

AN ABSTRACT OF THE THESIS OF

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Title: The Effect of Religious Coping on Depression and Anxiety in  
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Research has revealed evidence that stressful life events are related to problems among adolescents, including poor health, abdominal pain, cancer, psychological distress, depression, anxiety, suicide, and runaway behavior. Research also has revealed several moderators of stress in adolescence, including high self-esteem, an internal locus of control orientation, and social support from family and friends.

A moderator of stress that has received modest attention in the adult literature and even less attention in the adolescent literature is religious coping. Religious coping has been generally defined as the means by which individuals seek help from a higher power during times of life stress. Spiritual beliefs such as trusting God, doing good deeds such as attending church, and pleading by asking for a miracle are just a few of the many ways one might use religious coping during times of stress. This study focused on a specific form of religious coping called spiritually based coping. Spiritually based coping is defined as coping

that reflects a personal relationship with God, who serves as a guide and helper in coping with life stress.

The purpose of this study was to explore three ways in which spiritually based coping may affect adolescent depression and anxiety. First, this study investigated whether spiritually based coping had a direct effect on depression and anxiety. Second, this study investigated whether spiritually based coping moderated the impact of stress on depression and anxiety. Finally, this study examined whether the effect of spiritually based coping on anxiety and depression was mediated through levels of self-esteem and social support.

Scales measuring life event stress, spiritually based coping, social support, self-esteem, depression and anxiety were given to 95 adolescents, 61 females and 34 males, ages 12-17. Subjects were recruited through the youth groups of several Christian denominations throughout a university town in Oregon.

Results revealed that spiritually based coping did not have a direct effect, nor did it operate as a moderator of stress in predicting depression and anxiety. However, path analysis revealed that the effect of spiritually based coping on depression and anxiety was mediated through levels of self-esteem and social support.

This is an exploratory study of the relationship of spiritually based coping to depression and anxiety in adolescence. It provides evidence that the impact of spiritually based coping on depression and anxiety is mediated through self-esteem and social support.

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on  
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# The Effect of Religious Coping on Depression and Anxiety in Adolescence

## CHAPTER 1 INTRODUCTION

Numerous studies have shown that stress is often related to negative physical and psychological changes among adults (Folkman, Lazarus, Gruen, & DeLongis, 1986; Kobasa, 1982; Parkes, 1984). In comparison to the large body of literature on the negative effects of stress among adults, however, research on the effects of stress among adolescents is relatively sparse (Cohen, Burt, & Bjorck, 1987). There is some evidence that stressful life events are related to problems among adolescents, including poor health, abdominal pain, cancer, psychological distress, depression, anxiety, suicide, and runaway behavior (Williams & Uchiyama, 1989). Research also has revealed several moderators of stress in early adolescence, including high self-esteem, an internal locus of control orientation, and social support from family and friends (Compas, 1987; Hetherington, 1984; Rutter, 1983).

A moderator that has received modest attention in the adult literature and even less attention in the adolescent literature is religious coping. Religious coping has been considered as the ways individuals seek help from a higher power during times of life stress. Spiritual

beliefs such as trusting God<sup>1</sup>, doing good deeds such as attending church, and pleading by asking for a miracle are just a few of the many ways one might use religious coping during times of stress (Pargament et al., 1990). Of particular interest is the type of religious coping that Pargament et al. (1990) have identified as "spiritually based coping". Spiritually based coping strategies are beliefs the individual uses to find meaning or purpose in difficult situations through a personal relationship with God. Such strategies are reflected in such statements as "I found the lesson from God in the event" and "I realized God was trying to strengthen me" (Pargament et al., 1990). Recent research on the role of religious coping on adults has revealed a consistent relationship between religious coping and reduced levels of psychological distress (Pargament et al., 1990; Pargament, Olsen, Reilly, Falgout, Ensing, & Van Haitsma, 1992; Ross, 1990).

Little research to date has investigated the possible ways in which spiritually based coping buffers the negative impact of stress among adolescents. There are a number of possible ways that spiritually based coping may affect emotional well-being. First, there could be a direct effect. Greater levels of spiritually based coping may lead directly to better emotional adjustment (Ross, 1990). A second possibility is that

<sup>1</sup> It is important to state that God in this study refers to the Christian God. While the definition of God is limited for the consideration of this research, the author respectfully acknowledges that one's understanding of God is a very subjective experience. The conceptual implications of this research should not be limited by such definitions.

spiritual coping may interact with stress to produce a moderating effect (Maton, 1989). Finally, spiritually based coping could lead to greater levels of other coping resources, that, in turn, reduce psychological distress. As Riley & Eckenrode (1986) point out, the presence of a high level of one resource is often linked to the presence of a higher level of another resource. Specifically, higher levels of religiosity have been linked to higher levels of self-esteem (Maton, 1989) and social support (Abbott, Berry, & Meredith, 1990). The distinct relationship between religiosity, self-esteem, and psychological well being, however, remains to be explored.

The purpose of this dissertation is to extend this line of investigation through a preliminary exploration into the relationship between religious coping and depression and anxiety in adolescents. Three research questions are explored: 1) Does spiritually based coping, have a direct effect on levels of depression and anxiety?, 2) Does spiritually based coping operate as a moderator of levels of anxiety and depression in the response of adolescents to life event stress? and 3) Is the effect of spiritually based coping on anxiety and depression mediated through levels of self-esteem and social support?

## CHAPTER 2

### REVIEW OF THE LITERATURE

#### 2.1 STRESS IN ADOLESCENTS

##### 2.1.1 The Adolescent Stress Process

When the concept of adolescence as a distinct period of the life-span was first introduced it was suggested that this time of life was inherently stressful (Blos, 1967; Freud, 1925; Hall, 1904; Hamburg, 1974). Recent studies have failed to support the inherently stressful nature of adolescence, (e. g. Peterson & Spiga, 1982). Despite such evidence, a great deal of research on adolescence is guided by the traditional, if errant, assumption of adolescence as inherently stormy and stressful. According to Greene & Larson (1991) three important factors have misguided much of the research on adolescent stress. First, research on adolescents has relied too heavily on the adult literature, allowing for the false assumption that adolescents respond to stress in the same manner and intensity as adults. Secondly, adolescence has often been approached as an undifferentiated time of the life-span, when in fact tremendous developmental changes occur during this time. Therefore, if there is to be any real understanding, it is necessary to sub-divide adolescence into early, middle and late periods, and assess

the role that each time period plays. Finally, the developmental transitions that occur in abundance during adolescence need to be consistently considered. Developmental transitions occur in three major areas: physical, cognitive, and social (Steinberg, 1989). As will be discussed at a later point, the timing of these changes play an important role in how stressful adolescence may be (Peterson & Spiga, 1982).

### 2.1.2 Life Events

The theoretical model of stress predicts that some form of adjustment is necessary following the presence of a stressor. Furthermore, some stressors will require greater adjustment than others. Based on this model much of the research on stress in humans has been approached from a life events perspective, which predicts that life events are one of the main ways stress, and subsequent coping demands, are present in our lives.

Work in the area of life events began with Holmes & Rahe (1967) and the Social Readjustment Scale. This scale consisted of a list of life events to which a point value was assigned to each event. For example, "death of a spouse" received the most points (100), and thus was viewed as the most stressful event one could encounter. Other events included retirement (45 points), death of a close friend (37 points), and Christmas (12 points). Subjects were asked to indicate whether or not a particular event had occurred to them in the last 6 months to one year,

and a subsequent score was calculated that reflected the amount of readjustment each individual had to make.

