particular spiritual belief system generally experienced better mental health. Therefore, it could be implied that addressing issues in therapy with

these clients from a spiritual perspective might also foster better mental health. Clinicians can communicate to their clients their willingness to discuss issues of spirituality and provide a safe environment for that discussion without imposing their personal belief systems on their clients. Unfortunately, this is not a new concept. Twelve-step programs have recognized the importance of a relationship with a higher power and perceive it as an essential component to their program's foundation. Research continues to show that a higher power is key to optimum mental health (Chandler et al., 1992; Firshein, 1997; Hawks, 1994; Witmer & Sweeney, 1992). Spirituality has not received the full attention it deserves. This is evidenced by the hesitation of some clinicians to incorporate it into their work.

4. Because this study suggests the importance of strong correlations between spiritual beliefs and positive mental health, self-exploration of one's own level of belief might prove useful. For those uncertain about embracing spirituality into their own lives, there are a number of ways to still provide the client with the opportunity for spiritual expression. Educating one's self in the area of spirituality or exploring the subject with clients might aid clinicians in their efforts to understand the connection between spirituality and positive mental health. Addressing spiritual issues with clients is comparable to the work

clinicians already do with clients from different cultural backgrounds. Race, gender, sexual orientation, ethnic and cultural influences are all considered throughout the therapeutic process. One's religious or spiritual belief system warrants the same consideration.

Recommendations

1. Much of the literature in the area of spirituality is speculative and ungrounded in theory. The concept needs to be operationalized in order to better assist researchers with measurement in empirically based studies.

2. A replication of this study using a different population might yield even more successful results between spiritual beliefs, attitude toward life, and mental health. A less homogenous group could allow for more extensive exploration of spiritual beliefs.

3. In nearly every regression model, one individual predictor variable remained consistently significant. View of life was either the strongest predictor or the only predictor variable in most of the equations. The consistency of this variable warrants further exploration in future studies.

4. Further research needs to be conducted exploring the relationship between spirituality and religion. For instance, although Zinnbauer et al.'s (1997) and Mahoney and

Graci's (1999) studies both revealed that the majority of individuals considered themselves to be both spiritual and religious, the literature suggests that further investigation of these two concepts is warranted, as they are often used without definition and clarification of meaning.

5. For clinicians to begin to embrace the idea of spirituality in therapy, a paradigm shift in regard to spirituality and its validity to overall wellness is imperative. To foster this shift, more psychology programs might include in their curriculums training for spiritual issues. Students who receive this training might be more likely to see the importance of spirituality in people's lives and, thus, incorporate it into their therapeutic work.

APPENDIX A
CORRESPONDENCE

Andrews University

September 7, 2000

Sharon Sacks
304 North Brook Dr.
Michigan City, IN 46360

Dear Sharon:

RE: APPLICATION FOR APPROVAL OF RESEARCH INVOLVING HUMAN SUBJECTS

HSRB Protocol # : 00-01 : 420 **Application Type :** *Original* **Dept :** *Ed & Couns Psvc - 0104*

Review Category : *Exempt* **Action Taken :** *Approved*

Protocol Title : *The Relationship Between Spiritual Belief, Life Attitude and Mental Health Among Physical Fitness Participants in Northern Indiana*

On behalf of the Human Subjects Review Board (HSRB) I want to advise you that your proposal has been reviewed and approved. You have been given clearance to proceed with your research plans.

All changes made to the study design and/or consent form after initiation of the project require prior approval from the HSRB before such changes are implemented. Feel free to contact our office if you have any questions.

The duration of the present approval is for one year. If your research is going to take more than one year, you must apply for an extension of your approval in order to be authorized to continue with this project.

Some proposal and research designs may be of such a nature that participation in the project may involve certain risks to human subjects. If your project is one of this nature and in the implementation of your project an incidence occurs which results in a research-related adverse reaction and/or physical injury, such an occurrence must be reported immediately in writing to the Human Subjects Review Board. Any project-related physical injury must also be reported immediately to the University physician, Dr. Loren Hamel, by calling (616) 473-2222.

