

THE RELATIONSHIP BETWEEN EXTRINSIC
RELIGIOSITY, INTRINSIC RELIGIOSITY,
AND SPIRITUAL MATURITY TO
LIFE SATISFACTION AND
COPING RESOURCES

By

THERESA GRUBB HORTON

Bachelor of Arts
Southern Nazarene University
Bethany, Oklahoma
May, 1991

Master of Science
Southern Nazarene University
Bethany, Oklahoma
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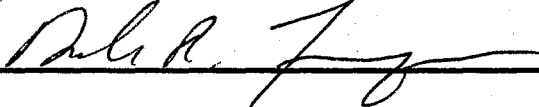
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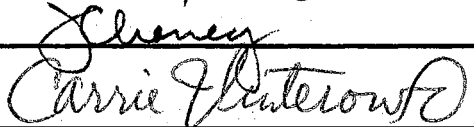
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CHAPTER I

INTRODUCTION

Overview of the Study

Three areas of interest to psychologists include religion, life satisfaction, and the use of coping resources in stressful life experiences. It is important to the field of professional psychology to conduct studies which examine the interaction and relationship between these variables in a sample of the population. Results of such a study will have theoretical and practical implications to the field of counseling psychology.

Background of the Problem

Life satisfaction has long been an area of extensive research in the field of psychology. The very connotation of the term itself is that one is satisfied with one's life, which suggests well being. The search for predictors of life satisfaction, or well being, is one aspect in the driving force of research in professional psychology (Hjelle & Ziegler, 1992). One objective of personality psychology is to help people live more satisfying lives, which includes the search for ways to promote effective strategies of coping with life events. Life satisfaction involves the breadth with which one is both subjectively and objectively "satisfied" with life. Webster's 1981 Collegiate Dictionary defines satisfaction as a noun meaning "an act, means, or result of satisfying." "Satisfy" is described as a verb meaning "to gratify completely, supply the needs of . . ." Thus, one who has achieved life satisfaction has recognized the acts and means which meet his or her needs, and results in feelings of gratification.

Various terms have been used in recent years which are similar to life satisfaction, including quality of life and subjective well being. Much of the literature uses these terms interchangeably. However, life satisfaction appears to be a more general construct than quality of life, and examines observations in areas which describe one's overall life, whereas quality of life appears to be primarily concerned with an individual's physiological well being, and characteristics which describe a person's functional ability (Hoffmann, Rouse, & Brin, 1995). Moreover, many studies have been conducted using quality of life measures with populations which suffer specific physiological impairment (Hoffman, Rouse, & Brin, 1995; Hornquist, Wikby, Hansson & Anderson, 1993; Wiklund, Gorkin, Pawitan & Schron, 1992) such as cancer and diabetes.

Subjective well being is a more synonymous construct to life satisfaction. Fabian (1991) reports a high correlation between life satisfaction and subjective well being. Further, a study conducted by Bhogle and Prakash (1993) reported a high correlation between subjective measures of well being and life satisfaction, and objective measures of these constructs.

Researchers have examined various predictors of life satisfaction. One identified area of life satisfaction is religiosity, which is a major component of many people's lives. However, until recently few studies have been conducted which examine the relationship between dimensions of religiosity and life satisfaction. Another area which has been linked to life satisfaction is the level of an individual's coping resources (Hjelle & Ziegler, 1992). Matheny, Aycock, Curlette, and Junker (for a review, see 1993) reviewed multiple studies using the Coping Resources Inventory for Stress, and reported that results indicated that coping resources are useful as a predictor of life satisfaction. Additionally, coping resources have previously been linked to religion (Jenkins & Pargament, 1995; Rutledge, Levin, Larson & Lyons, 1995). Religion and spirituality have been reported to play an important role in coping for patients with cancer, as well as for parents of chronically ill children. Additionally, religious attitudes have been found to be a

predominant coping behavior in older adults (Koenig, George, & Siegler, 1988). Thus, it is important to further examine the relationship between dimensions of religiosity and one's level of coping resources as well.

The Problem

Achieving improved life satisfaction is a general therapeutic goal for many clients who enter psychotherapy (Hjelle & Ziegler, 1992). Thus, psychologists need to have empirical data which justify the assessment, evaluation, and treatment of areas which directly impact life satisfaction. This information is useful to the therapist when identifying relevant variables and assessing for life satisfaction. It will also aid in the selection of target areas which will facilitate the development of specific treatment goals, including the promotion of effective and productive strategies for coping with life events. However, as previously indicated, although many researchers have examined life satisfaction in relation to a multitude of variables, few have looked at the relationship to religion. Ellison (1983) reports that the dimensions of religiosity have been virtually ignored by the quality of life movement. Further, as stated above, coping strategies are important to life satisfaction. Although research into the relationship between coping resources and religion has begun to emerge, no studies have been identified which examined the relationship between life satisfaction, coping resources and religion, alternatively in the same sample. Thus, this has become the objective of the proposed study.

Spilka, Hood, and Gorsuch (1985) discuss the theoretical implication for the study of religion and life satisfaction in The Psychology of Religion: An Empirical Approach. The authors report that "Adler's formulation of the major responsibilities of living leads individually, and in concert, to a further all-encompassing consideration--namely, the quality of life" (p. 111). Although previous studies have well documented the role of job satisfaction, interpersonal relationships and marriage as central components to life satisfaction, few have documented the role of religion. Further, although previous studies

which examined multiple areas that contribute to life satisfaction include religion, religion's significance is reported in the statistical portion of analysis, but often is disregarded in the discussion and concluding portions of the studies. Thus, the significance of religion on life satisfaction, although indicated, is far from clear. Historically, the study of aspects of religion and personal faith have lacked pertinent research in the area of adult life. However, the situation is being corrected, and an increasing rate of research in this area is taking place. Still, additional empirical studies are needed in regard to the relationship between religion and a host of variables, including life satisfaction and coping resources.

When studying religion, it becomes apparent that two different, yet somewhat related constructs are involved. Specifically, one finds measures of both religiosity and spirituality. A major component of religiosity is the study of extrinsic and intrinsic dimensions of religion. Persons who are religiously extrinsic in orientation are motivated by that which is external and concrete, while, persons who are religiously intrinsic in orientation are motivated internally (Spilka, Hood, & Gorsuch, 1985). These authors suggest that the majority of religious organizations desire for their members to move from an extrinsic to a more intrinsic orientation in a developmental manner as they progress in their spiritual growth. Spirituality appears to be a more global construct. One important aspect of spirituality is spiritual maturity. Hall & Edwards (1996b) report that spiritual maturity is an important area for research related to religious issues.

Purpose of the Study

The purpose of this study is to identify the relationship between extrinsic religiosity, intrinsic religiosity and spiritual maturity, and life satisfaction and coping resources in a sample of college students in a secular university population. More specifically, the study will increase knowledge about the relationship between the study's independent variables; extrinsic religiosity, intrinsic religiosity, and spiritual maturity,

and the dependent variables life satisfaction and coping resources. Doing so may lead to the predictability of life satisfaction and coping resources.

A secondary purpose of the study is to explore the relationship between extrinsic religiosity and spiritual maturity, and between intrinsic religiosity and spiritual maturity. Finally, the relationship between levels of life satisfaction and coping resources will be examined.

Significance of the Study

The importance of continued research in the area of life satisfaction and coping resources lies in the opportunity to support a scientist-practitioner model. Conducting this study according to the model will allow additional variables to be introduced into theory which may lead to the identification of new predictor variables. These variables may then be integrated directly into therapeutic modalities by counselors and psychologists, which will assist a client in improving his or her level of life satisfaction, coping resources, and thus well being. More specifically, an important aspect of studying these variables in a university setting is that findings may enhance university counselors' ability to help religiously oriented students adjust to changes associated with college life.

Definition of Terms

The definition of terms and variables which will be utilized in this study are as follows:

Life Satisfaction - Refers to satisfaction with life as a whole (Pavot & Diener, 1983). For the purpose of this study, life satisfaction will be operationally defined as the total score on the Satisfaction With Life Scale (SWLS).

Coping Resources - Those resources inherent in individuals that enable them to handle stressors more effectively, to experience fewer or less intense symptoms upon exposure to stressor, or to recover faster from exposure. For the purpose of this study, the operational definition for coping resources will be the total resource score on the Coping Resources Inventory (CRI, Hammer & Marting, 1988).

Religion - Webster's New World Thesaurus (1985) describes religion as a noun referring to all the centers about man's belief in or relationship to a superior being or beings. It is synonymous with both spirituality and religiosity.

Religiosity - Spilka, Hood & Gorsuch (1985) refer to religiosity as the degree to which a person possesses a certain feature or characteristic which tends to evolve when the use of separate scales are used to describe religious propensities.

Extrinsic Religiosity - Allport (1966) describes extrinsic religiosity as "religion that is strictly utilitarian; useful for the self in granting safety, social standing, solace, and endorsement of one's chosen way of life" (p.455). For the purpose of this study, extrinsic religiosity will be operationally defined as the total E scale score on the Allport & Ross Religious Orientation Survey (ROS).

Intrinsic Religiosity - Allport (1966) describes intrinsic religiosity as "faith as a supreme value in its own right . . . oriented toward a unification of being, takes seriously the commandment of brotherhood, and strives to transcend all self-centered needs" (p.455). For the purpose of this study, intrinsic religiosity will be operationally defined as the total I scale score on the Allport & Ross Religious Orientation Survey (ROS).

Spiritual Maturity - The incorporation of two distinct but related dimensions of one's self-God relationship including awareness of God in daily life and quality of one's relationship with God. For the purpose of this study, spiritual maturity will be operationally defined by the 5 factor scale scores on the Hall & Edwards Spiritual Assessment Inventory (SAI, 1996b), including awareness, and realistic acceptance which are considered positive aspects of one's relationship to God and represent spiritual maturity, and disappointment, grandiosity, and instability, which are considered negative aspects of one's relationship with God and represent lesser levels of spiritual maturity.

Research Questions

This study is an attempt to answer the following five specific research questions addressed in this study:

1. What percent of the variance in life satisfaction is accounted for both individually and collectively by extrinsic religiosity, intrinsic religiosity and spiritual maturity (i.e., awareness, realistic acceptance, grandiosity, disappointment, and instability)?
2. What percent of the variance in level of coping resources is accounted for both individually and collectively by extrinsic religiosity, intrinsic religiosity and spiritual maturity (i.e., awareness, realistic acceptance, grandiosity, disappointment and instability)?
3. What is the relationship between extrinsic religiosity and spiritual maturity?
4. What is the relationship between intrinsic religiosity, and spiritual maturity?
5. What is the relationship between level of coping resources and life satisfaction?

Expected Findings

Variables which will be investigated include the three predictor variables, including extrinsic religiosity, intrinsic religiosity and spiritual maturity, and two dependent variables, including life satisfaction and coping resources. Generally, a positive relationship between the individual and collective dimensions of religiosity and life satisfaction is expected to be found in response to research question 1. Recently, increased numbers of studies have been reported in the literature. Many support a positive relationship between life satisfaction and overall well being, and dimensions of religiosity (Chumbler, 1996; Pfeifer & Waeltly, 1995; Levin, Chatters, & Taylor, 1995; Myers & Diener, 1995; Coke, 1992; Harvey, Bond & Greenwood, 1991; Ellison, 1991; Ellison & Gay, 1990; Corrington, 1989; Ellison, Gay, & Glass, 1989). Few studies indicated no relationship between these variables. However, Courtenay, Poon, Martin, & Clayton (1992) and Anson, Antonovsky, & Sagy (1990) found no relationship between religiosity and life satisfaction although these studies have been conducted with geriatric

populations which may limit the generalizability of their results. The expected findings to research question 2 include a positive relationship between the individual and collective dimensions of religiosity with levels of coping resources.

The findings expected in response to research question 3 and 4 would indicate that extrinsic religiosity and intrinsic religiosity are positively related to spiritual maturity. However, it is suspected that intrinsic religiosity will have a more positive relationship with spiritual maturity than will extrinsic religiosity. Support for these expected results lies in the very definition of these constructs reported in the previous section, in which extrinsic religiosity appears to conflict, although to a minimal degree, with spiritual maturity. The definition of intrinsic religiosity appears to conceptually have a better fit. Additionally, Spilka, Hood, and Gorusch (1985) report that less desirable outcomes are expected to be associated with extrinsic religiosity than with intrinsic religiosity when examining areas concerned with well being. Spilka et al. (1985) report that a positive relationship between both extrinsic religiosity and intrinsic religiosity and well being have been indicated. However, they believe that intrinsic religiosity appears to have a more positive relationship with spirituality than extrinsic religiosity, yet the authors did not report empirical evidence.

The expected findings in response to research question 5 would indicate that levels of life satisfaction are positively related to levels of coping resources. Previous studies have indicated a positive relationship exists between these variables (for a review, see Matheny, Aycock, Curlette, & Junker, 1993).

Scope and Limitations

The boundary conditions for which the study will be carried out include a student sample from a large Midwestern State University. A related participant variable which legitimately could be studied is denomination. Identifying the specific denomination subjects are associated with; however, will not be investigated as part of this study. Information regarding denomination; however, will be collected as part of the

demographic information on all participants. This information, as well as all data related to each participant will be maintained for future study and analysis.

One extraneous variable that could potentially influence the dependent variables is age. Certain levels of age may potentially lead to increased measures of life satisfaction as reported in the literature (see chapter 2) and thus, as a portion of this study, the relationship between age will be examined and reported in chapters 4 and 5.

One limitation of the study is the possible effect of social desirability on subjective measures. For instance, subjects may answer the assessment questions in a manner in which others would find pleasing. However, Bhogle, and Prakash (1993) concluded that subjective and objective measures which indicate subjective well being have similar discriminate validity. Further, in an effort to reduce any potential impact of social desirability, anonymity of all study participants will be maintained. Each packet of demographic information and participant assessment responses will be identified only by the packet number to encourage honest response.