With the foundation of the life events concept laid by Holmes and Rahe, much of the research in this area has been in refining methodological and conceptual properties of the life events concept (Smith & Allred, 1989). Several methodological concerns exist regarding the accuracy of life event research (Smith & Allred, 1989). First, as mentioned earlier, there is concern about how each life event is weighted and valanced. Each life event is experienced differently by different individuals and thus there must be careful consideration of the manner in which a particular stress level is associated with a particular event. General weightings will not be accurate and a subjective rating of the amount of stress associated with a certain event must be considered.

A second methodological concern is that most life event research has used a retrospective design, asking subjects to report the occurrence of a particular event during the past 6 months to one year. Retrospection of this nature can easily lead to inaccurate counts of life events as well as misleading reports of the amount of stress associated with each event. It has been argued that a prospective design, where life events are measured at one time and the outcome variables are measured at a later date, would be much more accurate in evaluating life-event stress, but this approach has rarely been used. Smith and Allred (1989) reported that in the handful of cases where prospective designs were used in assessing the impact of life events on depression

the results were the same as retrospective designs. That is, an increase in life-events was positively related to an increase in levels of depression.

A final methodological concern is that without a pre-measure of emotional functioning, it is unclear whether life events are the consequence or cause of emotional dysfunction. For example, did an individual lose a job because of depression, or is the person depressed because of losing a job? As Smith & Allred (1989) point out, all recent methodological advances in the area of life event research have moved the field well beyond simple correlational analysis.

One of the main advances in life events theory came with the increasing evidence that similar life events do not necessarily create the same level of stress for each individual. Lazarus & Folkman (1984) proposed that stressful life events can only accurately be considered if one's cognitive appraisal of the stressful encounter is taken into account. One's subjective interpretation of the event determines not only how stressful the event actually is, but also helps to determine what type of coping strategy will be most effectively employed. According to Lazarus and Folkman (1984), initial cognitive appraisal of stressful events, which are referred to as primary appraisals, involve assessing the situation as one being stressful (threat, harm, loss), benign/positive, or irrelevant. Following primary appraisal a coping strategy is then chosen from the individual's repertoire of such strategies. Therefore, a situation that is interpreted as stressful, such as



a major life event, will evoke the use of a different coping strategy than a situation that is viewed as irrelevant to the individual's well-being.

Following the idea that one's cognitive appraisal of a stressful event is important, researchers in the area of adolescent stress and coping began to develop life event scales that specifically asked adolescents to rate the level of importance attached to each encountered event (e. g. Compas, Davis, Forsythe, & Wagner, 1987; Kohn & Milrose, 1993). While this method has been criticized by some as leading to potential confounding of subject's perceptions and level of psychological disorder (Sandler & Guenther, 1985), Compas et al. insist that one's perception of a life event is critical to a complete understanding of the impact of life-events on subsequent functioning.

In addition to an individual's cognitive appraisal of a stressful event it has been further recognized that life events cluster around those involving major events and those involving daily hassles (Compas, Howell, Phares, Williams, & Ledoux, 1989; DeLongis, Coyne, Dakof, Folkman, & Lazarus, 1982; Rowlinson & Felner, 1988). Research evidence in both the adult and adolescent literature indicates that daily hassles are more closely associated with adverse reactions than are major life events (Compas, Davis, & Forsythe, 1985; DeLongis, et al., 1982). While the conceptual differentiation of types of life events is critical, Compas, et al. (1989) argue that both types must be integrated in order to arrive at a complete understanding of the impact of life stress. Such an integrative model proposes that daily hassles may play a mediating role between major life events and subsequent outcomes

(Wagner, Compas, & Howell, 1988). In other words, it may be the daily problems that follow a major life event that actually influence the degree of stress that is encountered. While some support has been found for the mediational role of daily hassles, it needs to be examined in greater depth (Compas, et al., 1989).

Another conceptual difference that has emerged since the earliest research on stress and coping is the concept of mediating and moderating variables (Rutter, 1983; 1987). These concepts moved the understanding of life-event stress beyond the linear model of life stress leading to automatic negative outcomes. Mediating and moderating variables both act to temper the impact of an independent variable on a dependent variable, but their effects are distinctly different. A mediating variable impacts the relationship between the independent and dependent variable by going between the two. For example, research has revealed that major life events are often associated with poor adjustment (Compas et. al., 1989). What more accurately describes this relationship, however, is that the major life events are associated with greater levels of daily problems, that, in turn, are associated with poor adjustment (Compas et al., 1989). In this case the mediator is the increased daily problems that follow the major life event.

A moderating variable, on the other hand, influences the relationship between the independent and dependent variable by interacting with the independent variable. One of the best examples of a moderator can be found by considering how life stress interacts with many different factors (moderators) to predict various outcomes.

According to Rutter (1983) each person brings to a stressful situation a complex system of vulnerability and protective factors that will predict subsequent levels of psychological functioning in the presence of a "risk" factor such as life event stress. Vulnerability factors are those that increase the likelihood of poorer psychological functioning. For example, an important factor in considering how a child will adjust to parental divorce is the presence of social support, often in the form of one single good friend (Hetherington, 1989). The presence of such a friend in this case acts as a protective factor, promoting better post-divorce adjustment and decreasing post-divorce maladjustment. Conversely, the absence of such a friend indicates the presence of a vulnerability factor. Less successful post-divorce adjustment would be predicted in this case.

Protective and vulnerability factors behave as moderators in the stress-outcome model (Rutter, 1987). This means that their presence in the absence of stress may not make a major impact on psychological functioning. When stress is introduced, however, these factors act as catalysts increasing or decreasing the potential negative outcomes of a stressful life event. More and more attention is being paid to understanding why some individuals are negatively affected by a stressful situation, while others remain relatively unaffected by the same situation. The answer appears to lie, in part, in the presence or absence of moderating variables (Burt, Cohen, & Bjorck, 1988; Compas, 1987; Rowlinson, & Felner, 1988; Swearingen & Cohen, 1985).

## 2.2 MODERATORS OF ADOLESCENT STRESS

### 2.2.1 General Overview of Moderating Effects

It has been suggested that adolescents do not necessarily respond to stress in the same manner as adults (Greene, 1988). While adolescents may agree with adults on the perception that a certain event is stressful, the impact of the stressor may be different for adolescents. Thus, the death of a family pet may be viewed as stressful by both the parents and the child, but the level of stress may be very different for the child than the level of stress for the adult. Research on the impact of stress among adolescents has been consistent with the adult literature, however, in showing that there is great variability in the impact of stress on adolescents (e.g. Hetherington, 1984).

Coping resources that moderate the negative effects of stress fall into two categories, personal and environmental resources (Compas, 1987; Hetherington, 1984; Rutter, 1983). Personal resources include high self-esteem, internal locus of control orientation, as well as the cognitive, emotional, spiritual and physical characteristics one brings to a situation (Averill, 1973; Compas, 1987; Hammer, 1988; Kobasa, 1982; Parkes, 1984; Rutter, 1987). Environmental resources are external to the individual. One important environmental resource is social support. It has been shown that the availability of social resources may help to determine whether positive effects will occur as a result of a

specific stressful event (Compas, 1987; Ganellan & Blaney, 1984; Hetherington, 1984; Rutter, 1983).

### 2.2.2. Religious Coping

It is not a novel concept that religion often plays an important role in the mediation or moderation of stress. Pargament (1987) outlined the guidance, support and hope that religious beliefs provided during stressful times. Similarly Spilka, Shaver, & Kirkpatrick (1985) showed that religion helps individuals understand, predict, and control events. It also enhances self-esteem. One of the main impacts of religion on stressful encounters may lie in the fact that religious beliefs lend meaning and interpretation to the stressful event (Pargament et al, 1988). Equally importantly religion may provide the individual with emotional support during stressful life encounters (Pargament & Hahn, 1986).