We wish you success as you implement the research project as outlined in the approved protocol.

Sincerely,



Linda Thorman, Ed.D.
Human Subjects Review Board
cc: Nancy Carbonell

Andrews University

Greetings! My name is Sharon Sacks and I am a doctoral student at Andrews University pursuing a degree in Psychology. As a future psychologist I am interested in studying what contributes to a healthy outlook on life. What can prevent depression or anxiety attacks before they happen? Several studies have been conducted in this area, yet few, if any, have studied those individuals who have made a commitment to good physical health. This is why I am inviting you to participate in this study.

As a thank you for your time and effort I am offering to the first 200 respondents a *chance* to **win three months membership FREE!** All you need to do is complete the enclosed survey and turn it into the front desk at the Northwest Athletic Club by **October 2nd**. Keep the attached ticket at the bottom of this page and on *October 4th two numbers will be drawn* and posted at the NAC. The lucky individuals who hold the matching ticket numbers will *each* receive three months of their membership paid. *Remember, the matching ticket number **must** be presented in order to receive the three month membership.* I appreciate your time in completing this survey.

Sincerely,

Sharon Sacks, M.S.

Ph.D. Candidate

Place this ticket on your refrigerator for safe keeping.

Andrews University

Greetings Northwest Athletic Club members:

Approximately two weeks ago you received a survey by mail along with a cover letter explaining my research project. Many of you returned the survey, and I thank you. For those of you who have not yet returned your survey, I ask that you take 10 minutes to fill out the information and return it to either the NAC or directly to me.

Literature shows that spirituality has been an often overlooked dimension of mental health and may actually be an important component of optimum wellness. Research that explores spirituality and its effects on one's attitude toward life and mental health is scarce and sorely needed. My hope is that I will be able to use the results of this study to more fully understand the impact of spirituality on mental health. Your willingness to participate will make this study possible.

I can assure you that confidentiality will be ensured throughout handling the survey. You are not asked to place your name or any other personal information that will identify the survey with you as a person. The information will be used only for statistical calculations.

If you have any questions about the survey, please feel free to contact me at the phone number or the address below. I do appreciate your time for completing the questionnaire.

Sharon Sacks:

Phone: 219-879-6797
Address: 304 Northbrook Drive
Michigan City, IN 46360

Advisor: Dr. Nancy Carbonell
Andrews University
Educational and Counseling Psychology
Bell Hall
Berrien Springs, MI 49104

APPENDIX B
INSTRUMENTS

The Royal Free Questionnaire on Beliefs and Experiences

This questionnaire concerns your beliefs and views about life. To start, could you tell us your:

Age _____ Gender: Male _____ Female _____ Fitness level: 0 - 4 hrs. per week
 5 - 8 hrs. per week
 9+ hrs. per week

How would you describe yourself (one or more).

Married _____ Living with a partner _____ Divorced _____ Widowed _____ Separated _____ Single _____

How would you describe yourself (one)?

Caucasian _____ African American _____ Asian _____ Hispanic _____ Other _____

Are you?

Employed _____ Unemployed seeking work _____ Student _____ Retired _____ Home manager _____ On sick leave _____

If you are employed, can you describe your work? _____

If you are not employed now, what was your last job? _____

You will now be asked some questions about your religious and spiritual beliefs. Please try to answer them even if you have little interest in religion.

In using the word *religion*, we mean the actual practice of a faith, e.g. going to a temple, mosque, church or synagogue. Some people do not follow a specific religion but do have *spiritual* beliefs or experiences. For example, they may believe that there is some power or force other than themselves that might influence their life. Some people think of this as God or gods, others do not. Some people make sense of their lives without any religious or spiritual belief.

1. Therefore, would you say that you have a *religious* or *spiritual* understanding of your life?
 (Please one or more).