CHAPTER II

REVIEW OF THE LITERATURE

Introduction

The present study will examine the relationship between religious orientation; including intrinsic religiosity and extrinsic religiosity, spiritual maturity; including awareness, realistic acceptance, grandiosity, disappointment, and instability, and life satisfaction and coping resources. The first section of the review of the literature will examine the history of life satisfaction as a construct in Psychology. Next, a review of related articles on coping resources will be reported, and the role of religion in psychology will be discussed. Finally, the background of current issues surrounding religion and spirituality will be presented as well as a review of research efforts related to the present study.

History of Life Satisfaction as a Construct in Psychology

Life satisfaction is a psychological construct which has received a great deal of attention through a multitude of research studies conducted over the past two decades. Well over a thousand abstracts are reported in the PsycLit database between 1974 and the present (American Psychological Association, 1996). A large number of variables have been examined as possible predictors of life satisfaction. Further, various similar constructs have correlated predictor variables. For instance, quality of life is one construct which surrounds life satisfaction, and is measured by similar methods. However, quality of life appears to be primarily concerned with physiological well being, and characteristics which describe a person's functional ability (Hoffman, Rouse, & Brin,

1995). Many studies have been conducted using quality of life measures with populations which suffer specific physiological impairment (Hornquist, Wikby, Hanson, Anderson; 1993).

Life satisfaction; however, appears to be a more general construct which examines observations in areas which describe one's overall life including psychological and physiological well being. A construct which is more synonymous with life satisfaction is subjective well being. Fabian (1991) reports a high correlation between life satisfaction and subjective well being. Further, a study conducted by Bhogle and Prakash (1993) reports that a high correlation between subjective measures of well being and life satisfaction, and objective measures of these constructs is evident.

In a review of life satisfaction measures, Mookherjee (1992) reports that subjective well being is associated with many social, psychological, and behavioral factors. The study examined demographic data and data retrieved from the 1978 and 1988 General Social Surveys. Results indicate that financial status, marital status, and education appear to be important factors in perceiving individual well being. Ethnicity and age were found to be less significant factors.

Conversely, DeGenova (1993) conducted a study to identify variables which affect life satisfaction in later life that could be manipulated through intervention. One hundred twenty two retirees between the ages of 54 and 91 years participated in this study. Physical health, social activity, and income were controlled for, while assessment examined life satisfaction, degree of life revision, regretfulness, and reminiscence. Life revision and regretfulness were found to be more significant predictors of life satisfaction than income for this population.

Alternate results regarding gender have been reported by French, Gekoski, and Knox (1995). The authors examined gender differences in the relation between life events and well being. A geriatric sample was utilized where participants were age 65 and older, and was comprised by 123 men and 145 women. Assessment included the

Recent Life Change Questionnaire, the Older American's Resources and Services Multidimensional Functional Assessment Questionnaire, the Life Satisfaction Index, and the Affect Balance Scale. Results indicate that different outcome measures suggested different predictors. Further, significant gender differences appeared in the pattern of relationships of predictors to outcome variables. For instance, well being was more greatly impacted by life events in women, than in men. The authors concluded that the dimensions of life events and of well being which are measured influence the relation between the two constructs.

Other studies have examined how unemployment and occupation are related to life satisfaction and well being. Studies consistently report that unemployment has an adverse effect on emotional well being and leads to psychological impairment (for a review, see Darity, 1993). Riipinen (1996) examined work involvement, occupational needs, needs satisfaction and locus of control. Overall, work involvement was independent of need satisfaction. However, this appeared to be dependent upon occupational group and gender, as both positive and negative correlations were found.

Sung-Mook and Giannakopoulos (1994) studied the relationship of personality characteristics on life satisfaction. The sample included 818 male and 904 female Australians aged 17-40 years, who completed self report measures of life satisfaction. Regression analysis was performed and indicated that self esteem, depression, locus of control, trait anger, religiosity and age were significant predictors of life satisfaction. However, self-esteem and depression affected levels of life satisfaction more than other variables.

Another area of research involving life satisfaction involves the measurement of psychological well being, another construct which is similar to life satisfaction. Various studies examined exercise and aspects of meaning in life as components of psychological well being. In a review of studies by Leith (1990), 70% of 81 studies indicated a relationship between exercise and psychological well being, and reported significant

improvement on psychological measures as a result of participation in an exercise program. Only 19% of the studies reported no change.

Finally, experiences of meaning in life were investigated to identify any relation to psychological well being. Debats, Frost, and Hansen (1995) report that meaningfulness in and of itself is a significant construct, and positively related to psychological well being. Findings suggest that effective coping with stressful life events in the past was associated with a current sense of meaningfulness. The Life Regard Index, which measures positive life regard, was reported to be a valid measure of meaningfulness and predictive of psychological well being.

Previous studies reported discuss how demographic variables such as financial status, marital status, education, gender and age as well as other variables such as exercise, meaning in life, and effective coping affect life satisfaction. Life satisfaction is also described as subjective well being, psychological well being, and having meaningfulness in life. One additional area of comparison studies examined is the relationship between religiosity and spirituality, and will be further presented.

History of Coping Resources as a Construct in Psychology

Coping has long been an area of extensive studies in psychological research including coping styles, coping strategies, and coping resources among others. Hammer and Marting (1988) reported that coping resource variables are important to clinical practice, prevention, and research. Thus, they developed the Coping Resources Inventory (CRI) to provide a psychometrically sound, standardized measure of resources utilized in mediating the stress response. The CRI is a useful tool for identifying healthy and effective coping resources which are currently available to the individual client. Although often times therapy may focus on what is wrong in a client's life experience rather than strengths, the CRI allows for the identification of coping strategies which have been helpful in the past. Therefore, an emphasis may be placed on the client's strengths in their use of coping resources rather than their deficits. However, ineffective coping

resources may be identified as well. Utilizing this information, a therapist may design an intervention which utilizes the knowledge about the client's use of coping resources which may aid in reaching therapeutic goals.

Research on the Relationship between Life Satisfaction and Coping

Many studies have examined the relationship between life satisfaction and coping which have identified a positive association. King and Broyles (1997) suggest that wishful thinking is a commonly used coping mechanism. A subset of 92 male and female participants completed measures of well-being including the Satisfaction With Life Scale (SWLS), the Life Orientation Task (LOT), and the Beck Depression Inventory (BDI). They also created individual wish lists. High levels of involvement in wishful thinking were found to be significantly related to depression. Wishes associated to depression were often related to realistic and specific problems. Participants' perception of the probability that the wishes they made would come true was significantly and positively related to life satisfaction. Boland and Cappeliez (1997) also utilized the LOT to examine optimism and the relationship to coping in 113 female participants over the age of 60. They found that measures of optimism were positively related to measures of social support, perceived health and life satisfaction. Additionally, they reported that optimism was related to adaptive coping strategies of positive reinterpretation, and to active coping. Another study conducted by Fisher (1995) also examined these constructs in a geriatric population. Although coping strategies were found to be important to life satisfaction, they were found to be even more important to what the authors identified as successful aging.

The Role of Religion and Spirituality in Psychology

The study of religion in psychology is not a new movement, although research in this area has recently begun to emerge at increasing rates (Clay, 1996). In a critique of Freud's early works surrounding religion, Rainey discussed the manner in which Freud, in his 1927 writings, perceived religion's function as a consolation for the hardships of

human existence (as cited in Rainey, 1975). Freud makes an analogous comparison to the coca plant (cocaine), which "satiates the hungry, strengthens the weak, and causes them to forget their misfortune" (p. 131). Rainey reports these remarks from Freud's 1927 paper,

The Future of an Illusion in response to prohibition in the United States:

"That the effect of religious consolations may be likened to that of a narcotic is well illustrated by what is happening in America. There they are now trying obviously under the influence of petticoat government to deprive people of all stimulant, intoxicants, and other pleasure-producing substances, and instead, by way of compensation, are surfeiting them with piety" (p.131).

Rainey further reports Freud's view of the function of religion in large part as consolation .:

"The gods retain their threefold task, they must exorcise the terrors of nature, they must reconcile men to the cruelty of Fate, particularly as it is shown in death, and they must compensate them for the sufferings and privations which a civilized life in common has imposed on them" (p.132).

In 1893, Freud discussed the role of religion in psychology and included philosophical support for the relationship of the phenomena of witchcraft and possession by the devil to hysteria (as cited in Rainey, 1975). Further, Freud was intrigued by the phenomena of faith healing, and believed these cures were an example of spontaneous vanishing of hysterical symptoms. He regarded this occurrence to psychological motives and expectations. Many years later, Freud would insist that such phenomena could be explained naturalistically in terms of psychological processes, and were not, indeed, miracles.

Croce (1995) proposed that the middle to late nineteenth century is the era of William James in regard to issues relating to the intersection of science and religion. Further, he indicated that James's life and ideas spawned a great deal of debate. James was one of the first individuals to become aware of the erosion of certainty in both the

area of religion and in the field of science. He developed a method of coping with these changes which he used personally, as well as taught to others, and believed that science and religion were both fallible human inquiries into the structure of the world. Croce reports that during the early nineteenth century, people had very specific beliefs in regard to science and religion, which they held with certainty. However, as the century progressed, ideas perceived as truth were challenged. Thus, the certainty surrounding science and religion began to decline. By the 20th century, religious doubt was so rampant that religious leaders and professional scientists were greatly concerned with the intellectual and cultural changes taking place across America and Europe. Scientific inquiry and religious doubt became the norm as the breakdown of respect for authority, and what authority professed to be truth, took place.

Levinson (1981) discussed James's awareness of, and problem with religion in his text The Religious Investigations of William James. William James lived from 1842 to 1910 during a time that was dominated by the concern of Protestant Christians. At the time of his birth, persuasion was encouraged over those of coercion in religious, social, and political affairs. Yet, the increased development of new ideas and interpretations of religion and the Bible infuriated conservative Protestant Americans. The movement of new religions during the time of the Second Awakening heightened James's curiosity. Levinson reports that James was most attracted to those which he perceived as nondogmatic, experimental, regenerative, pacifist, and spiritualist, and was particularly intrigued by the religious socialism of Leo Tolstoy and H.G. Wells. James disassociated with the idea of being Christian, stating that Christ played no role in his perception of salvation. At the age of twenty-eight, James had tried to live without any religion, yet failed. He felt that this lack of commitment to a particular religion contributed to severe depression in his life during 1868 - 1872. During this time, and even 25 years later, James would write and lecture about whether or not life was worth living. Ultimately, James claimed the only reasons that life could be considered worth living were religious

ones, stating that pessimism was a religious disease. During these 25 years of discovery in James's life, he found both the sort of religion he could not live without, and the sort he could not live with. James suggested that religion was a cure for philosophical melancholy; religion being in the supernatural sense or having "faith in the existence of an unseen order of some kind in which the riddles of the natural order may be found explained" (p.30).

The connectedness between religion and mental health is exhibited in The Religion of Healthy Mindedness which James presented in Lectures IV and V, and in The Sick Soul which he presented in Lectures VI and VII, in The Works of William James: The Varieties of Religious Experience (in Burkhart, Bowers, & Skrupskelis, Eds., 1985). These concepts represent two different ways of looking at the world. James suggests a relationship between religion and happiness exists, and states that experiencing religion can produce inner paths to a supernatural kind of happiness. Further, that humans maintain an instinctual drive for optimism, and thus turn away from darkness with deliberate thought in self protection. "We divert our attention from disease and death as much as we can; and the slaughter-houses and indecencies without end on which our life is founded are huddled out of sight and never mentioned, so that the world we recognize officially in literature and in society is a poetic fiction far handsomer and cleaner and better than the world that really is" (pp. 80-81). James claims that the movement of liberalism within Christianity was supportive of achieving a victory of healthy-mindedness within the church, overcasting the previous hell-fire theology. He purports that this evolution of Christianity has led to a new religion---one of Nature, and that it is being embraced by a large population of society, particularly those contemporaries of science. It appears that James is qualifying no specific type of denomination of religion, rather the religion is in one's commitment to a specific set of thoughts and ideas. Thus, one's religion can be in maintaining an attitude of healthy mindedness. James also refutes any importance to the social behaviors of religion such as church attendance, and

emphasizes the importance of internalizing one's religion in order to become spiritual, creating inner change.

The introduction of a more organized study of the psychology of religion has emerged in recent years (Spilka, Hood, & Gorsuch, 1985). In a recent issue of the APA Monitor, Clay (1996) reports that although traditionally psychologists have disregarded the importance of religion in mental health, their faith in religion is growing. In the past, religious beliefs have been associated with signs of weakness and even pathology. Clay states that current research suggests that religious faith may enhance mental health, regardless of affiliation, be it Jewish, Muslim, Catholic, Protestant, Buddhist, or other.

Even so, Moore (1993) states that "In the modern world we tend to separate psychology from religion. We like to think that emotional problems have to do with the family, childhood, and trauma with personal life, but not with spirituality. We don't diagnose an emotional seizure as 'loss of religious sensibility', or 'lack of spiritual awareness'. Yet the soul--the seat of our deepest emotions--can benefit greatly from the gifts of a vivid spiritual life, and can suffer when it is deprived of them" (p. 28).

However, recent heightened awareness regarding the importance of religious beliefs and the impact of these beliefs has led to the introduction of a new V-code in the most recent edition of the Diagnostic and Statistical Manual (DSM-IV, 1994). The new code, V62.89 refers to religious or spiritual problems. Difficulties which fall into this category may include issues surrounding the loss or questioning of one's faith, problems associated with conversion to a new faith, and/or concerns about spiritual values which may be separate from organized religion. Lindgren (1995) found that 33% of clients who participated in her study currently discussed spiritual concerns with their therapist; however, this percentage represented only half of all those clients who reported they wanted to discuss spirituality in therapy.