Pargament, Kennell, Hathaway, Grevengoed, Newman, & Jones (1988) identified three specific ways one may draw on spiritual support from God during times of stress. The first they referred to as collaborative, where an individual is actively involved in a personal problem solving exchange with God reflecting an active and internalized commitment to religion. Individuals who wait for God to solve their problems were identified as deferring. This type of coping was especially true in situations that were difficult to resolve. A third form of coping

was identified as self-directing. This approach emphasizes that God gives individuals the freedom to direct their own lives. Self-directing individuals are actively involved in their problem solving and generally less tied to traditional religious involvement. Pargament et al (1988) showed that the role religious coping plays in problem-solving is very diverse.

In a more recent work Pargament et al. (1990) began to systematically break down the larger block of religious coping into differentiated types finding that individuals use religious coping in a number of discrete ways. After generating a list of 31 items that reflected ways of religious coping, Pargament (1990) presented the list to 586 members of various denominations who were asked to rate on a 4-point likert scale the degree to which each item was involved in coping with events. Subsequent factor analysis revealed five factors that accounted for 100% of the common variance in the sample. The first factor was spiritually based coping. This included trusting God to handle the situation, as well as a more personal relationship with God as a guide for the person through the problem. The second factor involved people making a commitment to do good deeds such as confessing sins, or leading a more loving life. A third factor reflected discontent with God, in that some individuals react to problems by becoming angry with God or questioning their faith. A fourth factor involved receiving direct support through help from clergy members and other members of the church. The fifth factor included pleading for miracles, bargaining with God and asking why something happened.

From this early research on the differentiated ways in which religion may help in coping with stressful life events four major ideas have emerged (Pargament et al., 1990). First, a belief in a just and loving God appears to play the most significant role in positive outcomes to negative life events. Second, experiencing God as a partner who is supportive during stressful times also appears to be important, reflecting an intimate relationship between the individual and God. Third, involvement in religious rituals such as prayer, and church services was significantly related to positive outcomes. Finally, individuals who chose to search for spiritual and personal support through religion during stressful events had more positive outcomes than those who did not seek such support. While the findings of the Pargament et al. study indicate various ways that religion plays a role in helping people cope with stress, there is also evidence that a lack of religious beliefs may be related to low levels of psychological distress.

Ross (1990) found that individuals with no religion also had low levels of psychological distress, and thus proposed that there may actually be a curvilinear effect to the role of religion in coping with stress. The idea that the picture of religion as a coping mechanism may not be all rosy is supported by Smith & Gorsuch (1989) who noted that high degrees of religious coping, through concentrated ego involvement with one's religion, may actually be a hindrance to coping if individuals experience a reduced flexibility in their response to stressful events. For example, a highly religiously involved person may choose to passively "let God handle the situation", referring to what Pargament et al. (1988)

called deferring coping, and thus overlook other strategies that might be employed to reduce the stress surrounding the event. It seems then, even with the limited research to date, that the role of religious coping is clearly not a direct linear association but a relationship riddled with complexity similar to that found in other better known moderators of life stress.

Still, the positive effects of religious coping seem somewhat accepted and it is generally believed that religious beliefs do help to lower psychological distress, especially depression and anxiety (Ross, 1990). Religion also plays a role in comforting, relieving pain and suffering, and suicidal tendencies (Stark, Doyle, & Rushing, 1983). Consistently, Ross (1990) found that the stronger a person's religious belief, the lower their level of psychological distress and, perhaps most importantly, also found that it was the strength of the person's religious beliefs, rather than the content, that explained the effect of religion on psychological distress.

The role religion plays in the stress and coping process has received relatively little detailed research attention (Pargament et al., 1990). Religion, and specifically the coping mechanisms that emerge from religious beliefs, most likely play a greater and more complex role in the stress and coping process than the amount and depth of previous research would lead us to believe. The time appears ripe to begin to unfold the complex nature of this form of coping that many individuals employ during times of stress.



### 2.2.2.1 Adolescents And Religion

Most of the research on religiosity during adolescence has focused on adolescent religious behavior, for example prayer and church attendance, rather than the psycho-social processes involved in the development of religious faith and commitment (Erickson, 1992). During adolescence there appears to be a movement away from the concrete external religious rules present and accepted in childhood, to an emergence of a more internally based religion by adulthood (Fowler, 1981). This movement is consistent with adolescent cognitive development that shows a movement from the concrete thinking of childhood to the more abstract formal thinking of adulthood (Piaget, 1972). During adolescence there is also a movement from external manifestations of religion (such as attending church) to more internalized religious behavior (such as developing personal beliefs) (Elkind, 1978). During adolescence it is common for religious beliefs to become more personalized and complex in nature, again reflecting a movement away from the concrete approaches to religion found in childhood. It makes sense, then, that the role of religious coping could change dramatically across the time span of adolescence. Spiritually based coping in particular may be found to be most prevalent in older adolescents as this type of religious coping reflects a more internalized sense of religion.

Most research indicates the importance of three factors on religious development in adolescents. Family, peers, and religious education all appear to play significant roles (Erickson, 1992). Family appears to have the most influence in the realm of religious, moral, and

social values (Erickson, 1992; Ozorak, 1989). Peers appear to have a strong influence in social religious behavior (Erickson, 1992) and practice (Ozorak, 1989). Peer influence appears to increase during later adolescence (Madsen & Vernon, 1983). Indeed, the influence of social groups on religious behavior appears to be quite strong. According to Cornwall (1987) individuals acquire the way they look at the world through interactions with others, and the social base of religion is vital to its ongoing effectiveness. Social groups provide the foundation of accepted and expected religious behavior. Given the ever-increasing importance of peers during adolescence, it makes sense that adolescent religious groups would have a strong influence on the development and maintenance of religious behavior.

### 2.2.3 Self-Esteem

The role that self-esteem plays in moderating life event stress has been well established in the literature (Rutter, 1983). Studies have consistently shown that high self-esteem serves as a protective factor during times of stress (Rutter, 1983). Adolescence is a particularly interesting time to investigate the role of self-esteem in coping with stress because of the distinct changes that occur physically, socially, and cognitively over the course of adolescent development. Early investigations into self-esteem in adolescence were driven by the storm and stress model that predicted self-esteem in adolescence would reflect the ongoing tumult (Steinberg, 1989). Research has uncovered very

little support for big changes in self-esteem during adolescence. Instead research supports that the same level of self-esteem with which a child enters adolescence is basically the same level with which the adolescent will enter adulthood. In fact it is likely that self-esteem will increase over the course of adolescence (Rosenberg, 1986; Savin-Williams & Demo, 1984).

Rosenberg (1986) stressed the necessity of distinguishing between baseline and barometric self-esteem, stating that baseline self-esteem is a stable aspect of one's self-image, while barometric self-esteem reflects a specific situation. Rosenberg argues that every individual, regardless of levels of baseline self-esteem, experiences situational moments of lower than usual self-esteem. Measures of self-esteem that report a consistent level of self-esteem across the adolescent years are most likely reporting baseline self-esteem, which is unlikely to change very much (Steinberg, 1989).

Developmentally, however, there is some evidence for shifts in self-esteem for a brief time during early adolescence. Compared with middle and older adolescents early adolescents show a small, but consistent, tendency for lowered self-esteem (Simmons, Rosenberg, & Rosenberg, 1973). This shift may occur because of the many initial changes occurring in the life of an early adolescent including puberty, social changes such as a change in school and friends, and cognitive maturity that leads to introspection and a preoccupation with one's self. If all these changes occur at the same time self-esteem could be dramatically, if only temporarily, affected (Simmons, Blythe, Van Cleave

& Bush, 1979). Lower levels of self-esteem that occur in early adolescence appear to be related to depression and anxiety, as early adolescents with the lowest levels of self-esteem also report the greatest levels of depression and anxiety. Compared to middle and late adolescents, early adolescents are more likely to be depressed and anxious in general (Simmons, Rosenberg, & Rosenberg, 1973).