_____ Religious _____ Spiritual _____ Neither religious or spiritual

If you have NEVER had a RELIGIOUS or SPIRITUAL BELIEF, please go to Question 13 on page 3.

Otherwise, PLEASE TRY TO ANSWER THE FOLLOWING QUESTIONS:

2. Can you explain briefly what form your religious/spiritual belief has taken?

3. Some people hold strongly to their views and others do not. How strongly do you hold to your religious/spiritual view of life? Circle the number that best describes your view.

0 1 2 3 4 5 6 7 8 9 10

Weakly held view

Strongly held view

4. Do you have a specific religion?

I do not observe a religion (go to question 8)

Methodist Judaism Baptist Buddhist Catholic Presbyterian Other

5. Can you give more detail? (e.g. denomination, sect)

6. Do any of the following play a part in your belief? For example, you might pray or meditate alone or with other people. (✓ as many choices as apply to you)

Prayer Alone With other people

**Ceremony (e.g. washing before prayer.)
a religious service** Alone With other people

Meditation Alone With other people

Reading and study Alone With other people

Contact with religious leader Alone With other people

None of the above

7. How important to you is the practice of your belief (e.g. private meditation, religious services) in your day-to-day life? Please circle the number on the scale which best describes your view.

0 1 2 3 4 5 6 7 8 9 10

Not Essential

Necessary

You can explain further if you would like to:

8. Do you believe in a spiritual power or force other than yourself that can *influence* what happens to you in our day-to-day life? Please circle the number on the scale which best describes your view.

0 1 2 3 4 5 6 7 8 9 10

No influence

Strong influence

17. Can you describe it?

18. Some people have described intense experiences at a time when they almost died but were eventually revived. Has this ever happened to you?

Yes No Unsure If yes or unsure, please describe the experience

If YES or UNSURE, how much has this near death experience changed your life? Please circle the number on the scale which best describes your view.

0 1 2 3 4 5 6 7 8 9 10

Not at all

Extremely

Mental Health Inventory

These next questions are about how you feel, and how things have been with you mostly within the past month.

For each question, please circle a number for the one answer that comes closest to the way you have been feeling.

54 How happy, satisfied, or pleased have you been with your personal life during the past month?

(Circle one)

Extremely happy	1	Sometimes fairly satisfied or unhappy	4
Very happy most of the time	2	Generally dissatisfied, unhappy	5
Generally satisfied, pleased	3	Very dissatisfied, unhappy most of the time	6

55 How much of the time have you felt lonely during the past month?

All the time	1	A good bit of the time	3	A little of the time	5
Most of the time	2	Some of the time	4	None of the time	6

56 How often did you become nervous or jumpy when faced with excitement or unexpected situations during the past month?

Always	1	Fairly often	3	Almost never	5
Very often	2	Sometimes	4	Never	6

57 During the past month, how much of the time have you felt that the future looks hopeful and promising?

Always	1	Fairly often	3	Almost never	5
Very often	2	Sometimes	4	Never	6

58 How often do you eat too much?

Very often	1	Sometimes	3	Never	5
Most of the time	2	Almost never	4		

- 59 How much of the time, during the past month, has your daily life been full of things that were interesting to you?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 60 How much of the time, during the past month, did you feel relaxed and free of tension?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 61 During the past month, how much of the time have you generally enjoyed the things you do?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 62 During the past month, have you had any reason to wonder if you were losing your mind, or losing control over the way you act, talk, think, feel or of your memory?
- | | | | | | |
|----------------|---|---|---|--|---|
| No, not at all | 1 | Yes, but not enough to be concerned or worry about it | 3 | Yes, and I am quite concerned | 5 |
| Maybe a little | 2 | Yes, and I have been a little concerned | 4 | Yes, and I am very much concerned about it | 6 |
- 63 In general, would you say your morals have been above reproach?
- | | | | | | |
|-----------------|---|--------------|---|----------------|---|
| Yes, definitely | 1 | I don't know | 3 | Definitely not | 5 |
| Yes, probably | 2 | Probably not | 4 | | |
- 64 Did you feel depressed during the past month?
- | | | | | | |
|---|---|--------------------------------------|---|---------------------------------|---|
| Yes, to the point I did not care about it anything for days at a time | 1 | Yes, quite depressed almost everyday | 3 | No, never felt depressed at all | 5 |
| Yes, very depressed almost every day | 2 | Yes, a little depressed now and then | 4 | | |