In a review of the research, Larson, Milano, and Barry (1996) suggest that religion is the forgotten factor in health care. Further, that although hard to resolve

questions such as "Does God exist?" lack the assumptions required for scientific study, questions such as "What medical effects can be seen for those who believe in God exist?" can, and are being studied intently. Religious and spiritual commitment, and religious practices, beliefs, and attitudes are often found to have positive clinical benefits for individuals in areas of clinical prevention, treatment, and improvement of predicting enhanced mental and physical health outcomes.

Genia (1994) reports that the needs of religiously committed clients are not being met by traditional psychotherapy. The author further states that due to the presentation of religious as well as secular concerns by clients, psychotherapists have a responsibility to become more empathic and competent in the treatment of religious individuals. This may be as simple as gaining a new heightened awareness of the population's needs and desires in therapy. Spirituality is reported to refer to "a general sensitivity to moral, ethical, humanitarian, and existential issues without reference to any particular religious doctrine" (p. 395). A large number of therapists are empathic to the needs of religious clients, yet do not feel competent in addressing related issues. In fact, it is actually only a minority of psychotherapists who are overtly antireligious. However, the majority maintain a more secular spiritual orientation, than one which is religious. Continued research in this area is important to raise the awareness of psychotherapists to issues in religious client's lives which appear to be greatly impacted by their belief systems. This type of information will aid psychologists in the treatment of a greater variety of clients. Currently, many religious clients face a dilemma of procuring services from a religious counselor who may be unprepared to handle psychopathology, or a traditional psychologist who is uncomfortable working with religious or spiritual needs of clients. Not unlike working with the multitude of diverse clients which counselors and psychologist provide services to, "the ability to foster a therapeutic alliance depends on the therapist's capacity to understand the client's worldview" (p. 396).

Glynn (1995) reports that the re-emergence of religious feelings, and their impetus in politics and culture has been one of the most striking features of the late 20th century American life. Further, he reports that Americans are openly impatient with the domination of secularism in culture and public life. This time of important transition in Western culture is described as a "postsecular", as well as a "postmodern" era. Even in the world of science, which has a long history of being antagonistic with religious ideology, a recent reversal of patterns is the trend (Glynn, 1995; Grosso, 1995).

Spirituality is reported to be synonymous with religion in Webster's 1985 Thesaurus (on-line); however, many people appear to prefer thinking of them as separate constructs. Webster's reports that religion is a noun referring to all the centers about man's belief in or relationship to superior being or beings. Further, Webster's reports that religion is synonymous with belief, devotion, piety, spirituality, persuasion, godliness, sense of righteousness, morality, religiosity, theology, faithfulness, devoutness, creed, myth, superstition, doctrine, cult, denomination, mythology, communion, religious conscience, fidelity, conscientiousness, spiritual-mindedness, religious bent, and ethical standard.

Moore (1996) states that he is often asked to speak about spirituality rather than religion. Further, that often times people are offended by the word "religion" which holds negative connotations for them, whereas the term "spirituality" is in vogue. Although Moore is empathic to the feelings of individuals who have had unhappy childhood experiences in religious institutions, and are thus wary of organized religion, he is concerned with the separation of the terms. The loss of formal religious practice presents a threat to spirituality (Moore, 1993). The transcendence of spirituality is not an effortless feat. Spiritual life requires constant attention. In an effort to remain conscious of spiritual needs people attend church, temple and mosque at regular appointed times.

Hawks (1994) defines spirituality and relates the construct to Maslow's theoretical model of the hierarchy of needs. He defines spiritual health as "A high level of faith, hope, and commitment in relation to a well-defined worldview or belief system that

provides a sense of meaning and purpose to existence in general, and that offers an ethical path to personal fulfillment which includes connectedness with self, others, and a higher power or larger reality" (p.5). The comparisons between the five dimensions of health; physical health, intellectual health, social health, spiritual health, emotional health, and Maslow's hierarchy were not absolute, but do lead to interesting insight. Spiritual health and Maslow's concept of self-esteem have an interesting connection. Maslow argues that love and acceptance are prerequisites to self-esteem. Hawks suggests that spiritual health is based on faith in a worldview that leads to fulfillment based on values, beliefs, and behaviors, and that self-esteem occurs when an individual maintains harmony with his or her value system that results from a strong sense of faith and spirituality.

Privette, Quackenbos, and Budrick (1994) conducted a study where they examined preferences for religious and non-religious counseling and psychotherapy. Fifty-one of 164 subjects preferred religious counseling. Overall, subjects indicated that counseling which could address religious issues was important. Results are supportive of the needs for the inclusion of religious issues in traditional psychotherapy when religion and spirituality are reported as important domains in a client's life. Mattson (1994) suggests that when clients announce a religious persuasion, that counselors should explore and work with religion as an issue rather than ignore it. The author further suggests that allowing the client to initiate religious issues, and becoming aware of personal religious issues are important guidelines when integrating religion with counseling. In theory, the importance of integrating dimensions of the religious domain is comparable to any other multi-cultural issue. However, although as a profession, the field of counseling psychology has become more multi-cultural aware in the past decade, the inclusion of religion has been slighted. Further, Grimm (1994) examined the nature of therapists' religious and spiritual values and the impact of these values on psychotherapy. Results indicated that therapists' religious and spiritual values appear to enhance positive therapeutic outcomes. He suggests that therapists' personal examination

of these values is critical, including their attitudinal and affective responses to particular religious and spiritual values, and unresolved religious or spiritual conflicts. The use of clients' religious and spiritual values for reconciliation of therapeutic issues requires a heightened sensitivity of the therapist to these issues, and that the therapist be trained to integrate them into secular approaches. In order to do so, it is important to understand the relationship between dimensions of religiosity and other psychological constructs such as life satisfaction and coping.

Research Related to Religious Orientation: Extrinsic and Intrinsic Religiosity

Numerous studies have been conducted in the psychology of religion surrounding extrinsic religiosity and intrinsic religiosity. A study conducted by Tjeltveit, Fiordalisi, and Smith (1996) concluded that mental health values are significantly related to dimensions of religiousness, including extrinsic and intrinsic religious orientation. Utilizing the Allport and Ross Religious Orientation Survey (ROS), intrinsic religiosity was found to be inversely correlated to negative traits, and positively related to achievement and good interpersonal relations. Extrinsic religiosity was found to be significantly related to achievement and personal relations as well.

Another study investigated the relationship between religious orientation and worry (Tapanya, Nicki, & Jarusawad, 1995). One hundred four elderly Buddhist Thais and Christian Canadians completed the Age Universal I-E Scale and the Penn State Worry Questionnaire. Multiple regression analysis was conducted, and results indicated that an intrinsic religious orientation was associated with lesser worry. Additionally, in the Buddhist population, extrinsic religiosity was associated with greater worry.

Hansen, Vandenberg and Patterson (1995) examined the relationship of religious orientation to spontaneous and non-spontaneous helping behaviors in a group of 70 college students. Participants completed the ROS, and helping behaviors were assessed by reports of volunteer work (non-spontaneous), and by responses to a solicitation from a confederate from help on a task (spontaneous). Results indicated a significant

relationship between intrinsic religious orientation and non-spontaneous helping behaviors such as volunteer work. No relationships were identified between intrinsic religiosity and spontaneous helping behaviors, or between extrinsic religiosity and eight helping behaviors.

A widely used measure of extrinsic and intrinsic religiosity is the Allport and Ross Religious Orientation Survey (1967). However, the fact that these two types of religious orientation represent two separate constructs, or opposite ends on a continuum remains unclear. The scoring on the ROS is somewhat confusing. Two subscale scores are provided, one represents extrinsic religious orientation and one represents intrinsic religious orientation. A high score on the extrinsic scale indicates an extrinsic religious orientation, but a low score on the intrinsic scale indicates an intrinsic religious orientation. A scoring system of this type suggests that one may be both extrinsic and intrinsic oriented. Yet the authors state that one total score may be utilized as well (summing all scores), where a high score is indicative of extrinsic religious orientation, and a low score is indicative of intrinsic religious orientation. In any event, it appears more clear that religious behaviors which are considered extrinsic are more social in design, while intrinsic religious behaviors are more private and personal in nature. Allport and Ross (1967) describe extrinsic religion as a means, and intrinsic religion as an end.

Research Related to Spiritual Maturity

Hall and Edwards (1996a, 1996b) developed a measure of spiritual maturity to fill a void in the assessment arena, where no valid measure of the construct existed that met the criteria of being theoretically based and psychometrically sound. The authors suggest that human beings are fundamentally relational, and based the development of their instrument, the Spiritual Assessment Inventory (SAI), on object relations theory. They justify that "if the essence of human beings is relational, then spiritual maturity should be viewed in this light" (p.235, 1996a). In theory, spiritual maturity includes two areas of a

person's relationship with God, including awareness and quality. Awareness of God involves communication with God on several levels. Ways in which people are addressed by God were presented from the Bible and include: (1) phenomenon plus voice; (2) supernatural messenger or angel; (3) dreams and visions; (4) audible spirit or still small voice (p. 236, 1996a). Willard (1993) suggests that the objective way God communicates is through the human voice, and the subjective way is through the still small voice, or an individual's thoughts and feelings. Hall and Edwards suggest that as individuals become more spiritually mature, they become more cognizant that life experience and religious experience are one event intertwined. This involves developing an awareness of one's communication with God, including the ability to listen, know of God's presence, and savor God's responses. An important notion of this theory, is that this awareness and communication is not automatic, rather, it is to be developed over time.

The other area of one's relationship with God which Hall and Edwards (1996a) present is quality. Three specific areas were introduced into theory including instability, grandiosity, and realistic acceptance. An additional factor, disappointment, was also later introduced (1996b). Unstable relationships are characterized by borderline personality organization including black and white perceptions of self and others due to excessive splitting and projection. Young children and adults who have experienced traumatic life events in early relationships tend to relate in this manner, and are often ambiguous in their spiritual lives. Grandiose relationships represent a narcissistic personality organization, and are associated with the behavior of alternating between idealization and devaluation of others and God. This stage of spiritual maturity is typically associated with middle childhood and early adolescence. Additionally, adults who have low self-acceptance often relate to God in this manner. Realistic acceptance is associated at the whole object relations level, and persons in this category are able to differentiate self from others, integrate good and bad, and maintain meaningful relationships as well as

resolve conflict with self and others. This is typically a stage of spiritual maturity achieved in late adolescence and adulthood. Persons at this stage are able to tolerate mixed feelings and ambivalence in their relationships with God. Disappointment reflects one's relationship with God, and is related to instability, yet a distinct factor in its own right involving fear of rejection (1996b). More specifically, excessive and unrealistic demands on God lead to disappointment and frustration in a person's relationship with God. Studies and factor analyses associated with Hall and Edwards' research have produced significant and interesting implications regarding the concept of spiritual maturity. These findings are relevant to this study and provide a theoretical foundation to the basis of the proposed study examining the relationship among dimensions of religiosity, life satisfaction and coping resources.

Where does all this information that is gained about spirituality belong, and how is it useful? Duvoli (1996) discusses the bridges being built between mind and body, and medicine and religion. He reports from his observations that spirituality can help decrease stress through the elicitation of relaxation responses. Further, he states that heightened spirituality is associated with an awakening of the relaxation response, which may lead to a decrease in medial symptoms. The field of psychology is not alone in this renewed pursuit to identify the impact of religion and spirituality on one's life. The field of medicine has dramatically increased research in the past decade as well.

Similarly, Kirkpatrick and Shaver (1992) examined relationships using attachment theory as a foundation for the study examining romantic love and religious beliefs. In a sample of 213 adults who were surveyed, subjects who classified themselves as secure, reported greater religious commitment and more positive images of God than the insecure subjects did. A positive association between security of attachment to God and security of adult attachment for subjects who described their childhood maternal attachment as insecure was also found.

Research Involving Religion and Life Satisfaction

A number of studies have previously examined certain aspects of religion and their relationship to life satisfaction. Snow and Compton (1996) concluded that partners' shared perception of religion as important in their lives was a significant predictor of marital satisfaction, an area of life satisfaction. A variety of concepts within religion and life satisfaction have been utilized as constructs in research.

A study conducted by Pfeifer and Waelty (1995) examined psychopathology and religious commitment in 44 adult patients with depression, anxiety disorders, and personality disorders and 45 healthy adult controls. Conclusions indicate that life satisfaction was correlated negatively with neuroticism, and positively with religious commitment. Further, sexual anxiety, superego conflicts, and childhood fears of God were mainly associated with neuroticism.

Myers and Diener (1995) report that the links between religion and mental health are impressive. In 1989, Ellison, Gay and Glass examined three dimensions of religiosity including participatory, affiliative, and devotional. The relationship between these dimensions, as well as social interaction, demographic covariables, and subjective reports of life satisfaction were closely analyzed utilizing a nested regression model. Data were obtained from the 1983 General Social Survey. The results indicate that devotional religiosity, which represents private aspects; and participatory, which represents public aspects, appear to have a relatively small, but persistent positive relationship with life satisfaction. The relationship between an affiliation with a certain denomination and life satisfaction appeared to be a positive association, regardless of the researchers effort to control for the effects of non-religious social ties.

Schwab and Peterson (1990) report on the relationship between religious beliefs, religious behavior, loneliness, neuroticism, and subjective well being. The authors utilized a questionnaire to examine these variables in 206 participants aged 15-87 years in West Germany. The findings suggest that subjects whose concept of God as a God of

wrath were more prone to feelings of loneliness. A belief that God merely existed was independent of loneliness, while the belief that God was helpful had a negative correlation to loneliness. Results of the relationship between the discussed religious variables and subjective well being appear inconclusive.