Studies have revealed that adolescent girls are more likely to have lower self-esteem than adolescent boys (Harper & Marshall, 1991; Simmons & Rosenberg, 1975). Gender role expectations may help to explain this difference. Girls appear to be more concerned about peer relationships, especially those with the opposite sex, and being popular (Simmons & Rosenberg, 1975). Because of the adolescent girl's concerns with popularity and peer relationships, self-esteem may vary based on the positive or negative responses of the peer group. Additionally, while boys appear to like the physical changes of puberty, there is evidence that girls are more distressed by the physical changes in their body, especially if these changes occur "off-time", either earlier or later than one's peer group (Nolen-Hoeksema, 1990).

#### 2.2.3.1 Self-Esteem and Religion

It has been hypothesized that a relationship exists between religion and self-esteem (Bahr & Martin, 1983; Forst & Healy, 1990), but this relationship has not been considered empirically in any depth. Forst & Healy (1990) found that participation in pleasant church activities was

important in elevating self-esteem. The belief in a loving, personal God who will help in times of crisis (Pargament et al., 1992) may also serve to elevate self-esteem, in that the individual feels loved and cared for, and thus confident in facing life stress. Other benefits from religiosity, such as personal well-being, family affection, and noncoercive family discipline have been identified (Abbott, Berry, & Meredith, 1990), that may, in turn, lead to higher self-esteem. Good familial relationships have been associated with higher self-esteem (Forst, & Healy, 1990).

On the other hand, religion could have a potentially negative affect on self-esteem. As Abbott, Berry, & Meredith (1990) pointed out, religion has been damaging to many. For example, corporal punishment, sexual abuse, racism and sexism have all been documented as harmful results of some religious organizations. Clearly, such activities in the name of God would not lead to greater levels of self-esteem. In addition, Pargament et al. (1988) define one type of religious coping as deferring. This type of coping could also be linked to low self-esteem due to the fact that the individual may feel helpless when faced with life stress.

While research in this area is limited, it seems plausible that religious activities that enhance well-being, helping the individual to feel loved and supported, will also enhance self-esteem. Such individuals will feel supported and not alone during times of stress.

#### 2.2.4 Social Support

Research has consistently revealed the important role social

support plays in the health and well-being of individuals ( e. g. Brown & Shumaker, 1984; Turner, 1981). Individuals with high levels of social support show increased levels of psychological adjustment. It is becoming increasingly clear, however, that the concept of social support is highly complex and thus it has been difficult to establish a clear and consistent link between social support and any given outcome (Stokes & McKirnan, 1989). Conceptual clarity is lacking in the area of social support. One of the greatest debates centers around whether social support is a personal or environmental coping resource (Stokes & McKirnan, 1989).

Social support as an environmental resource has been identified by many as a system within the social environment that comes to one's aid during times of stress (Compas, 1987; Ganellan & Blaney, 1984; Hetherington, 1984; Rutter, 1983). Social support as an environmental resource is distinguished by the roles it plays in the stress-mediation process. The assumption is that the lack of a social support system that can be activated during times of need is potentially stressful (Stokes & McKirnan, 1989). As an environmental coping resource a number of types of support can be identified (House, 1981). The first is emotional support, which operates by providing concern, caring, and connection between individuals during times of stress. Secondly there is instrumental support which is specific or material aid that a person receives from others in order to help reduce stress levels. A third form of external social support has been defined as informational, where social support systems provide guidance and information that is helpful

for dealing with the stressful situation. Finally, there is appraisal support that provides validation about how one is interpreting and reacting to a stressful event.

On the other hand, social support has also been proposed as a personal resource that is present within, rather than outside, the individual. This perspective emphasizes how the person perceives the availability and quality of social support (e. g. Heller, Swindle, & Dusenbury, 1986; Hobfoll & Stokes, 1988). This idea relates again to the importance of considering one's perception of stress (Compas, 1987; Lazarus & Folkman, 1984; Rutter, 1983) and the coping resources available to the individual to help during stressful times.

Whether social support is considered an environmental or personal resource determines how it will be measured. Measuring social support as an environmental coping resource requires an objective approach. The underlying assumption of this approach is that the presence of a social support system equals the presence of social support (Stokes & McKirnan, 1989). Objective measures typically include size of social networks, number of close friends and/or confidants, frequency of contact, frequencies of specific interactions, and presence of a marital partner (Stokes & McKirnan, 1989).

Measurement of the subjective aspects of social support are designed to assess the availability of, and satisfaction with, one's social support networks. Because of the widespread use of subjective measures of social support, researchers are increasingly defining social support to mean the subjective appraisal of one's social environment

(Stokes & McKirnan, 1989). In addition, objective and subjective measures of social support appear to be largely unrelated to each other (Hobfoll & Stokes, 1988) and subjective measures show a better relationship to adjustment and psychological distress (Hobfoll & Stokes, 1988; Sandler & Barrers, 1982, Stokes & McKirnan, 1989).

Stokes & McKirnan (1989) point out, however, the serious methodological problem of confounding when both a predictor and outcome variable are measured subjectively. They argue that a third variable, such as negative affect that biases both one's interpretation of social support and level of depression, could be responsible for increased levels of depression. For example, negative affect could lead an individual to perceive little available social support as well as increased levels of depression. It would be a false conclusion, in this case, that low levels of social support leads to greater levels of depression.

Several researchers have expressed concern over the conceptual movement of social support from an environmental resource to a personal resource (Coyne & DeLongis, 1986; Gottleib, 1985; Stokes & McKirnan, 1989). Still, other researchers (e.g. Compas, 1987; Lazarus & Folkman, 1984) insist that cognitive interpretation is essential in understanding individual difference in the stress and coping process. It appears that the functional, mobilized, support of social support networks and the perception an individual has of available support both play an important, albeit different, role in moderating the effects of life stress.



#### 2.2.4.1 Social Support and Religion

Research has indicated that many individuals turn to religion during times of stress (Abbott, Berry, & Meredith, 1990; McIntosh, Silver, & Wortman, 1993; Pargament et al., 1990; Unger & Powell, 1980). Social support from religion has been shown to be instrumental in helping families during crises (McIntosh, Silver, & Wortman, 1993; Unger & Powell, 1980). Involvement in religious activities may enlarge one's social network, and lead one to believe he or she is loved and cared for (Abbott, Berry, & Meredith, 1990; Ellison, & George, 1994). Religious social support networks are helpful in providing both instrumental and emotional support during times of stress (Unger & Powell, 1980).

Religion provides further social support via church-based social groups (Abbott, Berry, & Meredith). Such groups provide support for one's religious beliefs. As Cornwall (1987) pointed out, social validation of one's religious views is important. Ozorak (1989) stated that individuals may even change their religious affiliations to seek out those with similar views. Thus, churches not only provide support during times of stress, but also serve to form a "plausibility structure" (Cornwall, 1987) by which individuals may interpret their world. It makes sense, then that those who turn to God for help during times of stress may also show enhanced levels of social support. This support could be instrumental or emotional support, or support for the way in which the individual turns to God for help.

## 2.3 DEPRESSION AND ANXIETY IN ADOLESCENCE

### 2.3.1 Depression In Adolescence

Depression has been cited as the most common psychological disturbance in adolescence (Weiner, 1980). The true prevalence of adolescent depression is somewhat difficult to ascertain due to differences in the definition and measurement of depression (Steinberg, 1989). It is important to distinguish between clinical depression and depressive symptoms. According to Chartier and Ranieri (1984) about 1 in 4 adolescents experience depressive feelings, while only 3 percent would be diagnosed as severely depressed.