- 65 During the past month, how much of the time have you felt loved and wanted?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 66 How much of the time, during the past month, have you been a very nervous person?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 67 When you got up in the morning, this past month, about how often did you expect to have an interesting day?
- | | | | | | |
|------------|---|--------------|---|--------------|---|
| Always | 1 | Fairly often | 3 | Almost never | 5 |
| Very often | 2 | Sometimes | 4 | Never | 6 |
- 68 How often have there been times in your life when you felt you acted like a coward?
- | | | | | | |
|--------------|---|--------------|---|-------|---|
| Very often | 1 | Sometimes | 3 | Never | 5 |
| Fairly often | 2 | Almost never | 4 | | |
- 69 During the past month, how much of the time have you felt tense or "high-strung"?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 70 During the past month, have you been in firm control of your behavior, thoughts, emotions, feelings?
- | | | | | | |
|------------------------|---|-----------------|---|-----------------------|---|
| Yes, very definitely | 1 | Yes, I guess so | 3 | No, and I am somewhat | 5 |
| | | | | disturbed | |
| Yes, for the most part | 2 | No, not to well | 4 | No, and I am very | 6 |
| | | | | disturbed | |
- 71 During the past month, how often did your hands shake when you tried to do something?
- | | | | | | |
|------------|---|--------------|---|--------------|---|
| Always | 1 | Fairly often | 3 | Almost never | 5 |
| Very often | 2 | Sometimes | 4 | Never | 6 |

- 72 During the past month, how often did you feel that you had nothing to look forward to?
- | | | | | | |
|------------|---|--------------|---|--------------|---|
| Always | 1 | Fairly often | 3 | Almost never | 5 |
| Very often | 2 | Sometimes | 4 | Never | 6 |
- 73 Would you say that you give every penny you can to charity?
- | | | | |
|------------------------|---|------------|---|
| Yes, definitely | 1 | Yes, I try | 3 |
| Yes, for the most part | 2 | No | 4 |
- 74 How much of the time, during the past month, have you felt calm and peaceful?
- | | | | |
|------------------------|---|------------|---|
| Yes, definitely | 1 | Yes, I try | 3 |
| Yes, for the most part | 2 | No | 4 |
- 75 How much of the time, during the past month, have you felt emotionally stable?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 76 How much of the time, during the past month, have you felt downhearted and blue?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 77 How often have you felt like crying, during the past month?
- | | | | | | |
|------------|---|--------------|---|--------------|---|
| Always | 1 | Fairly often | 3 | Almost never | 5 |
| Very often | 2 | Sometimes | 4 | Never | 6 |
- 78 In choosing your friends, how important to you are things like their race, their religion, or their political beliefs?
- | | | | | | |
|-------------------------|---|-------------------|---|-----------------------|---|
| Always very important | 1 | Usually important | 3 | Hardly ever important | 5 |
| Almost always important | 2 | Not too important | 4 | Not important at all | 6 |
- 79 During the past month, how often did you feel that others would be better off if you were dead?
- | | | | | | |
|------------|---|--------------|---|--------------|---|
| Always | 1 | Fairly often | 3 | Almost never | 5 |
| Very often | 2 | Sometimes | 4 | Never | 6 |