Further, a study of religiosity and adaptation in the elderly reports finding a significant relationship between religiosity and physical health, but no significant relationship between religiosity and mental health (Courtenay, Poon, Martin, & Clayton, 1992). Anson, Antonovsky, and Sagy (1990) appear to concur with their findings in a longitudinal study on religiosity and well being among retirees. The authors report that self rated religiosity did not contribute much to adjustment as measured by life satisfaction. An interesting note in this study states that while religiosity was only faintly and inversely related to health and psychological distress, that poor well being at the time of the initial measurement, and a decline in well being at follow-up in a year did lead to an increase in religiosity.

Results of another study which examined the relationship between religious involvement and subjective well being appear more distinct (Ellison, 1991). Using data retrieved from the 1988 General Social Survey, the author reports that the positive influence of religious certainty on well being was found to be direct and substantial. Individuals who reported having strong religious faith also reported higher levels of life satisfaction, greater personal happiness, and fewer negative psychosocial consequences of traumatic life events. More specifically, nondenominational Protestants, liberal Protestants, and Mormons reported greater life satisfaction than their unaffiliated counterparts, even with the effects of other dimensions of religiosity held constant.

Harvey, Bond, and Greenwood examined the interaction of elderly subjects with middle age offspring, and the effect of self perceived well being in 137 participants aged 56-87 years. The findings indicate that religiosity and well being correlated positively;

however, good physical health was a stronger predictor of satisfaction in both fathers and mothers. The variable of income is reported to be unrelated to all measures of well being.

Chumbler (1996) examined the relationship between five dimensions of religious involvement, two forms of secular social involvement, demographic data and individual life satisfaction utilizing a nested regression methodology. Findings derived from a sample of 163 adolescents and adults indicated that individuals with strong religious faith reported higher levels of life satisfaction. When demographic covariances and secular social activity were statistically controlled, divine power and existential certainty had the strongest relationship to life satisfaction. A total of ten items were used to measure religious involvement, and the Ellison Overall Life Satisfaction Scale which has four items was used to measure life satisfaction. The findings also indicate that persons who are married, experience fewer traumatic life events, and are from higher social classes reported higher levels of life satisfaction. Frequency of attendance to religious services did not have a significant direct effect on life satisfaction. Of the variance in life satisfaction reported, 23% is accounted for by a model which included respondents with higher levels of divine interaction, existential certainty, spiritual gifts, and divine authority while holding constant the effects of social background, secular social involvement, and church attendance.

Coke (1992) examined correlates of life satisfaction among 87 male and 79 female older African Americans. Among the male subjects; family role involvement, and hours of church participation were related significantly to life satisfaction, as well as self perceived adequacy of income, actual household income, education level, and self rated religiosity. Self rated religiosity was the only significant predictor of life satisfaction among the female subjects. Ellison and Gay (1990) also studied religious commitment and life satisfaction among Black Americans. These authors concluded that religious participation contributed to subjective well being only among non-Southern Blacks. Private religiosity was unrelated to well being in any analysis. Baptists, Methodists, and

Southern Catholics reported particularly high levels of life satisfaction. Conversely, Levin, Chatters, and Taylor (1995) found significant effects for organizational religiosity on both health and life satisfaction, for non-organized religiosity on health, and for subjective religiosity and life satisfaction among Black Americans.

One study which emphasized the construct of spirituality explored the relationship between the amount of time spent in Alcoholics Anonymous, level of spirituality, level of contentment with life, and stressors encountered in the past year in 30 adult participants age 18-70 years (Corrington, 1989). A direct correlation appeared between levels of spirituality and contentment with life regardless of time spent in AA. Further, subjects who reported being more spiritually aware were also more content with their life and surroundings.

Poloma and Pendleton (1991) examined the effects of prayer on general well being. Participants were randomly selected and interviewed by phone regarding 11 domains of well being. Prayer is considered to be a subconcept to religiosity, and like its parent concept, is found to be multidimensional. Factor analysis indicated four different types of prayer, each of which relate differently to the well being measures. The authors conclude that religiosity and prayer contribute to one's quality of life and perceptions of well being. These indicators are included in the vast study conducted in a sample population in Canada recently.

An especially large sample of Canadians was recently polled to prepare a representation of Christians and their faith (Marshall, Underwood, & Cardwell, 1993). Cluster analysis was conducted which indicated nine groups which are presented in a descending scale of commitment, with the percent of participants within the respective category placed in parenthesis: Evangelical Believers (13%); Ardent Churchgoers (14%); Dormant Evangelicals (11%); Cultural Christians (12%); Occasional Christians (13%); Modern Moderates (11%); Skeptics/Non-Christians (13%); Atheistic Religionists (2%); Atheists (13%). The authors further report that members of the first two groups;

evangelistic believers and ardent churchgoers, report being happier than those in other groups.

Research Related to Religion and Coping

Another area of interest to researchers is the relationship between religion and coping. Snowden, Schott, Awalt, and Gillis-Knox (1988) reported in the results of their study that coping resources were linked to marital satisfaction in both the early and late stages of pregnancy within a military medical center population. Additionally, the study examined religious participation. Results indicated that religious participation was associated with a change in marital satisfaction at the .05 level of significance when partial correlations were conducted, removing the early pregnancy marital satisfaction scores from the equation. Striznec (1995) also examined the role of religion in the coping strategies of study participants in a small sample of college students and attendees at a religious lecture. Results indicated that among these study participants intrinsic religious orientation was more prevalent than extrinsic religious orientation, particularly in women. Collaboration with God was identified as the predominant religious coping style.

Koenig, George, and Siegler (1988) examined coping strategies in a stratified random sample of 100 participants in a geriatric population. Individual interviews were conducted in order to extract participants' effective coping strategies through the use of open ended questions which were presented in an effort to examine behaviors and not just reactions to events. Results indicated that the most common coping strategies perceived as effective by the participants included: the focus of attention on other activities when the situation was unalterable; accepting the situation; seeking support and encouragement from family and friends; and coping strategies involving religion. Religious coping strategies were the most commonly identified behavior that helped participants through difficult life experiences. Participants reported the use of religious strategies in 26% of all stressful situations. Religious coping behaviors and their respective frequency included: trust and faith in God, 31%; Prayer, 27%; Help and strength from God, 17%;

Church friends, 7%; church activity, 6%; ministers help, 5%; read the Bible, 4%; knowing it was the Lord's will, 2%; and lived a Christian life, 1%. Results indicate that the more private religious behaviors, such as faith, prayer and acknowledging strength as a gift from God were most effective at helping persons cope with difficult life experiences, and comprised 74% of the reported religious behaviors. Of the participants who reported the use of religious coping strategies, 66% indicated they used only personal or private religious behaviors such as these, rather than more social religious behaviors. The authors suggest that their findings are converse to the proposed theory that positive effects of religion in mental health are derived from the associated social aspects. Further, that it is the intrapsychic mechanisms based on religious attitudes that play an integral role in mental health. Identifying and acknowledging the past use of effective coping strategies, including religious behaviors is essential in assisting the client discard more dysfunctional methods of coping.

Pargament, Ishler, Dubow, Stanik, Pouiller, Crowe, Cullman, Albert, and Royster (1994) examined methods of religious and non-religious coping among college students during the Gulf War crisis. The analyses were cross-sectional and longitudinal. Students completed measures of coping methods, war-related involvement, and psychological distress. Religious coping activities were found to be significant predictors of psychological distress. More specifically, religious avoidant coping was correlated with increased distress, and pleading for a miracle was tied to reduced distress over time. The author reports that although analyses indicate religious and non-religious coping strategies are related, they are not functionally redundant. Further, each set of coping skills provides its own unique variance as a predictor of psychological distress. The results additionally indicate that stressful experiences may drive religious coping, and that the efficacy of coping methods may change over time.

Pargament and Park (for a review, see 1995) examined the perception that religion is merely a defense, and thus is a coping mechanism in the sense that tension is reduced

by avoiding threatening situations rather than confronting them. However, the authors state that this is not the only motivation for religion. Further, they report that empirical evidence suggests that religion is not merely a passive form of coping. In fact, religion serves many purposes and should be perceived as a way of coping rather than a defensive reaction. The authors conclude that psychologists must acquiesce to work in partnership with compatible religious systems and appreciate religious diversity and the dignity of an individual in order to expand their reach as well as their resources. Suggestions are made for the need for improved methods of analyses of specific religious coping mechanisms in specific life situations.

Various types of religious coping were examined in a study conducted by Kendler, Gardner, and Prescott (1997). The authors found that personal religious devotion, but not religious conservatism, was associated with lower levels of depressogenic effects of stressful life events. These findings suggest that religious coping strategies can be effective methods of dealing with stressful situations.

Strengths and Limitations of Research in the Area

Recent research on the relationship between religious commitment and psychopathology have produced mixed results (for a review, see Gartner, Larson & Allen, 1991). The authors report that the discrepant attempt to measure a mental health construct has led to incongruent results among many of these studies. Further, concerns surrounding the reliability and validity of measures of religious constructs have provoked a multitude of reviews which report on the value of numerous instruments. The psychometric soundness and clinical utility of numerous assessment tools which examine religious dimensions for research and clinical use is presented by Hall, Tisdale, and Brokaw (for a review, see 1994). Many of the devices presented in this study have been used in the past research produced in this area. Butman presents a further critique of assessment instruments used in the measurement of religious development (for a review, see 1990).

Similarly, another study presents a comparison of assessment tools which measure Christian Maturity (for a review, see Bassett, et al., 1991). Yet another study focuses on the development of assessment tools which discern religious orientation (for a review, see VanWiklin, 1990; also Boivin, Donkin, & Darling, 1990). The majority of assessments rely on a self-report questionnaire format for the retrieval of subjective data. However, as previously indicated in a study by Bhogle and Prakash (1993), high correlations have been found between subjective and objective measures. Conversely, Basinger reports a philosophical concern regarding the measurement of religiousness (for a review, see Basinger, 1990). Further, he questions whether the results and supported hypotheses in these studies actually mirror reality.

The Future of Religion in Relation to Life Satisfaction and Coping Resources:

A Rationale for the Present Study

It appears apparent that a relationship between multiple dimensions of religiosity and a scope of life experiences, both positive and negative, exist. However, it is equally apparent that a need exists to develop a more standard protocol for conducting research in this area. Many of the previous studies have looked at very broad, general constructs in religion. The primary objective of this study is to examine specific aspects of religiosity (intrinsic religiosity, extrinsic religiosity, and spiritual maturity) and identify the relationship to specific life experiences (life satisfaction and coping resources). Further, it is imperative to conduct statistically valid analyses on the data, and provide the empirical evidence to either support, or disregard the associated hypotheses in a scientific manner. Doing so may influence the field of professional psychology toward a greater acceptance of research in the study of the psychology of religion, and lead to increased credibility of these associated studies.

CHAPTER III

METHODS AND PROCEDURES

Hypotheses

The null hypotheses which will be tested in this study are:

1. There is no linear relationship between extrinsic religiosity, intrinsic religiosity and spiritual maturity (i.e., awareness, realistic acceptance, grandiosity, disappointment, and instability), and life satisfaction.
2. There is no linear relationship between extrinsic religiosity, intrinsic religiosity, spiritual maturity, and level of coping resources.
3. There is no relationship between extrinsic religiosity and spiritual maturity.
4. There is no relationship between intrinsic religiosity and spiritual maturity.
5. There is no relationship between level of life satisfaction and coping resources.

Participants

The population of participants was selected from the undergraduate and graduate student population at a large Midwestern university. Professors and teaching assistants were approached and requested to allow researchers to collect data in their classes. A total of 197 (122 female and 75 male) participants made up the sample for this study and completed the instrument packets. The average age of participants was 27.3, ranging in age from 18 to 56. More complete demographic information on the participants is reported in Table 1.

Table 1

Demographic Information of Entire Sample with Regard to Gender,

Ethnicity, Marital Status, Education Level, and Religious Affiliation (N=197)

Category	Number	Percent
Gender		
Male	75	38%
Female	122	62%
Ethnicity		
African-American	06	03%
Asian-American	01	< 01%
Caucasian	160	81%
Hispanic	02	01%
International	05	< 03%
Native American	14	07%
Other	03	< 02%
Multiple Categories	06	03%
Marital Status		
Single	122	62%
Married	52	26%
Divorced	16	08%
Multiple Categories	07	04%

Level of Education

Freshman	07	04%
Sophomore	27	14%
Junior	51	26%
Senior	36	18%
Graduate	76	38%

Religious Affiliation

Agnostic	05	03%
Atheist	01	< 01%
Baptist	52	26%
Catholic	20	10%
Episcopalian	04	02%
Jewish	01	< 01%
Lutheran	06	03%
Methodist	30	15%
Mormon	01	< 01%
Muslim	03	02%
Non-Denominational Christian	32	16%
Pentecostal	07	04%
Presbyterian	12	06%
Unitarian	01	< 01%
Other	22	11%

Instrumentation

The following section will describe the instruments utilized in this study, and discuss the reliability and validity of each. In addition to the self-report instruments, an informed consent and demographic sheet were also distributed to participants. These forms can be found in appendices A and B, respectively.

Religious Orientation Survey (ROS)

The Religious Orientation Survey (Allport & Ross, 1967) was developed to identify an individual's religious orientation in terms of intrinsic and extrinsic behaviors. These concepts have been widely researched in the empirical study of religiosity (for a review, Hall, Tisdale, & Brokaw, 1994). The instrument consists of twenty questions which can be completed in approximately ten minutes. Available responses range from strongly disagree to strongly agree on a five point likert scale. A score of 3 is given when no response to an item is made. Two subscales are included. One provides a measure of extrinsic religiosity, and the other a measure of intrinsic religiosity. However, higher scores on either scale correspond with higher levels of characteristics consistent with extrinsic religious orientation, while lower scores on either scale correspond with higher levels of intrinsic religious orientation.