Chartier and Ranieri (1984) outlined four sets of adolescent depressive symptoms. First, depression can have emotional manifestations such as dejection and low self-esteem. Second there are cognitive manifestations as reflected in helplessness and lack of optimism. Third, motivational depression can be identified which includes apathy or boredom. Finally, vegetative depression including a loss of appetite, energy, or difficulty sleeping can be noted. Although many theories have been proposed about the etiology of adolescent depression, it is commonly thought to be a product of interacting environmental and personal factors (Rutter, 1983; Steinberg, 1989).

### 2.3.2 Anxiety In Adolescence

While the storm and stress model of adolescent development discussed earlier has been diminished somewhat in recent years, there still exists an argument for a certain amount of anxiety, developmental in nature, to be present during adolescence. Developmental changes in the biological, psychological, and social realm will undoubtedly invoke anxiety, but such anxiety is normative and is usually not cause for concern (Tonge, 1988). Rutter, Graham, Chadwick, & Yule (1976) reported in their Isle of Wright study that 40% of the adolescents studied reported currently being fearful or anxious. Furthermore, Rutter et al. (1976) reported this general anxious state to be short-lived and often unnoticed by adults.

A certain amount of anxiety about body image, performance, social ability, and new cognitive awareness appears to be a normal aspect of adolescent development (Tonge, 1988). Such anxieties may even increase over the course of adolescence, and then begin to decline after age 17 or 18 (Bamber, 1979). There appears to be similar levels of anxiety between males and females, with some evidence that anxiety peaks a few years earlier in girls than boys, reflective of the differing rates of maturity (Tonge, 1988).

Depression and anxiety are especially interesting variables to study during adolescence because of the dramatic change in levels of anxiety and affective disorders between males and females that occurs at this time. Prior to puberty, girls and boys usually show similar levels of depression (Nolen-Hoeksema, 1990). By middle adolescence,

however, girls are 2 to 3 times more likely to be depressed than boys (Nolen-Hoeksema, 1990). For a variety of proposed reasons boys appear to be much more vulnerable to a variety of psychopathological symptoms prior to adolescence than girls (Hetherington, 1984; Nolen-Hoeksema, 1990; Rutter, 1987), yet at adolescence it is only in levels of depression and perhaps anxiety that a reversal between boys and girls is found (Nolen-Hoeksema, 1990). Why this reversal takes place is not clearly understood, but it is suspected that the biological and social changes that occur during adolescence play an important role.

## 2.4 LIFE EVENTS, DEPRESSION AND ANXIETY

Research on the concepts of depression and anxiety has been unable to provide a clear distinction between the two. This seems to be particularly true in the case of self-report measures where correlation alphas between the two concepts range from .50 to .80 regardless of the population studied (Watson & Kendall, 1989). There appears to be a significant overlap between depression and anxiety and little has been done to improve this situation. Still, there exists an intuitive difference that may be assessed best through the use of life event inventories.

Freud (1959) was one of the first to point out that the difference between depression and anxiety reactions lies in whether one is worried about an event happening, or whether an event has already taken place. Specifically, in the area of loss Freud predicted that anxiety is a result of threat of loss, while depression follows an actual loss. Similarly, Smith &

Allred (1989) concluded that anxiety and depression can be distinguished from each other by the kinds of life events that precede such reactions. In other words, certain life events may be more likely to lead to depression, while others may lead to anxiety, and certainly some life events may lead to an expression of both reactions. The data is rather consistent about the relationship between life events and depression, but much less is known about the effect of life events on anxiety. While it makes sense that a distinction exists, there is little empirical evidence to support such a distinction (Smith & Allred, 1989).

#### 2.4.1 Life Events and Depression

The relationship between life events and depression has been well established in research in psychopathology (Smith & Allred, 1989). This relationship has been found in both clinical (e.g. Billings, Cronkite & Moos, 1983; Costello, 1982), and non-clinical populations (e. g. Hewitt & Dyck, 1986; Smith, O'Keefe, & Jenkins, 1988). Similar to the area of social support, however, there are conceptual and methodological concerns about the revealed connection between life stress and depression. Again, concurrent measurement of life events and levels of depression leads to the question of confounding, and prospective studies are thought at this point to be the best way to assess depression as a response to life event stress (Smith & Allred, 1989). Well designed prospective studies are not very common, but seem to lend clear support for the life event-depression relationship that is consistent with

results from the more prevalent retrospective studies (Smith & Allred, 1989).

Another important conceptual consideration is the difference between depressed mood and depressed disorder (Smith & Allred, 1989). Depressed moods are something every individual is susceptible to at one point or another, but a depressive disorder is something that is quantitatively, if not qualitatively, different. For the purpose of this research, depression will be defined as a variation in affective mood seemingly natural to every human being, and the consideration of clinical depressive disorders will not be addressed.

As mentioned earlier, not all individuals respond to similar life events in the same manner. In terms of a depressive response to life event stress two factors should be considered. First there is the idea that some life events are more likely to evoke depressive reactions than others. Life events that are inherently more negative appear more likely to evoke depression and chief among these are events that involve loss (Paykel, 1982). Another factor is the degree of responsibility an individual feels for the negative life event. Those who feel more personal responsibility are more likely to become depressed (Hammen & Mayol, 1982). Cognitive variables may also play a role in depressive reactions to stress. Smith, O'Keefe, and Jenkins (1988) stated that persons who are highly dependent or highly self-critical are more likely to show depressive reactions to life event stress. Like so many researchers in the increasingly complex area of stress and coping, Smith & Allred (1989) emphasize the need to pay attention to specific life events and factors

that serve to mediate a depressive response to stress. It is by isolating such factors that a clearer and more definite understanding of depressive reactions will emerge.

#### 2.4.2 Life Events and Anxiety

Research on the relationship between life events and anxiety is especially sparse (Andrews, 1988). Studies that have addressed this relationship, however, were consistent in finding a positive correlation between life events and anxiety (e.g. Miller, Ingham, & Davidson, 1976; Sarason, Johnson, & Siegel, 1978). These studies were retrospective and linear in theory, again raising the methodological problems of assessing predictor and criterion variables both concurrently and retrospectively.

Recently, more specific consideration has been given to the types of life events that may be more likely to lead to increased levels of anxiety. Consistent with Freud's (1925) theory that loss will provoke feelings of depression and threat will increase levels of anxiety, Finley-Jones & Brown (cited in Andrews, 1988) found specific associations between loss and depression and danger and anxiety. Similarly, Barret (1979) found that anxiety patients reported financial problems and arguments as primary stressors, while those with depressive reactions found stressors to revolve around separation and loss. While the research evidence is limited, there appears to be an interesting link between life events and levels of anxiety, and it appears particularly

important to consider the type of life event stress when considering this relationship.

## 2.5 SUMMARY AND HYPOTHESES

There is little doubt that stress, especially daily life stress, is often associated with greater levels of depression and anxiety in adolescents. It is clear from the review of the literature, however, that the relationship between stress and depression and anxiety in adolescence is rather complex. While there are many factors that may influence this relationship, religious coping is one that remains virtually unexplored. Based on previous research results, it makes sense that religious coping could impact adolescent depression and anxiety in one of three ways. First the impact of religious coping could have a direct effect. Greater levels of religious coping could be associated with lower levels of depression and anxiety, thereby leading to the first hypothesis:

Hypothesis One: Spiritually based coping will have a direct negative effect on levels of depression and anxiety. That is, individuals with greater levels of spiritually based coping will have lower levels of depression and anxiety.

A second way in which religious coping may affect adolescent depression and anxiety is by acting as a moderator. Stress and religious coping may interact together to impact depression and anxiety. Therefore, the second hypothesis states:



Hypothesis Two: Spiritually based religious coping will act as a moderator between life event stress and depression and anxiety. Subjects experiencing high levels of life event stress who also have high levels of spiritually based coping will not show significantly different levels of anxiety and depression than those subjects with low life event stress. However, subjects with high levels of life event stress who report low levels of spiritually based coping will show significantly greater levels of depression and anxiety than those subjects with low life event stress.