- 80 How much of the time, during the past month, were you able to relax without difficulty?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 81 During the past month, how much of the time did you feel that your love relationships, loving and being loved, were full and complete?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 82 How often, during the past month, did you feel that nothing turned out for you the way you wanted it to?
- | | | | | | |
|------------|---|--------------|---|--------------|---|
| Always | 1 | Fairly often | 3 | Almost never | 5 |
| Very often | 2 | Sometimes | 4 | Never | 6 |
- 83 How much have you been bothered by nervousness, or your "nerves," during the past month?
- | | | | | | |
|--|---|---------------------------------|---|----------------------------------|---|
| Extremely so, to the point where I could not take care of things | 1 | Bothered quite a bit by nerves | 3 | Bothered just a little by nerves | 5 |
| Very much bothered | 2 | Bothered some, enough to notice | 4 | Not bothered at all by this | 6 |
- 84 During the past month, how much of the time has living been a wonderful adventure for you?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 85 If it is more convenient for you to do so, how often will you tell a lie?
- | | | | | | |
|-----------------------|---|----------------------|---|------------------|---|
| Very often tell a lie | 1 | Sometimes tell a lie | 3 | Never tell a lie | 5 |
| Fairly often | 2 | Almost never | 4 | | |

86 How often, during the past month, have you felt so down in the dumps that nothing could cheer you up?

Always	1	Fairly often	3	Almost never	5
Very often	2	Sometimes	4	Never	6

87 During the past month, did you ever think about taking your own life?

Yes, very often	1	Yes, a couple of times	3	No, never	5
Yes, fairly often	2	Yes, at one time	4		

88 During the past month, how much of the time have you felt restless, fidgety, or impatient

All the time	1	A good bit of the time	3	A little of the time	5
Most of the time	2	Some of the time	4	None of the time	6

89 How often have you done anything of a sexual nature that society does not approve of?

Very often	1	Sometimes	3	Never	5
Fairly often	2	Almost never	4		

90 During the past month, how much of the time have you been moody or brooded about things?

All the time	1	A good bit of the time	3	A little of the time	5
Most of the time	2	Some of the time	4	None of the time	6

91 How much of the time, during the past month, have you felt cheerful, light-hearted?

All the time	1	A good bit of the time	3	A little of the time	5
Most of the time	2	Some of the time	4	None of the time	6

92 During the past month, how often did you get rattled, upset, or flustered?

Always	1	Fairly often	3	Almost never	5
Very often	2	Sometimes	4	Never	6

- 93 Are your table manners at home just as good as they are when you are invited out to dinner?
- | | | | | | |
|--------------------------|---|---------------------------|---|-------------------------------|---|
| Yes, always just as good | 1 | Yes, usually just as good | 3 | No, quite a bit worse at home | 5 |
| Yes, with rare exception | 2 | No, usually worse at home | 4 | No, very bad at home | 6 |
- 94 During the past month, have you been anxious or worried?
- | | | | | | |
|--|---|--------------------------------|---|----------------------|---|
| Yes, extremely so, to the point of being sick or almost sick | 1 | Yes, quite a bit | 3 | A little of the time | 5 |
| Yes, very much so | 2 | Yes, some, enough to bother me | 4 | None of the time | 6 |
- 95 During the past month, how much of the time were you a happy person?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 96 How often during the past month did you find yourself having difficulty trying to calm down?
- | | | | | | |
|------------|---|--------------|---|--------------|---|
| Always | 1 | Fairly often | 3 | Almost never | 5 |
| Very often | 2 | Sometimes | 4 | Never | 6 |
- 97 During the past month, how much of the time have you been in low or very low spirits?
- | | | | | | |
|------------------|---|------------------------|---|----------------------|---|
| All the time | 1 | A good bit of the time | 3 | A little of the time | 5 |
| Most of the time | 2 | Some of the time | 4 | None of the time | 6 |
- 98 How often, during the past month, have you been waking up feeling fresh and rested?
- | | | | | | |
|-------------------|---|----------------------------|---|------------------------------|---|
| Always, every day | 1 | Most days | 3 | Hardly ever | 5 |
| Almost, every day | 2 | Some days, but usually not | 4 | Never wake up feeling rested | 6 |

99 During the past month, have you been under or felt you were under any strain, stress, or pressure?

Yes, almost more than I could stand or bear	1	Yes, some, more than usual	3	Yes, a little bit	5
Yes, quite a bit of pressure	2	Yes, some, but about normal	4	No, not at all	6

Instructions: The 56 statements printed below represent individual differences in viewpoint.