Reliability and Validity - Donahue (1985b) reports that reliabilities have ranged from .69 to .85 for extrinsic religiosity, while ranging from .81 to .93 for intrinsic religiosity. Strong validity has also been reported from the ROS where intrinsic religiosity exhibited a strong positive correlation of .76 with measures of religious commitment (Donahue, 1985a). Conversely, only a minimal correlation of .03 was reported between extrinsic religiosity and measures of religious commitment.

Spiritual Assessment Inventory (SAI)

The Spiritual Assessment Inventory is an object relations theoretically based measure of spiritual maturity from a Judea-Christian perspective. It is a 48 item inventory (9 of the items have two parts) which is based on likert scores ranging from 1 -

not at all true to 5 - very true. Factor analyses and reported correlations with the Bell Object Relations Inventory are supportive of the underlying theoretical base of the instrument and its validity as a useful research and clinical tool (Hall & Edwards, 1996a). The SAI examines two concepts of spiritual maturity; awareness of God and quality of relationship with God. Five factors have been identified including awareness, instability, grandiosity, realistic acceptance and disappointment. The most recent revision of the SAI which was utilized in this study also includes an experimental 5-item lie scale which is designed to measure an honest response set. Four levels of the quality of relationship with God are obtained through observation of the grandiosity, the instability, the disappointment and the realistic acceptance subscales. The awareness scale items assess the degree of a participants' awareness of God's communication and/or presence in his or her life.

Reliability and Validity - The authors have conducted three factor analyses which have consistently found the five factors (Hall & Edwards, 1996b); the lie scale was added after these studies. Forty-six of the 48 items loaded .50 or better on their respective factors. The internal consistency ranges from .46 to .88. Cronbach's coefficient alphas estimated the reliability of the factor scales as follows: awareness, .95; disappointment, .90; realistic acceptance, .83; grandiosity, .73; and instability, .84. No alpha coefficient is presented for the lie scale.

The SAI was correlated with other measures to evaluate convergent validity. Strong correlations were observed between the awareness subscale and the Spiritual Well Being Scale (Ellison, 1983). Moderate negative correlations were observed between these scales and the SAI instability scale, while the grandiosity subscale show a weak relationship to both scales. The realistic acceptance scale correlated positively with the SWBS and the disappointment subscale correlated negatively.

Satisfaction With Life Scale (SWLS)

The instrument which was utilized to measure the dependent variable life satisfaction is the Satisfaction With Life Scale. The SWLS was designed to assess subjects' overall judgment of their life in order to measure the concept of life satisfaction (Diener, Emmons, Larsen, & Griffen, 1985). A list of 48 self-report items were generated in the initial phase of the scale's construction. Factor analysis then indicated 3 factors (positive affect, negative affect, and life satisfaction). Affect and satisfaction items which had loadings of less than .60 were discarded leaving 10 items. Due to the high similarity between the 10 items, 5 more were eliminated. The five-item SWLS resulted.

The SWLS is a 5-item Likert type scale which offers a choice of 1 of 7 responses for each item, and yields a score of 5 (low satisfaction) to 35 (high satisfaction). Specifically, "The 7-point scale is 1-strongly disagree, 2=disagree, 3=slightly disagree, 4=neither agree nor disagree, 5=slightly agree, 6=agree, and 7=strongly agree;" Diener et al., 1985, p.72). Higher SWLS scores indicate greater levels of satisfaction with life.

Reliability - Diener et al. (1985) administered the SWLS to 176 college students and reports a test-retest correlation of .82, and an alpha coefficient of .87. In another sample 163 different undergraduates participated.. All subjects were given a battery of subjective well being scales in addition to the SWLS, as well as a variety of other instruments including the Marlow-Crowne measure to assess for social desirability. Correlations between the SWLS and other measures of subjective well being for both sample 1 and sample 2, respectively, are as follows: Fordyce's Single Item Measure of Happiness, .58 and .57; Fordyce's Percent of Time Happy Question, .58 and .62; Cantril's Self Anchoring Ladder, .62 and .66; Andrew and Withey's D-T Scale, .68 and .62. Scores on the SWLS and selected other measures are as follows: self-esteem, .54; symptom checklist, -.41; neuroticism, -.48; emotionality, -.25; activity, .08; sociability, .20 and impulsivity, -.03. These results suggest that individuals satisfied with life appear to adjust well and have little psychopathology. Further, the correlation between the SWLS

and the Marlow-Crowne social desirability measure is .02. Arrindell, Meeuwesen, and Hyse (1991) found reliability figures sound. The authors report the correlation of the SWLS scores with General Health Questionnaire, the SCL-90 Revised, and with health attitudes indicated a positive association.

Validity - The inter-item correlation matrix was factor analyzed using principle axis factor analysis (Diener et al., 1985). The number of factors extracted evolved from a review of the scree plot of eigenvalues. A single factor emerged which accounts for 66% of the variance. Factor loadings identified for specific items follow: item 1=.84; item 2=.77; item 3=.83; item 4=.72; and item 5=.61. Item-total correlations for numbers one through five are .75; .69; .75; .67; and .57, respectively.

Descriptive Statistics - The mean for the SWLS in a college population is reported as 23.5 with a standard deviation of 6.43 (Diener et al., 1985).

Coping Resources Inventory (CRI)

One of the goals for the development of the CRI was to provide a tool to assess for and identify resources currently available to individuals for managing stress (Hammer & Marting, 1988). It is reported to be a useful research instrument in the investigation of levels of coping resources with various populations. The CRI is a 60 item scale that measures resources in five domains including cognitive, social, emotional, spiritual/philosophical, and physical. There is a cumulative total resource score as well, with higher scores indicating higher levels of resources. The instrument may be administered to individuals as well as groups to subjects aged 14 to 83 years of age. The inventory can be completed in about 10 minutes.

Reliability and Validity - More than 150 items were originally generated for an item pool in the early development of the CRI (Hammer & Marting, 1988). Items were collected from clinical experience, literature on stress and coping, previously published instruments, and expert consultants in particular resource domains. Item to scale correlations suggest the CRI is successful at achieving good homogeneity of item content

per scale. The median intercorrelations for the 6 scale scores range from .37 to .46. Internal consistency reliabilities of the CRI were estimated using Cronbach's alpha and ranges from .71 for the Physical Subscale, .77 for the Cognitive, .79 for the Social, .80 for Spiritual and Philosophical, .84 for the Emotional, to .91 for the Total Resource Score. Scale intercorrelations indicate some overlap; however, and there is reported to be more scale discrimination among female subjects than male. Predictive validity is reported to be strong, and means and standard deviations for a variety of populations are reported in the manual.

Research Design

The general type of research design utilized in this study is a correlational; and no cause and effect relationships were explored. Individual assessment packets which each contained the same five measures (demographic questionnaire, the ROS, the SAI, the SWLS and the CRI) and the informed consent were distributed to subjects for completion and retrieved for scoring and analysis.

Procedures

Specific steps were followed in carrying out this study. Before conducting the study using the previously described instruments, the authors of the SAI were contacted and permission to utilize the respective developed instrument in this study was requested and obtained. Prior to administration of scales, permission to use human subjects in a scientific study was requested and granted by the Institutional Review Board at Oklahoma State University (see appendix C). Instructors who agreed to participate were asked to integrate a 45 minute time allotment for the researcher to meet with the prospective class/students and administer the assessment packets. Instruments were randomly ordered and sorted into individual packets. Upon receipt of permission to complete study from the IRB, the administration of assessment packets began. Individual test packets were placed in manila envelopes. Each envelope had the packet number printed on the outside of the envelope in order to alleviate the use of names and ensure respondents'

confidentiality. Consent forms with subject identification were retrieved from each envelope at the time of completion, and placed in a separate file in order to maintain the confidentiality. A brief description of the study was presented to each class, and a request for their volunteer participation was made. Packets were handed out to those who volunteered to participate. Students were asked to open packets, and review and sign the consent form. They were informed to keep one copy of the consent form for their personal records. Students were then asked to complete the demographic form. Students were then asked to complete each of the remaining instruments, and asked to respond to each statement according to their associated agreement or disagreement in an honest and open manner. Students were also requested to take careful note of the different scales on each of the four instruments. Students were asked to make a final check for completion on all forms prior to turning them in. The packets were collected. A total of 197 subject packets were collected out of an attempt to gain 200 subjects.

Data Analysis

A total of 197 completed subject packets were collected for data analyses. The variables were identified and organized into a format of lines and columns in which the raw data could be efficiently entered into a word-processing program. Data were entered separately for each subject packet in the following order: packet ID number; demographic information; Coping Resources Inventory; Religious Orientation Survey; Satisfaction With Life Scale; and the Spiritual Assessment Inventory.

The data collection file was then entered into the Statistical Package for Social Sciences (SPSS) program. Variables from the data list were identified and coding was entered in order for the program to differentiate scores from each scale of the instruments. Commands for the computation of each scale and assessment instrument were entered. Incomplete or missing data were defined and the program was given the command to delete these scores. Approximately 10% of the 197 participant packets had at least one area of assessment instrument left incomplete. However, the total percentage of

incomplete data should be considered less than this figure in relation to the number of instruments used. Thus, the actual percentage of missing data should be considered not greater than 2%.

Descriptive statistics were computed for all variables. In order to test the hypotheses, correlational analyses were performed. Four multiple regression analyses were conducted using a forced entry method. The first regression included the predictor variables extrinsic religiosity, intrinsic religiosity, awareness, realistic acceptance, grandiosity, disappointment, instability, and lie on the dependent variable life satisfaction. The second regressed these predictor variables on coping resources. A third and fourth regression analysis were conducted utilizing these same variables with the exclusion of the SAI lie scale scores. Results of these analyses are reported in the following chapter with levels of significance at .01 and .05.

Limitations of the Design

Limitations with regard to the specific population utilized in the study may affect generalizeability. The conclusions obtained from the data analyses reported in Chapter 4 are made within the framework of the following limitations:

1. The sample in the present study was not a random sample of all college students, and therefore may not be representative of a university population.
2. The homogeneous nature of the sample does not reflect the greater variance in the population with regard to demographic variables such as ethnicity, age-range, socio-economic status, or marital status and, therefore generalizeability of the results may be limited.
3. All the data were collected using paper and pencil self-report instruments. This method of data collection may be subject to the influence of social desirability and fake good response sets. Thus, the generalizeability of the results may be limited.

4. The lack of clarity and consistency offered in various studies to define dimensions of religiosity may present a concern over the measurement of religious variables, and thus affect the generalizeability of the results.

One limitation notable to this study involves social desirability. Hoge (1972) reports that social desirability may arise as a problem on the intrinsic and extrinsic measures of religiosity in Judeo-Christian groups due to the theological nature which is critical of extrinsic motivation. However, results from studies which compared intrinsic/extrinsic measures with the Marlow-Crowne Social Desirability Scale were insignificant. Further, Deiner et al. (1985) found that social desirability was not a problem when utilizing the SWLS, as correlations with the Marlow-Crowne Social Desirability Scale were also insignificant.

Other possible limitations of the measured variables are the lack of clarity and consistency offered in various studies to define dimensions of religiosity. Basinger (1990) presents and discusses philosophical concerns regarding the measurement of religiousness. In an effort to alleviate these concerns, a review of the literature provided a search for the most consistent and specific definition of the variables to be measured, as well as a review of the psychometric properties of the assessment instruments to assure that the tools will measure the specific variables which are the interest of this study.

During the most recent analysis of the SAI, Hall and Edwards (1996b) attempted to extract and include a lie scale in order to judge the reliability of individual's scores based on how honestly they responded to instrument assessment questions. However, this 5-item subscale is experimental in nature. Therefore, the results of the analyses are reported with and without the inclusion of this scale. All correlations found in the analysis between the lie scale and any variable are reported additionally.

CHAPTER IV

RESULTS

Introduction

The present chapter reports the results of this study. Null hypotheses 1 and 2 were tested through the use of multiple regression analyses. Null hypotheses 3, 4 and 5 were tested through the use of zero-order correlational analysis.

Descriptive Statistics

The means and standard deviations of the participants' scores on the scales of the Satisfaction With Life Scale (SWLS), the Coping Resources Inventory (CRI), the Religious Orientation Scale (ROS), and the Spiritual Assessment Inventory (SAI) are reported in Table 2.

As previously stated in Chapter 3, for the SWLS and the CRI, the higher the total score, the greater the measured level of satisfaction with life and the greater the level of coping resources, respectively. For the ROS, a somewhat confusing scoring method is used. Specifically, the higher the score on the E subscale, the greater the measured level of extrinsic religious attributes, while the lower the score on the I subscale, the greater the level of intrinsic religious attributes. Six subscales make up the SAI, a measure of spiritual maturity, with no total spiritual maturity score. Higher scores on each of the five subscales are attributed to greater levels of those characteristics in the participants' relationship with God. Higher scores on awareness and realistic acceptance scales are indicative of greater spiritual maturity, as are lower scores on disappointment, grandiosity

and instability. The sixth subscale is an experimental lie scale where higher scores indicate a greater level of dishonest response.

Table 2

Means and Standard Deviations of Participants' (N=197) Scores on the Scales of the SWLS, the CRI, the ROS, and the SAI

Instrument Scale	Mean	Std.Dev.	Min.	Max.
Extrinsic Religiosity	28.20	6.51	12.00	44.00
Intrinsic Religiosity	22.06	8.08	9.00	45.00
Spiritual Maturity				
Awareness	60.05	21.37	12.00	95.00
Realistic Acceptance	24.11	9.45	2.00	35.00
Disappointment	12.65	6.33	4.00	35.00
Grandiosity	10.59	4.67	3.00	35.00
Instability	14.65	6.42	4.00	42.00
Coping Resources Inv.				
Total Score	178.58	21.61	116.00	230.00
Satisfaction With Life				
Scale Total Score	26.13	5.80	7.00	35.00

Before addressing the research questions, it is helpful to first present the correlation matrix of all of the variables of interest in this study. This matrix is presented in Table 3.