Finally, the relationship between religious coping and depression and anxiety could be considered by exploring the presence of mediating variables. It could be the case that greater levels of religious coping are associated with greater levels of other factors, such as social support and self esteem. These factors, in turn, could be associated with lower levels of depression and anxiety. Therefore the third hypothesis states:

Hypothesis Three: The effect of spiritually based coping on depression and anxiety will be mediated through self-esteem and social support. Spiritually based coping will be associated with greater levels of self-esteem and social support that, in turn, are associated with reduced levels of anxiety and depression.

## CHAPTER 3 METHODS AND PROCEDURES

### 3.1 SUBJECTS

The subjects were 95 adolescents age 11 to 18 who were recruited for participation in the study through various church youth groups in a university town in Oregon. Sixty-one females with a mean age of 13.96 years, and 34 males with a mean age of 14.33 years participated. The 2:1 ratio of females to males approximated the ratio of females to males who attended the groups. The sample consisted of adolescents who attended youth group meetings at a Roman Catholic Church (42%), a First Congregational Church of Christ (23%), an Episcopal Church (11%), a Presbyterian Church (8%), a Non-Denominational Christian Church (7%), and a First Christian Disciples of Christ church (5%). In addition, 4 subjects (4%) who did not attend regular youth group meetings, but did participate in religious activities, volunteered to participate in the study.

Ninety percent of the subjects were from two-parent households, 1 subject's parents were currently separated, and 8 subject's parent's (9%) were divorced. Ninety one percent reported living with two parents, and 9% reported living with their mother only.

Three percent of the household incomes were under \$8,000, 3%

had incomes of \$8,001- 20,000, 6% between \$20,001- 30,000, 20% ranged from \$30,001- 40,000, 14% were between \$40,001- 50,000, 22% had incomes of \$50,001-60,000, and 31% reported incomes of over \$60,000. Twenty-seven percent of the mothers and 28% of the fathers reported having a four year college degree. Twenty-nine percent of the mothers and 23% of the fathers held master's degrees. Nine percent of the mothers and 30% of the fathers held doctoral degrees.

## 3.2 INSTRUMENTS

### 3.2.1 The Inventory of High-School Students' Recent Life Experiences

The Inventory of High-School Students' Recent Life Experiences (IHSSRLE) (Kohn & Milrose, 1993), found in Appendix A, was used to measure subject's levels of recent life events. This scale was chosen for two reasons. First, the scale focuses primarily on daily events or "hassles" rather than on major life events. Research suggests that daily hassles may play a more important role in creating stress than major events (Compas et al., 1989). Furthermore, the daily hassles that follow a major life event, referred to as secondary stressors, may play a more important role in the level of stress accompanying the major event than the major event itself (Compas et al., 1989). Secondly, this scale was designed to assess the daily hassles that occur specifically among adolescents. The items focus on peer relations, school, relationships

with parents, and plans for the future, all important areas of adolescent development (Steinberg, 1989).

The IHSSRLE consists of 41 items reflecting daily hassles in the life of adolescents. For example item one is "being let down or disappointed by my friends" and item 26 is "finding subjects at school too demanding." Subjects are asked to indicate how much a part of their life each experience has been in the past month using a scale that ranges from 1 (not at all a part of my life) to 4 (very much a part of my life). Scores for the IHSSRLE are obtained by adding together all responses. Scores on the IHSSRLE range from a low of 41 to a high of 164.

Reliability for the IHSSRLE was shown to be .91 and .90 in two separate testings (Kohn & Milrose, 1993). Reliability based on gender was shown to be .91 for males and .88 for females (Kohn & Milrose, 1993). Internal reliability for this study was calculated to be .90.

Construct validity was demonstrated through correlations with the Perceived Stress Scale (PSS), a well-established measure of subjectively appraised stress (Cohen, Kamarack, & Mermelstein, 1983). Cross-validations of the IHSSRLE with the PSS indicated a correlation of .68 and .63 ( $p < .01$ ) (Kohn & Milrose, 1993). In addition, the IHSSRLE has sufficient face validity, addressing events uniquely common to adolescents, and not so crucial to adults.

### 3.2.2 Center For Epidemiologic Studies Depression Scale

The Center for Epidemiologic Studies Depression Scale (CES-D) (National Institute of Mental Health), found in Appendix B, is a twenty-item instrument designed to measure levels of depression in non-clinical populations. This instrument was designed specifically for use in the testing of hypotheses relating to other variables such as life events and social support and has most often been employed by researchers in this area (Devins & Orme, 1985).

For each of the twenty items subjects are asked to indicate on a 4 point scale how often in the past week each of the 20 items were experienced. For example, item 2 states "I did not feel like eating, my appetite was poor" and item 9 states "I thought my life had been a failure". To minimize the response set bias, four items included in the CES-D ask about presence of non-depressive symptoms. For example, item 12 states "I am happy." For purpose of determining depression, these items are reverse scored. A score of 0 indicates the feeling occurred rarely or none of the time and a score of 3 indicates that the symptoms occurred most or all of the time. Scores for the CES-D range from 0 to 60.

Reliability testing of the CES-D has been conducted through test-retest and internal consistency methods. Test-retest reliability of 2, 4, 6, & 8 week intervals resulted in respective alphas of .51, .67, .59, & .59 (Devins & Orme, 1985). While these reliability coefficients are slightly below the recommended .70 (Nunnally, 1978), it needs to be noted that the CES-D measures a level of state depression that, by its theoretical

construction, may not be the same over periods of time. A more accurate measure of reliability for instruments that measure state qualities is ascertained through the use of internal consistency measures. Radloff (1977) reported Cronbach's alphas ranging from .84 to .90 during the initial psychometric testing of the CES-D. Internal reliability for this study was calculated to be .85.

Construct validity of the CES-D appears to be quite strong when the purpose of the study is to measure depressive symptomatology. Roberts & Vernon (1983) successfully discriminated depressed from non-depressed subjects as concurrently measured by the Schedule for Affective Disorders and Schizophrenia-Research Diagnostic Criteria. Furthermore, Pearson correlations between the CES-D and the Hamilton scale range from .50 to .80. Correlations with the Raskins scale range from the .30s to .80 (Devins & Orme, 1985).

### 3.2.3 The Provisions of Social Relations Scale

The Provisions of Social Relations Scale (PSR) (Turner, Frankel, & Levin, 1983), found in Appendix C, was used to assess social support. This scale was chosen for the present study because it measures social support from both family and friends. As adolescents mature they turn increasingly to their friends for advice, yet parents remain an important influence in their lives (Steinberg, 1989). This scale allows differentiation between social support received from friends and family.

The PSR consists of 15 items (9 that measure friend support and

6 that measure family support) to which subjects are asked to respond on a 5 point scale. A response of 1 means that the statement is "very much like my experience" and a response of 5 indicates that the statement is "not at all like my experience." Scores are computed by adding together scores for each response with greater scores indicating greater levels of support. Scores will range from 0 (no support) to 75 (high support) for the combined scales. Levels of social support between family and friends can be distinguished by separating scores for each scale.

Reliability for the PSR was established through internal consistency methods. Cronbach's alphas ranged from .75 to .87 in two initial testings (Turner, Frankel & Levin, 1983). Cronbach's alpha for this study was determined to be .87 for the complete scale. The subscales for friend support and family support produced alphas of .87 and .85 respectively. Construct validity was established through correlations with the Kaplan Social Support Scale resulting in a correlation coefficient of .62 (Turner, Frankel & Levin, 1983).