Using the scale shown below, please respond with your own point of view to all of the statements: for example, if you strongly agree with a statement then circle 1 (SA). Do not spend a lot of time thinking about each one; just indicate your first impression. Remember, respond to these statements according to how you feel about them right now.

1- strongly agree 2- agree 3- disagree 4- strongly disagree

	SA	A	D	SD
1. I like people I get to know.	1	2	3	4
2. It is best not to set your hopes too high since you will probably be disappointed.	1	2	3	4
3. There is so much to be done and so little time to do it in.	1	2	3	4
4. I have a tendency to make mountains out of molehills.	1	2	3	4
5. Rarely do I expect good things to happen.	1	2	3	4
6. Everything changes so quickly these days that I often have trouble deciding which are the right rules to follow.	1	2	3	4
7. All in all the world is a good place.	1	2	3	4
8. When it comes to my future plans and ambitions in life, I expect more to go wrong than right.	1	2	3	4
9. My hardest battles are with myself.	1	2	3	4
10. I believe there's not much hope for the human race.	1	2	3	4
11. It does not take long to shake off a bad mood.	1	2	3	4
12. If you hope and wish for something long and hard enough, you will eventually get it.	1	2	3	4

- | | | | | |
|---|---|---|---|---|
| 13. People get ahead by using 'pull' and not because of what they know. | 1 | 2 | 3 | 4 |
| 14. Even when things in my life are going okay, I expect them to get worse soon. | 1 | 2 | 3 | 4 |
| 15. With enough faith, you can do almost anything. | 1 | 2 | 3 | 4 |
| 16. I enjoy myself most when I am alone, away from other people. | 1 | 2 | 3 | 4 |
| 17. When I undertake something new, I expect to succeed. | 1 | 2 | 3 | 4 |
| 18. Honesty is the best policy in all cases. | 1 | 2 | 3 | 4 |
| 19. I generally look at the brighter side of life. | 1 | 2 | 3 | 4 |
| 20. If I make a decision on my own, I can pretty much count on the fact that it will turn out to be a poor one. | 1 | 2 | 3 | 4 |
| 21. I generally make light of my problems. | 1 | 2 | 3 | 4 |
| 22. It is always a good thing to be frank. | 1 | 2 | 3 | 4 |
| 23. Where there's a will, there's a way. | 1 | 2 | 3 | 4 |
| 24. I have a tendency to blow up problems so they seem worse than they really are. | 1 | 2 | 3 | 4 |
| 25. All in all, it is better to be humble and honest than important and dishonest. | 1 | 2 | 3 | 4 |
| 26. As time goes on, things will most likely get worse. | 1 | 2 | 3 | 4 |
| 27. It is the slow, steady worker who usually accomplishes the most in the end. | 1 | 2 | 3 | 4 |
| 28. When I go to a party I expect to have fun. | 1 | 2 | 3 | 4 |
| 29. Times are getting better. | 1 | 2 | 3 | 4 |
| 30. Everyone should have an equal chance and an equal say. | 1 | 2 | 3 | 4 |
| 31. Better to expect defeat: then it doesn't hit so hard when it comes. | 1 | 2 | 3 | 4 |
| 32. It is wise to flatter important people. | 1 | 2 | 3 | 4 |