While the primary research questions are exploring the relationships between religious variables (i.e., intrinsic religiosity, extrinsic religiosity, and spiritual maturity)

TABLE 3

Pearson Correlation Coefficients Between All Variables

	AGE	ROS/I	ROS/E	SAI/A	SAI/R	SAI/D	SAI/G	SAI/I	SAI/L	CRI/CG	CRI/SO	CRI/EM	CRI/SpPh	CRI/PHY	CRI/tot	SWLS
AGE	1.000															
ROS/I	.015	1.000														
ROS/E	-.095	.275**	1.000													
SAI/A	-.023	-.766**	-.146*	1.000												
SAI/R	-.185*	-.442**	-.093	.546**	1.000											
SAI/D	.022	.115	.199**	.010	.140	1.000										
SAI/G	-.146*	-.263**	.299**	.490**	.295**	.111	1.000									
SAI/I	-.159*	-.039	.195**	.165*	-.272**	.551**	.277*	1.000								
SAI/L	-.093	-.652**	-.025	.755**	.498**	.014	.480**	.184**	1.000							
CRI/CG	-.027	-.090	-.025	.173*	.086	-.194**	.108	-.289**	.208**	1.000						
CRI/SO	.003	-.189**	-.079	.158*	.022	-.150*	.017	-.246**	.227**	.733**	1.000					
CRI/EM	.029	-.137	.048	.134	-.004	-.099	.079	-.318**	.154*	.663**	.680**	1.000				
CRI/SpPh	.046	-.617**	-.175*	.604**	.214**	-.234**	.216**	-.241**	.565**	.523**	.561**	.571**	1.000			
CRI/PHY	-.182*	-.100	.017	.100	.009	-.220**	.087	-.140*	.210**	.522**	.384**	.430**	.386**	1.000		
CRI/tot	-.027	-.284**	-.049	.289**	.076	-.217**	.124	-.313**	.336**	.847**	.846**	.862**	.764**	.665**	1.000	
SWLS	-.131	-.303**	-.165*	.241**	.112	-.392**	.075	-.272**	.280**	.492**	.453**	.381**	.475**	.388**	.542**	1.000

and mental health variables (i.e., life satisfaction and coping resources), research questions 3 and 4 explore the relationships between intrinsic/extrinsic religiosity and spiritual maturity.

Relationships presented in Table 3 which are not specifically addressed in the research questions will be presented as post hoc analyses.

In addition, for a better understanding of the psychometric properties, the alpha coefficients for all of the variables are presented in Table 4. From Table 4 it can be seen that all of the variables with the exception of extrinsic religiosity have acceptable reliability coefficients.

Table 4

Internal Consistency (Chronbach's Alpha) Reliability Coefficients for the ROS, the SAI, the CRI, and the SWLS Scales in a College Student Sample

	Alpha Coefficients
Religious Orientation Survey	
Extrinsic Religiosity Scale	0.63
Intrinsic Religiosity Scale	0.85
Spiritual Awareness Inventory	
Awareness Scale	0.98
Realistic Acceptance Scale	0.94
Disappointment Scale	0.93
Grandiosity Scale	0.81
Instability Scale	0.77
Lie Scale	0.78
Coping Resources Inventory	
Cognitive Scale	0.82

Social Scale	0.78
Emotional Scale	0.83
Spiritual and Philosophical Scale	0.80
Physical Subscale	0.71
Total Resource Score	0.93
Satisfaction With Life Scale	
Total Satisfaction Scale	0.87

Research Question 1

Is there a significant relationship between extrinsic religiosity and intrinsic religiosity and spiritual maturity (i.e. realistic acceptance, awareness, disappointment, instability, and grandiosity) and life satisfaction as measured by the ROS, the SAI, and the SWLS respectively?

Null hypothesis 1 addressed this question with the assumption of no significant relationship between participants' scores on extrinsic religiosity and intrinsic religiosity as measured by the ROS, and spiritual maturity as measured by the SAI and life satisfaction as measured by the SWLS. Two regression equations were used to test this hypothesis. In the first equation, participants' scores on the two subscales of the ROS and the 6 subscales of the SAI were used as the independent or predictor variables, and their scores from the SWLS were used as the dependent or criterion variable. In the second equation the same independent variable scores were utilized with the exclusion of the scores from the experimental Lie scale of the SAI. In both regression equations, the forced entry method was used.

An R Square of .255 was observed when all of the subscales were entered. This indicates that 25.5% of the variance in life satisfaction was accounted for in concert by all the ROS and SAI subscales. The first regression equation was significant with all of the

variables entered, $F(8, 175) = 7.46, p = .0000$. As can be seen in Table 5, the Lie and Disappointment subscales were observed to have the greatest level of significance in their contribution to the variance in satisfaction with life at the .04 and .00 level of probability, respectively. In order to better understand the relationships, Beta weights and levels of significance for each predictor variable are reported in Table 5.

An R Square of .236 was observed when all subscales of the ROS and the SAI excluding the Lie scale were entered. This indicates that 23.6% of the variance in life satisfaction was accounted for in concert by the ROS and SAI subscale, excluding the Lie scale. A small change in the R Square was observed between the two multiple regression equations; however, statistical analysis was not computed to discern the level of significance in this change. The second regression equation was also significant with all of the variables, with the exclusion of the Lie scale entered, $F(7, 176) = 7.77, p = .0000$.

Table 5

Multiple Regression Summary Table of Beta Weighting for the Relationship Between Intrinsic Religiosity, Extrinsic Religiosity, and Spiritual Maturity and the Satisfaction With Life Scale

Variable	Beta	t	p
Religious Orientation Scale			
Extrinsic	-.055459	-.737	.4621
Intrinsic	-.127332	-1.152	.2508
Spiritual Maturity			
Awareness	-.017038	-.132	.8953
Realistic Acceptance	.011328	.141	.8881
Instability	-.136148	-1.696	.0917

Grandiosity	.034545	.402	.6880
Disappointment	-.294694	-3.749	.0002
Lie	.219865	2.109	.0364

Research Question 2

Is there a significant relationship between participants' level of extrinsic religiosity and intrinsic religiosity and spiritual maturity (i.e. awareness, realistic acceptance, grandiosity, disappointment, and instability) and level of total coping resources as measured by the ROS, the SAI, and the CRI, respectively?

Null hypothesis 2 addressed this question with the assumption of no significant relationship between participants' scores on extrinsic religiosity and intrinsic religiosity as measured by the ROS, and spiritual maturity as measured by the SAI, and the CRI total resource subscale score. Two regression analyses were used to test this hypothesis. In the first equation, participants' score on the two subscales of the ROS and the 6 subscales of the SAI were used as the independent or predictor variables, and their scores from the CRI were used as the dependent or criterion variable. In the second equation the same independent variable scores were utilized with the exclusion of the scores from the experimental Lie scale of the SAI. In both regression equations, the forced entry method was used.

An R Square of .260 was observed when all of the subscales were entered. This indicates that 26% of the variance in level of coping resources was accounted for in concert by all the ROS and SAI subscales. The first regression equation was significant with all of the variables entered, $F(8, 175) = 7.72, p = .0000$. As can be seen in Table 6, the Lie and Instability subscales were observed to have the greatest level of significance in their contributions to the variance in level of coping resources at the $<.01$ and $.00$ level

of significance, respectively. In order to better understand the relationships, Beta weights and levels of significance for each predictor are presented in Table 6.

An R Square of .228 was observed when all subscales of the ROS and the SAI excluding the Lie scale were entered. This indicates that 22.8% of the variance in level of coping resources was accounted for in concert by the ROS and SAI subscale, excluding the Lie scale. A small change in the R Square was observed between the two multiple regression equations; however, statistical analysis was not computed to discern the level of significance in this change. The second regression equation which excluded the lie scale was also significant, $F(7, 176) = 7.43, p = .0000$.

Table 6

Multiple Regression Summary Table of Beta Weighting for the Relationship Between Intrinsic Religiosity, Extrinsic Religiosity, Spiritual Maturity and the Coping Resources Inventory

Variable	Beta	t	p
Religious Orientation Scale			
Extrinsic	.059970	.800	.4247
Intrinsic	-.069838	-.634	.5266
Spiritual Maturity			
Awareness	.130961	1.017	.3104
Realistic Acceptance	.079134	-.988	.3243
Grandiosity	-.004418	-.052	.9589
Instability	-.374746	-4.687	.0000
Disappointment	-.016474	-.210	.8336
Lie	.289381	2.787	.0059

Research Question 3

Is there a significant relationship between extrinsic religiosity and spiritual maturity (i.e. awareness, realistic acceptance, grandiosity, instability, and disappointment)?

Null hypothesis 3 addressed this question with the assumption of no significant relationship between extrinsic religiosity and spiritual maturity. A series of Pearson product moment correlations were utilized to test this hypothesis. Multiple significant correlations are observed between these scale scores and are reported in Table 3. A significant negative correlation was found between the Extrinsic Religiosity subscale and Awareness ($r = -.148, p < .05$). Significant positive correlations were found between Extrinsic Religiosity and Disappointment ($r = .199, p < .01$), Grandiosity ($r = .298, p < .01$), and Instability ($r = .195, p < .01$). Recall from the scoring system of the ROS, that high extrinsic religiosity subscale scores are indicative of an extrinsic religious orientation. No significant relationships were identified between Extrinsic Religiosity and Realistic Acceptance ($r = -.093, p > .05$), or the Lie scale ($r = -.025, p > .05$).

Research Question 4

Is there a significant relationship between intrinsic religiosity and spiritual maturity (i.e. awareness, realistic acceptance, grandiosity, instability, and disappointment)?

Null hypothesis 4 addressed this question with the assumption of no significant relationship between intrinsic religiosity and spiritual maturity. Pearson correlations were utilized to test this hypothesis. Multiple significant correlations are observed between these scale scores and are reported in Table 3. The Intrinsic Religiosity subscale is observed to be negatively correlated to Realistic Acceptance ($r = -.442, p < .01$), Awareness ($r = -.766, p < .01$), Grandiosity ($r = -.263, p < .01$), and the lie scale ($r = -.652, p < .01$). No significant correlations were found between the Intrinsic Religiosity subscale and Disappointment ($r = .115, p > .05$), or Instability ($r = -.034,$

$p > .05$). It is important to recall the direction of the ROS scales when interpreting these results. Low scores on the Intrinsic Religiosity subscale are indicative of an intrinsic religious orientation.

Research Question 5

Is there a significant relationship between participants' level of coping resources total score and satisfaction with life total score?

Null hypothesis 5 addressed this question with the assumption of no significant relationship between participants' coping resources total score and satisfaction with life as measured by the SWLS. Pearson correlations were conducted in order to test this hypothesis. A significant positive correlation was observed between the Coping Resources Inventory total score and the Satisfaction With Life Scale total score ($r = .547$, $p < .01$). Results of the correlational analysis of the relationships between the subscales of the CRI and the total score of the SWLS are reported in Table 3.

Additional Post Hoc Correlational Analysis

Correlations among all variables were computed to determine the independent nature of the relationship among the two subscales of the ROS, the five subscales of the SAI, the total score of the SWLS, and the subscale and total scores of the CRI. The correlation matrix is presented in an earlier section of this chapter in Table 3.

From Table 3 it can be observed that there are several significant relationships between these scales. Specifically, the total SWLS score is negatively correlated with the SAI Disappointment scale, the SAI Instability scale, the ROS Extrinsic scale, and the ROS Intrinsic scale. The total SWLS is positively correlated with the SAI lie scale, and with the SAI awareness scale.

Additionally, several significant relationships were also observed between the subscales of the ROS and the SAI, and the subscale and total scale scores of the CRI. Significant negative correlations between the cognitive scale of the CRI and the SAI subscales include the Disappointment and Instability subscales. Positive correlations

between the cognitive scale of the CRI and SAI subscales include the Lie and Awareness subscales. No significant relationship was observed between the CRI Cognitive scale and the ROS subscales.

Significant negative correlations between the CRI Social scale and the SAI subscales include Disappointment, Instability, and the ROS Intrinsic scale. Significant positive correlations between the CRI Social scale and the SAI Lie scale and the SAI Awareness scale were observed.

A significant negative correlation between the CRI Emotional Scale and the SAI Instability scale was observed, while a positive correlation with the SAI Lie scale was observed.

The CRI Spiritual and Philosophical scale was observed to have negative correlations with the SAI Disappointment scale, the SAI Instability scale, the ROS Extrinsic scale, and the ROS Intrinsic scale. Significant positive correlations between the CRI Spiritual and Philosophical scale and the SAI Realistic Acceptance scale, the SAI Grandiosity scale, the SAI Lie scale, and the SAI Awareness scale were also observed.

Significant negative correlations between the CRI Physiological scale and the SAI Disappointment scale, and the SAI Instability scale were observed. A positive correlation between the CRI Physiological scale and the SAI Lie scale was also observed. No significant relationships are observed between this scale and the ROS subscales.

Finally, the CRI Total score was observed to have a significant negative correlation to the SAI Disappointment scale, and the SAI Instability scale as well as the ROS intrinsic scale. A significant positive relationship was observed between the CRI Total scale score and the SAI Lie scale, and the SAI Awareness scale.

These results indicate that in general higher levels of disappointment and instability (i.e., lower levels of spiritual maturity) are related to lower levels of satisfaction with life, and to lower levels of coping resources. Further, that higher levels of Lie scale scores, and of Awareness scale scores are related to higher levels of

satisfaction with life and to higher levels of coping resources. The results also indicate that higher levels of extrinsic religiosity (i.e. higher scores on the extrinsic religiosity scale) are related to lower levels of life satisfaction and lower levels of coping resources, and higher levels of intrinsic religiosity (i.e. lower scale scores on the intrinsic religiosity scale) are related to higher levels of life satisfaction and coping resources.