#### 3.2.4 The Religious Activities Coping Scale

The Religious Activities Coping Scale (RCAS) (Pargament et al., 1990), found in appendix D, was used to measure religious coping. The complete Religious Activities Coping Scale consists of 29 items divided into six subscales that measure Spiritually Based Coping, Good Deeds, Discontent, Religious Support, Plead, and Religious Avoidance. Because

the specific intent of this study is to look at spiritually based coping, only the Spiritually Based Coping Subscale was used.

The Spiritually Based Coping subscale consists of 12 items that reflect an intimate relationship between the individual and God resulting in a "religiously based positive outlook on problems, emotional reassurance, and guidance in problem solving" (K. I. Pargament, personal communication, September 26, 1993). For each item the subject is asked to respond on a scale of 1 to 4, with 1 indicating "not at all" and 4 indicating "a great deal", how much each item is used in coping with life stress. Scores for spiritually based coping range from a low of 12 to a high of 48.

The Religious Activities Coping Scale is a relatively new scale developed by Pargament et al. in 1990. It is the first, and currently the only, scale that measures specific religious coping strategies such as spiritually based coping. The psychometric testing that has been completed is limited, but promising. Pargament et al (1990), reported a Cronbach's alpha of .92 for the spiritually based coping subscale, the highest of all six subscales. Cronbach's alpha for this study was calculated to be .93.

Validity of the Religious Activities Coping Scale has not been completely established. At this point, face validity is the strongest argument for conceptual strength. As defined earlier, spiritually based coping reflects a personal relationship with God that, in turn, provides meaning for life stress as well as strategies for coping. Each of the 12 items in the Spiritually Based Coping subscale reflect the idea of a



personal, meaningful relationship between an individual and God.

### 3.2.5 Rosenberg Self-Esteem Scale

The Rosenberg Self-Esteem Scale (Rosenberg, 1965), found in Appendix E, was used to measure the subject's level of global self-esteem. This scale consists of 10 questions followed by four possible responses: strongly agree, agree, disagree, and strongly disagree. For example, question three states "All in all, I am inclined to feel that I am a failure." Responses are scored from one, indicating lowest self-esteem, to four, indicating highest self-esteem. Self-esteem scores range from a low of ten to a high of forty.

Internal reliability coefficients for the RSE range from a low of .72 to a high of .87 on 5 different populations (Wylie, 1989). Test-retest reliabilities have been reported in two studies. Silber & Tippet (1965) reported a 2-week correlation of .85 and Byrne (1983) a .63 reliability coefficient over a 6 month interval. Cronbach's alpha for this study was determined to be .90.

Support for strong construct validity is evident in the successful testing of the unidimensionality of the RSE. Several studies report sufficient evidence that the scale measures a unidimensional construct (Wylie, 1989). Intercorrelations with the Coopersmith's Self-Esteem Inventory revealed a convergent validity coefficients that range from .55 to .65 (Wylie, 1989).

### 3.2.6 The Revised Children's Manifest Anxiety Scale

The Revised Children's Manifest Anxiety Scale (RCMAS) (Reynolds & Richmond, 1978) found in Appendix F was used to measure anxiety. The RCMAS is a revised version of the Children's Manifest Anxiety Scale (Casteneda, McCandless, & Palermo, 1956). The RCMAS, entitled "What I Think and Feel", consists of 37 items to which subjects answer yes or no. For example, item 2 states "I get nervous when things do not go the right way for me", and item 19 states "my hands feel sweaty." Four subscales have been empirically derived. Ten items measure physiological anxiety, 11 items address worry/oversensitivity, 7 measure social concern/concentration, and 9 items relate to the lie subscale (Freidman & Walker, 1988). The lie scale is designed to assess the subject's willingness to admit minor common faults (Freidman & Walker, 1988). In addition, a total anxiety score (28 items) can be obtained that includes each of the subscales except the lie scale.

Scoring of the RCMAS is accomplished by assigning a value of 1 to each yes answer and 0 to each no answer. The total measure of anxiety ranges from 0 to 28. Each subscale score can be likewise obtained. For the purpose of this study, the measure of Total Anxiety will be considered.

Reliability testing was conducted on a sample of 4,972 children between the ages of 6 and 17 (Reynolds & Richmond, 1985). Coefficient alphas for the Total Anxiety Scale ranged from .78 to .85. Reliabilities for each of the subscales are in the .60s and .70s (Friedman

& Walker, 1988). A test-retest reliability completed on 534 elementary school children 9 months apart revealed a coefficient of .68 for Total Anxiety (Reynolds, 1981). Internal reliability was calculated to be .77 for this study.

Construct validity was established through factor analytic studies that resulted in the four current subscales (Reynolds & Richmond, 1979; Reynolds & Harding, 1983; Reynolds & Richmond, 1985). The RCMAS appears to reflect chronic or trait anxiety. When correlated with the State-Trait Anxiety Inventory for Children (STAIC; Spielberger, 1973), the RCMAS was strongly correlated with the STAIC Trait scale ( $r = .85$ ,  $p < .001$ ) and not so with the STAIC State scale ( $r = .24$ ,  $p < .05$ ) (Freidman & Walker, 1988).

### 3.3 PROCEDURE

Youth group directors from nine churches were contacted by phone. A brief description of the study was given at that time. Youth group directors were told that the researcher was interested in adolescent stress, depression, and anxiety. They were further told that the purpose of the research project was to investigate the role that religion played in adolescent's coping efforts. Following the initial phone contact, a time was established to meet with each director separately to discuss the study further. The researcher then met with the youth group leader to review the questionnaire, answer any questions the group leader had, and arrange a time to administer the questionnaire.

Of the nine churches contacted, one declined participation in the study without a further meeting. One group director did meet to discuss the study, but declined to participate following the informational meeting. A third agreed to participate in the study but did not return any completed surveys.

The youth directors each wrote a cover letter of support for the study that was mailed along with the informed consent (found in Appendix G) to the parents of each member of the youth group. The parents were asked to complete the informed consent, which included background information on family income, education, and composition, and have their child return it on the day the questionnaire was to be given. Three of the groups completed the questionnaire during a Sunday school hour, and 2 completed it during a mid-week youth group meeting. During these times the researcher arrived at the meeting time and administered the questionnaire to all who returned a parental consent form.

For one group, a convenient time for the researcher to conduct the survey could not be established so it was decided that the questionnaire would be mailed, along with the informed consent and cover letter, to the parents of each child. Enclosed with the questionnaire was a self-addressed, stamped envelope in which the questionnaire and informed consent could be returned directly to the researcher. For the 4 subjects who did not belong to a specified youth group, an informed consent was mailed or given upon request to the parent. The subjects subsequently filled out the questionnaire and

returned it directly to the researcher.

The following instructions were printed on the first page of the questionnaire:

"The purpose of this project is to find out about the attitudes that young persons your age have about their families, friends, religion, and themselves. In order to do this we would like you to answer some questions, since no one can give us information better than you. Before you answer these questions it is very important that you know that your answers will be kept totally private. No one you know (parents, ministers, teachers, anyone in the community) will ever see your answers, so please answer honestly. It is also important that you know that you do not have to answer any questions that you are not comfortable answering. Remember, this is not a test. There are no right or wrong answers, just your answers. Don't spend too long on any question, your first reaction to a question is usually the best answer."

### 3.4 ANALYSIS

#### 3.4.1 Statistical Procedures

Hypothesis One predicted that spiritually based coping would have a direct effect on levels of depression and anxiety. Multiple regression was used to analyze this hypothesis. The dependent variable was either depression or anxiety and the independent variable was level

of spiritually based coping. In addition to spiritually based coping the control variables of age, gender, household income and church group membership were entered into the model.