33. I expect to achieve most of the things I want to in life. 1 2 3 4
34. It seems the cards of life are stacked against me. 1 2 3 4
35. What is lacking in the world today is the old kind of friendship
that lasted for a lifetime. 1 2 3 4
36. When the weatherman predicts 50% chance rain, you might just as
well count on seeing rain. 1 2 3 4
37. Before an interview, I am usually confident that things will go well. 1 2 3 4
38. Sometimes I feel down, but I bounce right back again. 1 2 3 4
39. The future seems too uncertain for people to make serious plans. 1 2 3 4
40. When I have undertaken a task, I find it difficult to set it aside even
for a short time. 1 2 3 4
41. Tenderness is more important than love. 1 2 3 4
42. When gambling, I expect to lose. 1 2 3 4
43. Anybody who is willing to work hard has a good chance for
succeeding 1 2 3 4
44. The future looks very dismal. 1 2 3 4
45. If I had to choose between happiness and greatness, I'd choose
greatness. 1 2 3 4
46. Minor setbacks are something I usually ignore. 1 2 3 4
47. In general, things turn out all right in the end. 1 2 3 4
48. It is better to be a dead hero than a live coward. 1 2 3 4
49. Give me 50/50 odds and I will choose the wrong answer every time. 1 2 3 4
50. It is hard to get ahead without cutting corners here and there. 1 2 3 4
51. If I were in competition and contestants were narrowed down to
myself and one other person, I would expect to be runner-up. 1 2 3 4

- | | | | | |
|---|---|---|---|---|
| 52. April showers bring may flowers. | 1 | 2 | 3 | 4 |
| 53. I can be comfortable with nearly all kinds of people | 1 | 2 | 3 | 4 |
| 54. The worst defeats come after the best victories. | 1 | 2 | 3 | 4 |
| 55. In the history of the human race there have probably been just a
handful of really great thinkers. | 1 | 2 | 3 | 4 |
| 56. Every cloud has a silver lining. | 1 | 2 | 3 | 4 |

REFERENCE LIST

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EXPERIENCE:

2001-2002 Northeastern Illinois University

Pre-doctoral internship - responsibilities consisted of individual and couple's counseling, psychological assessment, report writing, didactic presentations, outreach programs, therapy seminars, professional development, and group work.

1997-1998 Nasr Psychiatric Services

Pre-doctoral practicum - duties consisted of individual and family therapy, psychological assessment, report writing, administering, scoring, and interpreting the: WAIS-III, WAIS-R, MMPI-2, MCMI-II, and the Rorschach-Exner 3rd edition. Received individual supervision at the University Counseling Center at the University of Notre Dame.

1996-1997 Andrews University Counseling Center

Pre-doctoral practicum - duties consisted of individual, marital, child, adolescent, and family therapy, as well as psychological assessment and report writing. Administered, scored, and interpreted results for the: WAIS-R, WISC-III, WIAT, MMPI-2, T.A.T., C.A.T., Stanford-Binet Fourth Edition, H-T-P, H-F-D, Bender Gestalt Visual Motor Intelligence Test, and the VMI. Received both individual and group supervision at this site.

1995 LaPorte County Youth Service Bureau

Parenting Program Coordinator - duties consisted of counseling and coordinating parenting program. Coordinated and educated volunteers to go into homes of clients and teach appropriate parenting and life skills. Counseled troubled youths and parents one-on-one at the center and in the home. Responsible for both the Michigan City office and LaPorte office.

1993 Madison Center - Indiana University at South Bend

Practicum student - duties included individual, career, group, and family therapy. Administered, scored, and interpreted the Myers-Briggs-Type Indicator, Self-Directed Search, Strong Interest Inventory, H-T-P, and the H-F-D.

RESEARCH/ASSISTANT EXPERIENCE:

1996, 1997 Graduate assistant

Dr. W.A. Fitcher - Introduction to Statistical Analysis in Psychology and Education . Duties included scoring assignments, statistical projects, and exams, as well as instructing lab twice a week.

1994 - 1995 Research assistant

Dr. Vincent J. Peterson - collected, organized and updated new material for text book, *Orientation to Counseling - Third Edition*. Revised and edited the instructor's manual that accompanied the text book.

1994 Masters thesis

Nonverbal Aggression in Children Expressed Through the H-T-P Projective Drawing Test.