Pearson correlations were also calculated between the subscales of the ROS and between the subscales of the SAI to determine the level of multicollinearity before performing the regression analyses. These correlations are reported in Table 3. For the total sample (n=197) the ROS Intrinsic and Extrinsic scales have a significant positive correlation.

The SAI Realistic Acceptance scale was observed to have no significant relationship to Disappointment, and significant positive correlations to the Grandiosity, Instability, Lie, and Awareness Scales. The Realistic Acceptance scale was also observed to have a significant negative correlation to the ROS Intrinsic scale.

The SAI Awareness scale was observed to have a significant positive correlation to the SAI Realistic Acceptance scale, Grandiosity scale, and the Lie scale, and to the Instability scale. No significant relationship was observed between the SAI Awareness and Disappointment scales. A significant negative correlation was observed between the SAI Awareness scale and the ROS Extrinsic scale, and the ROS Intrinsic scale.

The SAI Disappointment scale was observed to have a significant positive correlation to the SAI Instability scale, and to the ROS Extrinsic scale.

The SAI Instability scale was observed to have significant positive correlations to the SAI Realistic Acceptance scale, the Disappointment scale, the Grandiosity scale, and the Lie scale at, and with the Awareness scale. The SAI Instability scale was also observed to have a significant positive relationship with the ROS Extrinsic scale.

Significant positive correlations were observed between the SAI Grandiosity scale and the SAI Realistic Acceptance scale, the Instability scale, the Lie scale, and the

Awareness scale, and the ROS Extrinsic scale. A significant negative correlation was found between the SAI Grandiosity scale and the ROS Intrinsic scale.

Significant positive correlations were observed between the SAI Lie scale and other SAI subscales, excluding the Disappointment scale. No significant relationship is observed between the SAI Lie and Disappointment scales. A significant negative correlation between the SAI Lie scale and the ROS Intrinsic scale is observed.

As previously mentioned in chapter 1, previous research suggests that age may potentially lead to increased levels of life satisfaction. However, a zero-order correlation analysis was conducted using the variables age, total SWLS score, and the total CRI score. No significant relationships were observed between the independent variable age and either dependent variable, life satisfaction or level of coping resources.

CHAPTER V

SUMMARY, CONCLUSIONS, IMPLICATIONS AND RECOMMENDATIONS

The present chapter reports a summary of the study, conclusions and discussions based on the results, implications for theory and practice, and recommendations for future research.

Summary

The problem addressed in this study was to expand the limited field of research investigating the relationship of dimensions of religiosity, including extrinsic religiosity, intrinsic religiosity and spiritual maturity, and level of life satisfaction and coping resources. Though a large body of research exists which examines the relationship of life satisfaction and coping resources to other variables, few studies have been found which address the relationship of these constructs to dimensions of religiosity.

The present study utilized the Allport & Ross Religious Orientation Survey (ROS), which has previously been widely used in the field of research. Few studies have been conducted utilizing a psychometrically sound measure of spiritual maturity; therefore, the Spiritual Assessment Inventory (SAI, Hall, & Edwards, 1996), a recently developed instrument which met these requirements was utilized in this study. Additionally, the Satisfaction With Life Scale (Diener, et al.), and the Hammer and Marting Coping Resources Inventory (CRI) were found to be psychometrically sound measures of their respective constructs, and these instruments were utilized in this study.

A total of 197 undergraduate and graduate students enrolled in Applied Behavioral Studies and General Psychology courses were administered the ROS (Allport & Ross, 1967), the SAI (Hall & Edwards, 1996), the CRI (Hammer & Marting, 1988), and the SLWS (Diener, Emmons, Larsen & Griffen, 1985) in random order. All data were collected during the spring of 1997.

Five null hypotheses were tested in the present study. Null hypotheses 1 and 2 were tested through the use of multiple regression analyses. Pearson correlations were used to test null hypotheses 3, 4 and 5. The following is a summary of the five null hypotheses with accompanying results from the statistical analyses.

Null Hypothesis 1. There is no linear relationship between extrinsic religiosity, intrinsic religiosity and spiritual maturity, and life satisfaction.

Multiple regression analysis using the forced entry method indicated the ROS and SAI subscales accounted for a significant amount of the variance in life satisfaction as measured by the SWLS. Zero-order correlation analysis indicated that the intrinsic religiosity, awareness, disappointment and instability subscales were significant predictors of life satisfaction at the .01 level. The extrinsic religiosity subscale was significant at the .05 level. In the first regression equation all of the subscales of the ROS and the SAI accounted for 25.5% of the variance in life satisfaction. In the second regression equation, the lie scale on the SAI was removed, and the remaining ROS and SAI subscales continued to account for 23.6% of the variance in life satisfaction. Thus the null hypothesis is rejected.

Null Hypothesis 2. There is no linear relationship between extrinsic religiosity, intrinsic religiosity and spiritual maturity, and level of coping resources.

Multiple regression analysis using the forced entry method indicated the ROS and SAI subscales accounted for a significant amount of the variance in level of coping

resources. Zero-order correlation analysis indicated that the intrinsic religiosity, awareness, disappointment, instability, and lie subscales were significant predictors of level of coping resources at the .01 level. In the first regression equation all of the ROS and SAI subscales accounted for 26% of the variance in level of coping resources. In the second regression equation the lie scale on the SAI was removed, and the remaining ROS and SAI subscales continued to account for 22.8% of the variance in level of coping resources. Thus, the null hypothesis was rejected.

Null Hypothesis 3. There is no significant relationship between extrinsic religiosity and spiritual maturity.

Multiple significant correlations between the extrinsic subscale of the ROS and subscales of the SAI indicate a relationship between religious orientation and spiritual maturity. Results indicate that a significant inverse relationship exists between the ROS extrinsic religiosity subscale and the SAI awareness subscale at the .05 level. Positive relationships are indicated between the ROS extrinsic religiosity subscale and the SAI disappointment, grandiosity, and instability subscales at the .01 level.. These results indicate that an inverse relationship appears to exist between extrinsic religious orientation and spiritual maturity, where higher levels of extrinsic religious orientation are associated with lower levels of spiritual maturity. Thus, the null hypothesis is rejected.

Null Hypothesis 4. There is no significant relationship between intrinsic religiosity and spiritual maturity.

Multiple significant correlations between the intrinsic subscale of the ROS and subscales of the SAI indicate a relationship between intrinsic religious orientation and spiritual maturity. A significant inverse relationship is indicated between the ROS intrinsic religiosity subscale and the SAI awareness, realistic acceptance and grandiosity

subscales at the .01 level. These results indicate that a relationship appears to exist between intrinsic religious orientation and spiritual maturity, where higher levels of intrinsic religious orientation are associated with higher levels of spiritual maturity. Thus, the null hypothesis is rejected.

Null Hypothesis 5. There is no significant relationship between level of life satisfaction and level of coping resources.

A significant positive correlation between the SWLS total score and the CRI total score at the .01 level indicates a significant positive relationship exists between level of coping resources and level of life satisfaction. Thus, the null hypothesis is rejected.

Conclusions and Discussion

The conclusions obtained from the data analyses reported in Chapter 4 are made within the framework of the following limitations.

1. The sample in the present study was not a random sample of all college students, and therefore may not be representative of a university population.
2. The homogeneous nature of the sample does not reflect the greater variance in the population with regard to demographic variables such as ethnicity, age-range, socio-economic status, or marital status and, therefore generalizability of the results may be limited.
3. All the data were collected using paper and pencil self-report instruments. This method of data collection may be subject to the influence of social desirability and fake good response sets. Thus, the generalizability of the results may be limited.
4. The lack of clarity and consistency offered in various studies to define dimensions of religiosity may present a concern over the measurement of religious variables, and thus affect the generalizability of the results.

With the exception of the extrinsic religious orientation subscale, all other subscales had acceptable levels of internal consistency as interpreted from the computed Chronbach alpha coefficients (reported in Table 4). Reliabilities computed for this sample of the population were mostly similar to those reported for the respective instruments and their associated scales in the methods section in Chapter 3. These computations suggest that the instruments and their subscales are measuring only one construct. Further, from the review of the instruments reported in the methods section, it appears that the correlations reported between each instrument and instruments which measure similar constructs is high enough to support good construct validity. Thus, it could be concluded that the instruments are measuring what they report to measure.

Results of the present study provide tentative support for the hypothesis that dimensions of religiosity are related to levels of life satisfaction and to coping resources. In the general sample, lower levels of extrinsic religiosity and higher levels intrinsic religiosity appear to be related to higher levels of life satisfaction and coping resources. Additionally, higher levels of spiritual maturity appear to be related to higher levels of life satisfaction and coping resources. The results of this study are statistically significant; however, future studies should further explore the practical significance of these findings.

The significant negative correlation between extrinsic religious orientation and satisfaction with life, and the significant positive correlation between intrinsic religious orientation and satisfaction with life was expected. It was suspected that extrinsic religiosity may affect life satisfaction in such a manner due to the traits related to this type of religious orientation, and the importance they place on the self in terms of presentation to society. A more positive relationship was suspected between intrinsic religiosity and life satisfaction. It was previously presented that those who are more intrinsic in their religious orientation strive to transcend self-centered needs, and suspected that this transcendence may improve life satisfaction. Other aspects of intrinsic religiosity include

being oriented toward a unification of being and serious consideration of the commandment of brotherhood. Additionally, although no significant relationship between extrinsic religiosity and level of coping resources was observed, a significant positive correlation appeared between intrinsic religiosity and level of coping resources. Hall, Tisdale and Brokaw (for a review, 1994) previously reported that intrinsic religiosity was highly positively correlated with religious commitment, as well as purpose in life, and conceptualization of God as a causal agent. Overall, when the lie scale was removed from the regression equation, intrinsic religiosity accounted for approximately 9% of the 24% reported variance accounted for in life satisfaction, and approximately 4% of the 23% reported variance in level of coping resources. Extrinsic religiosity also minimally contributed to the variance in life satisfaction.

Self-report measures such as the SWLS and CRI may be subject to social desirability and fake good response sets, and in fact a high correlation significant at the .01 level is observed between the lie scale and the SWLS and CRI total scores. Indeed, the strong positive relationship between intrinsic religiosity and satisfaction with life and level of coping resources may be indicative of these participants adherence to, and consistency to responding in a positive manner to the subscale statements. Additionally, a lack of method variance could be responsible for the results which are indicative of a positive and significant relationship between these variables. Future studies might include an additional method of data collection such as an interview portion in order to add to the strength of the results.

Another significant result appeared when observing the independent correlations between intrinsic religiosity and spiritual maturity. Positive correlations were suspected as it has been stated that individuals ordinarily enter into a church member relationship with an extrinsic religious orientation, and it is the desire of the Church that individuals become more intrinsically oriented in time as they develop in their spiritual growth (Spilka, Hood & Gorsuch, 1985). Correspondingly, significant positive correlations were

observed between both intrinsic religiosity and awareness; a measure of the awareness of God's communication and/or presence in one's life. Further, extrinsic religiosity has a significant positive correlation to disappointment, grandiosity and instability; measures of the quality of one's relationship to God. These results are in accordance with what was expected. Further, observations indicate that intrinsic religiosity is also positively correlated with realistic acceptance and grandiosity. Also, although no significant relationship is observed between extrinsic religiosity and the SAI lie scale, a significant negative relationship does appear between the lie scale and intrinsic religiosity. Thus, as intrinsic religious orientation increases, scores on the lie scale increases as well. Therefore, although the initial research questions regarding the relationship between intrinsic religiosity, extrinsic religiosity and spiritual maturity, level of coping resources and life satisfaction were answered, many new questions have arisen. More specifically, what are the causal attributes of intrinsic religiosity which lead to greater levels of spiritual maturity, life satisfaction, and coping resources?

One consideration to be made regarding these results is how we measure intrinsic religiosity. Although the Allport and Ross ROS is the most widely used instrument in measuring these constructs (Hall, Tisdale & Brokaw, 1994), it is not without concerns. Gorsuch and McPherson (1989) suggest a need for revision. One specific item considered problematic on the intrinsic religiosity scale involves the presence of the behavior, church attendance, which they believe is a consequence of intrinsic faith rather than a measure of it. However, other statements on the intrinsic religiosity scale do appear to measure religious behaviors which are more internalized and personal. For example, "I try hard to carry my religion over into all my other dealings in life", and "Quite often I have been keenly aware of the presence of God or the Divine Being."

The significant positive correlation between spiritual maturity and life satisfaction lead to closer inspection of the individual scales which collectively contributed to the variance in life satisfaction. Upon initial observation, it was discovered that the lie scale

of the SAI contributed to a significant portion of this variance. Thus, the lie scale score was extracted from the multiple regression equation, and an additional analysis was conducted. Little change occurred in the total variance accounted for, with a decrease of only 1.9%. It was then determined that the scale which also greatly contributed individually to this variance was the SAI disappointment subscale at 15%. Other spiritual maturity variables which contributed to the variance in life satisfaction are instability and awareness.

Because such a large amount of the variance was accounted for by the disappointment subscale, the items of this measure were more closely scrutinized to see if they were in fact similar statements to those on the SLWS rather than a spiritual or religious oriented measure. It was found that the disappointment subscale does appear to measure what it purports to (i.e. disappointment in the quality of one's relationship with God). Examples of these statements are SAI item #2.1 - "There are times when I feel disappointed with God", and item 33.1 - "There are times when I feel frustrated with God for not responding to my prayers." There are a total of 7 items on the disappointment subscale.

Spiritual maturity was also found to have a significant positive relationship to level of coping resources. Significant negative correlations were observed between SAI disappointment and instability subscales and level of coping resources. Significant positive correlations were observed between the lie and awareness subscales to level of coping resources. As in the regression analysis with life satisfaction, the lie scale contributed significantly to the variance in level of coping resources. Again, a second regression equation was utilized with the extraction of the lie scale and regression analysis conducted. The variance in level of coping resources accounted for by the remaining ROS and SAI subscales continued to be significant at 22.8%, a decrease of only 3.2%.

The most significant predictor in the equation for level of coping resources was awareness at approximately 10%, a measure of spiritual maturity and one's ability to communicate with God. Instability was also a significant predictor at approximately 9%. Disappointment and intrinsic religiosity also contributed to the variance accounted for in level of coping resources, although to a lesser degree.

These findings indicate that an individual's awareness of God in his or her life in terms of spiritual maturity is an important variable in both level of life satisfaction and level of coping resources. Greater measures of awareness are related to increased levels of life satisfaction and coping resources. Remember that higher levels of awareness are indicative of an individual's ability and propensity to communicate with God in daily life. Additionally, instability and disappointment were found to be important predictors of life satisfaction and level of coping resources. The findings suggest that as the quality of one's relationship with God becomes more convoluted with greater levels of disappointment and instability, his or her life satisfaction and level of coping resources goes down. Conversely, individuals with low levels of disappointment and instability in the quality of their relationship with God enjoy greater levels of life satisfaction and coping resources.

During the early stages of development of the proposal of this study, a major question was debated as to whether or not religiosity and spirituality were actually two separate constructs. Many individuals who are uncomfortable being labeled religious are quite content to emphasize the extent of their spirituality. The significance of these findings support that these variables are indeed strongly related constructs. Intrinsic religious orientation, or internalized religious beliefs and personal religious behaviors, are significantly and positively related to spiritual maturity. However, extrinsic religious orientation and the associated behaviors are negatively related to spiritual maturity. It appears that these more external or social types of religious behaviors are the exception to the rule which supports religion and spirituality as two separate constructs. In fact, these

behaviors are what many people connect with a more negative view of religion, while a more positive perception is widely held for those internalized beliefs and personal behaviors associated with spiritual maturity. Extrinsic religious orientation has been identified as having an inverse relationship to life satisfaction and level of coping resources, while intrinsic religious orientation is positively related to spiritual maturity, life satisfaction and coping resources. Additionally, spiritual maturity has been identified as having a positive impact on life satisfaction and level of coping resources.

A large amount of the variance in life satisfaction (24%), and in level of coping resources (23%) has been accounted for in concert by religious orientation (i.e., extrinsic religiosity and intrinsic religiosity) and spiritual maturity (i.e., awareness, realistic acceptance, grandiosity, instability and disappointment). Although these percentages seem considerable, the question remains as to what variables contribute to the remaining 76% of the variance in life satisfaction, and 77% of the variance in coping resources.

An additional research question identified a significant correlation between the dependent variable life satisfaction and level of coping resources at the .01 level, with a correlation coefficient of $r = .5416$. It is suspected that a simple linear regression where level of coping resources was regressed on life satisfaction would reveal a variance of R Square of greater than 25%. This is an area which should also be more closely explored. The dimensions of religiosity measured herein have already been identified to be strong predictors of both life satisfaction and level of coping resources. If coping resources are identified as having a significant contribution in life satisfaction, then one could ascertain that by adjusting religious orientation and spiritual maturity, the level of coping resources might be increased, and thus life satisfaction would increase as well.

No significant relationships were identified between the independent variable age, and the dependent variables life satisfaction and coping resources, although the review of the literature indicated that increased levels of age may lead to increases in life satisfaction and coping. The lack of significance in this study may be due to the

particular sample utilized in this study which appears to be bi-modal. The average age of participants was 27.3, with the majority of students being either older or younger, and fewer in between age groups.

Implications

In addition to the conclusions presented in this chapter, there are three implications which follow from the findings of this study.

1. Findings regarding the relationship between scores on the ROS, the SAI, the CRI and SWLS have theoretical as well as practical implications. Theoretically the findings support much of the research which would predict higher levels of life satisfaction and coping resources with greater levels of religiosity and spirituality.

Practically, these findings provide some insight into the area of spirituality as a predictor of life satisfaction and level of coping resources. Religious and spiritual domains are often left out in traditional psychotherapy. The knowledge that these are important predictors of life satisfaction and coping resources can be advantageous to the therapist and client when increasing levels of these constructs is a goal of psychotherapy. Religious and spiritual domains may be assessed with instruments such as the ROS and the SAI, which may reveal areas where clients may benefit from reevaluation of their belief and value systems, as well as how they communicate and relate to God. This type of assessment and intervention would prove efficacious particularly for clients who consider religion and/or spirituality an important area in their lives. In fact, Richards and Bergin (1997) have recently written a new book A Spiritual Strategy For Counseling and Psychotherapy which has been published, and will be available from the American Psychological Association Press in July of 1997. The authors emphasize the need for therapists to routinely assess clients' religious and spiritual domains in order to obtain a fuller and more accurate diagnostic picture.

2. The results regarding the significant relationship of the ROS to the SAI adds to the controversy that religion and spirituality are two different constructs. Intrinsic

religiosity has previously been identified as the internalization of religion necessary for a spiritual experience, and a significant positive relationship appeared between intrinsic religiosity and spiritual maturity. However, extrinsic religious orientation has been found to have a significant negative correlation to spiritual maturity.

3. Theoretically, the significant correlation observed between level of coping resources and life satisfaction supports much of the research which would predict a strong relationship between higher levels of coping resources and higher levels of life satisfaction.

Practically, these findings define areas in need of important exploration in terms of identifying client problems and setting goals in psychotherapy. This could be particularly helpful when a general or vague dissatisfaction with one's life is a client's only presenting problem.

Recommendations

Based on the conclusions and implications of this study it is recommended that future research be conducted to further examine the complex relationship that exists between dimensions of religiosity, life satisfaction, and coping resources. It may be beneficial to conduct a similar study within a more generalizable random sample of the general population where more subject diversity might be expected, and then examine the impact of religious variables on life satisfaction and coping resources. The present study was conducted utilizing only participants who were university students, therefore limiting its generalizability.

Future studies could also more closely examine the traits and behaviors of extrinsic and intrinsic religiosity and their independent relationship to life satisfaction and coping resources. Doing so would help specify problem areas that could be confronted in psychotherapy, and thus increase levels of coping resources and life satisfaction. Additional studies could equally study characteristics of spirituality and spiritual maturity

more precisely and independently in order to clarify the relationship of these constructs to life satisfaction and coping resources.

Finally, it is recommended that more studies be conducted regarding the validity of the SWLS. The SWLS is widely used in research and the associated validity and reliability studies are supportive, yet somewhat limited.

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APPENDIX A

Consent Form

"I _____, hereby authorize or direct Tad Skinner, Theresa Grubb Horton, or associates or assistants of their choosing to perform the following procedures":

Procedure: You will be asked to complete a packet of assessment instruments, including a brief demographic data sheet; the Spielberger State-Trait Anxiety Inventory; the Spielberger State-Trait Anger Inventory; Allport & Ross Religious Orientation Scale; Hall & Edward Spiritual Assessment Inventory; Diener, et al Satisfaction With Life Scale; and the Hammer & Marting Coping Resources Inventory.

Duration: The completion of the aforementioned assessment scales should take approximately 45 minutes.

Confidentiality: In an effort to gain open and honest responses, confidentiality will be maintained. Request for name will not be made on any of the self-report measures. This informed consent will be the only time identification will be requested, and these forms will later be withdrawn from the packets and filed under separate cover. The research material will only be available to the principle investigators.

Possible Discomforts or Risks: the completion of the above mentioned self-report scales will require a certain level of introspection. Self-examination may lead to temporary change in mood/affect which may be either positive or negative.

This study is being completed as part of an investigation examining the relationship between dimensions or religiosity, state-trait anger, state-trait anxiety, coping styles, and life satisfaction.

I understand that participation is voluntary, that there is no penalty for refusal to participate, and that I am free to withdraw my consent and participation in this project at any time without penalty after notifying the project directors.

I may contact Tad Skinner or Theresa Grubb Horton at (405) 744-6036 should I wish further information about the research. I may also contact Jennifer Moore, IRB Executive Secretary, 305 Whitehurst, Oklahoma State University, Stillwater, Oklahoma 74078; Telephone: (405) 744-5700.

I have read and fully understand the consent form. I sign it freely and voluntarily. A copy has been given to me.

Date: _____

Time: _____

Subject

Signature: _____

I certify that I have personally explained all elements of this form to the subject before requesting the subject to sign it.

Tad Skinner or Theresa Grubb Horton
or authorized representative

APPENDIX B

DEMOGRAPHIC QUESTIONNAIRE

AGE _____

MAJOR _____

GENDER Female Male

CLASSIFICATION (please check one)

Fr. So. Jr. Sr. Gr.

RELIGIOUS AFFILIATION (please check one)

<input type="checkbox"/> Agnostic	<input type="checkbox"/> Jehovah's Witness	<input type="checkbox"/> Non-Denominational Christian
<input type="checkbox"/> Atheist	<input type="checkbox"/> Jewish	<input type="checkbox"/> Pentecostal
<input type="checkbox"/> Baptist	<input type="checkbox"/> Lutheran	<input type="checkbox"/> Presbyterian
<input type="checkbox"/> Catholic	<input type="checkbox"/> Methodist	<input type="checkbox"/> Unitarian
<input type="checkbox"/> Episcopalian	<input type="checkbox"/> Mormon	<input type="checkbox"/> Other _____
<input type="checkbox"/> Hindu	<input type="checkbox"/> Muslim	(please specify)

ETHNICITY (please check all that apply)

<input type="checkbox"/> African-American	<input type="checkbox"/> International
<input type="checkbox"/> Asian-American	<input type="checkbox"/> Native American
<input type="checkbox"/> Caucasian	<input type="checkbox"/> Other _____
<input type="checkbox"/> Hispanic	(please specify)

MARITAL STATUS:

SINGLE _____
MARRIED _____
DIVORCED _____

DEMOGRAPHIC QUESTIONNAIRE

AGE _____

MAJOR _____

GENDER Female Male

CLASSIFICATION (please check one)

Fr. So. Jr. Sr. Gr.

RELIGIOUS AFFILIATION (please check one)

<input type="checkbox"/> Agnostic	<input type="checkbox"/> Jehovah's Witness	<input type="checkbox"/> Non-Denominational Christian
<input type="checkbox"/> Atheist	<input type="checkbox"/> Jewish	<input type="checkbox"/> Pentecostal
<input type="checkbox"/> Baptist	<input type="checkbox"/> Lutheran	<input type="checkbox"/> Presbyterian
<input type="checkbox"/> Catholic	<input type="checkbox"/> Methodist	<input type="checkbox"/> Unitarian
<input type="checkbox"/> Episcopalian	<input type="checkbox"/> Mormon	<input type="checkbox"/> Other _____
<input type="checkbox"/> Hindu	<input type="checkbox"/> Muslim	(please specify)

ETHNICITY (please check all that apply)

<input type="checkbox"/> African-American	<input type="checkbox"/> International
<input type="checkbox"/> Asian-American	<input type="checkbox"/> Native American
<input type="checkbox"/> Caucasian	<input type="checkbox"/> Other _____
<input type="checkbox"/> Hispanic	(please specify)

MARITAL STATUS:

SINGLE _____
MARRIED _____
DIVORCED _____

DEMOGRAPHIC QUESTIONNAIRE

AGE _____

MAJOR _____

GENDER Female Male

CLASSIFICATION (please check one)

Fr. So. Jr. Sr. Gr.

RELIGIOUS AFFILIATION (please check one)

<input type="checkbox"/> Agnostic	<input type="checkbox"/> Jehovah's Witness	<input type="checkbox"/> Non-Denominational Christian
<input type="checkbox"/> Atheist	<input type="checkbox"/> Jewish	<input type="checkbox"/> Pentecostal
<input type="checkbox"/> Baptist	<input type="checkbox"/> Lutheran	<input type="checkbox"/> Presbyterian
<input type="checkbox"/> Catholic	<input type="checkbox"/> Methodist	<input type="checkbox"/> Unitarian
<input type="checkbox"/> Episcopalian	<input type="checkbox"/> Mormon	<input type="checkbox"/> Other _____
<input type="checkbox"/> Hindu	<input type="checkbox"/> Muslim	(please specify)

ETHNICITY (please check all that apply)

<input type="checkbox"/> African-American	<input type="checkbox"/> International
<input type="checkbox"/> Asian-American	<input type="checkbox"/> Native American
<input type="checkbox"/> Caucasian	<input type="checkbox"/> Other _____
<input type="checkbox"/> Hispanic	(please specify)

MARITAL STATUS:

SINGLE _____
MARRIED _____
DIVORCED _____

DEMOGRAPHIC QUESTIONNAIRE

AGE _____

MAJOR _____

GENDER Female Male

CLASSIFICATION (please check one)

Fr. So. Jr. Sr. Gr.

RELIGIOUS AFFILIATION (please check one)

<input type="checkbox"/> Agnostic	<input type="checkbox"/> Jehovah's Witness	<input type="checkbox"/> Non-Denominational Christian
<input type="checkbox"/> Atheist	<input type="checkbox"/> Jewish	<input type="checkbox"/> Pentecostal
<input type="checkbox"/> Baptist	<input type="checkbox"/> Lutheran	<input type="checkbox"/> Presbyterian
<input type="checkbox"/> Catholic	<input type="checkbox"/> Methodist	<input type="checkbox"/> Unitarian
<input type="checkbox"/> Episcopalian	<input type="checkbox"/> Mormon	<input type="checkbox"/> Other _____
<input type="checkbox"/> Hindu	<input type="checkbox"/> Muslim	(please specify)

ETHNICITY (please check all that apply)

<input type="checkbox"/> African-American	<input type="checkbox"/> International
<input type="checkbox"/> Asian-American	<input type="checkbox"/> Native American
<input type="checkbox"/> Caucasian	<input type="checkbox"/> Other _____
<input type="checkbox"/> Hispanic	(please specify)

MARITAL STATUS:

SINGLE _____

MARRIED _____

DIVORCED _____