Hypothesis Two predicted that spiritually based coping would moderate the effect of life stress on depression and anxiety. A two-step multiple regression analysis was used to investigate this hypothesis. In the first step a multiple regression that looked for main effects was performed. The dependent variable was either depression or anxiety. The independent variables of life-stress and spiritually based coping were entered into the regression model in that order. Each model also controlled for the age, gender, household income, and church group membership of the subject. The second step of the analysis involved inserting an interaction term into the regression model in order to ascertain the presence of a moderating variable. The multiplicative effect of life-event stress and spiritually based coping was entered into the model as the third independent variable, still controlling for age, gender, household income, and church group. Using this procedure, Adjusted  $R^2$ , standardized betas, and p values were calculated for each dependent variable.

Hypothesis Three was investigated by path analysis. The basic path model was the same for all 8 path analyses that were conducted. In each case the first leg of the path was analyzed with a regression model using spiritual coping as the only predictor variable. Four dependent variables, self-esteem, total social support, family social support, and friend social support were regressed on the predictor

variable spiritual coping. The second part of the path analysis required a multiple regression model with two predictors. The first predictor was either self-esteem, total social support, family social support, or friend social support. The second predictor variable was spiritual coping. In this manner depression or anxiety was regressed on either spiritual coping (indicating a direct effect), or one of the 4 mediating variables of self-esteem, total social support, family social support, or friend social support (indicating that the effect of spiritual support is mediated through these variables, rather than a direct effect).

Using this procedure, standardized betas and p values for each possible path were obtained, thus the most significant path could be determined. Because of the simplicity of the models (and thus reduced degrees of freedom) sophisticated tests of goodness of fit were not able to be performed. The goodness of fit of each model was determined by assessing the total amount of variance explained by the significant paths.

## CHAPTER 4 RESULTS

### 4.1 TESTING THE HYPOTHESES

#### 4.1.1 Hypothesis 1

Hypothesis 1 predicted that spiritually based coping would have a direct negative effect on depression and anxiety. In other words, individuals with greater levels of spiritually based coping would have lower levels of depression and anxiety.

Multiple regression analysis was used to assess the direct effect of spiritually based coping on depression and anxiety. Spiritually based coping, and the control variables of age, gender, household income, and youth group membership were regressed first on depression and then on anxiety. There were no significant effects found for spiritually based coping on either depression or anxiety.

#### 4.1.2 Hypothesis 2

Hypothesis 2 predicted that spiritually based coping would moderate the negative effect of life event stress on depression and anxiety. In other words, subjects who reported high levels of stress but



who also reported high levels of spiritually based coping would not show significantly different levels of anxiety and depression than subjects who reported low levels of life event stress. However, subjects with high levels of life event stress and low levels of spiritually based coping would show significantly greater levels of depression and anxiety than any other subjects.

As Table 1 indicates, there was a significant main effect of stress on depression ( $p = .02$ ). However, the interaction between stress and spiritually based coping was not significant in predicting depression. Table 2 indicates similar results for anxiety. While there was a significant main effect of stress on anxiety ( $p = .03$ ), the interaction between stress and spiritually based coping was not a significant predictor of anxiety.

#### 4.1.3 Hypothesis 3

Hypothesis 3 predicted that the effects of spiritually based coping on depression and anxiety would be mediated through levels of self-esteem and social support. In other words, spiritually based coping was predicted to lead to greater levels of self-esteem and social support which, in turn, lead to reduced levels of depression and anxiety.

Path analysis was used to analyze this hypothesis. Eight separate path models were considered. For each path model 2 regressions were run. The first involved regressing the mediating variable (self-esteem or social support) on spiritual coping. The second involved regressing the

TABLE 1

Multiple Regression Analysis: The Moderating Influence of  
Spiritual Coping on Depression

Step One Main effects				Step Two Add Interaction			
<u>Predictors</u>	Stan. <u>beta</u>	Adj. <u>R<sup>2</sup></u>	<u>p</u>	<u>Predictors</u>	Stan. <u>beta</u>	Adj. <u>R<sup>2</sup></u>	<u>p</u>
Stress	.55	.33	.0001	Stress	.96	.33	.02
Spiritual Coping	-.11	.33	NS	Spiritual Coping	.47	.33	NS
				Stress x Spiritual Coping	-.71	.33	NS

TABLE 2

Multiple Regression Analysis: The Moderating Influences of  
Spiritual Coping on Anxiety

Step One Main effects				Step Two Add Interaction			
<u>Predictors</u>	<u>Stan. beta</u>	<u>Adj. R<sup>2</sup></u>	<u>p</u>	<u>Predictors</u>	<u>Stan. beta</u>	<u>Adj. R<sup>2</sup></u>	<u>p</u>
Stress	.48	.25	.0001	Stress	.91	.25	.03
Spiritual Coping	-.15	.25	NS	Spiritual Coping	.48	.25	NS
				Stress x Spiritual Coping	-.75	.25	NS

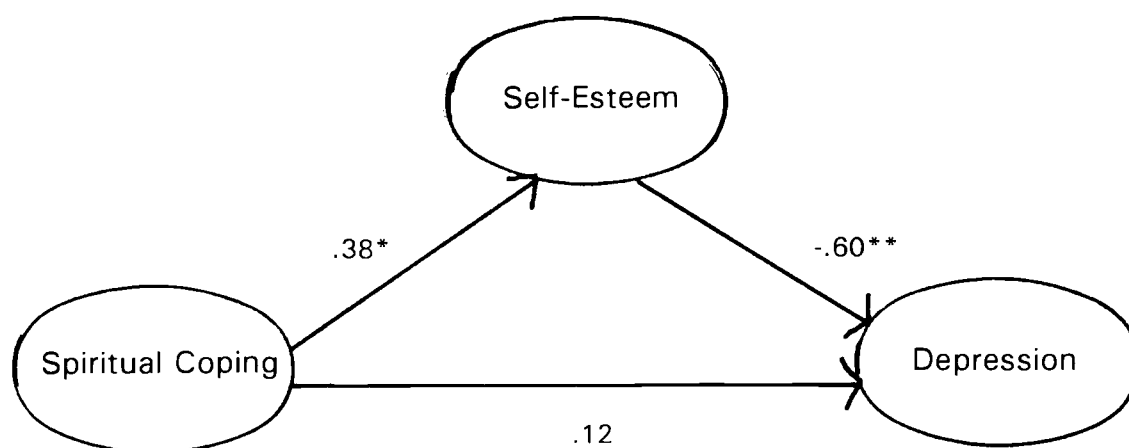
outcome variable (depression or anxiety) on both the mediating variable (self-esteem or social support) and spiritual coping. In this manner, path coefficients were obtained for each of the three possible paths.

The first two path models examined the mediating role of self-esteem. Figure 1 shows that a significant positive path was found between spiritual coping and self-esteem ( $r = .38$ ;  $p = .0003$ ), and a significant negative path was found between self-esteem and depression ( $r = -.60$ ;  $p = .001$ ). This reveals that greater levels of spiritual coping led to greater levels of self-esteem, which, in turn, led to lower levels of depression. There was no significant direct path correlation between spiritual coping and depression. A similar result was obtained for anxiety. As Figure 2 indicates, there was a significant positive path between spiritual coping and self-esteem ( $r = .38$ ;  $p = .0003$ ), as well as a significant negative path between self-esteem and anxiety ( $r = -.61$ ;  $p = .001$ ). In summary, greater levels of spiritual coping led to greater levels of self-esteem, which in turn led to lower levels of anxiety.

The next path model looked at the mediating effect of total (from both family and friends) social support. As Figure 3 shows, there was a significant positive path found between spiritual coping and total social support ( $r = .23$ ;  $p = .04$ ). In addition, the path between total social support and depression showed a significant negative relationship ( $r = -.32$ ;  $p = .005$ ). As before, there was no significant direct path between spiritual coping and depression. This analysis showed that social support acts as a mediator between spiritual coping and depression.

FIGURE 1

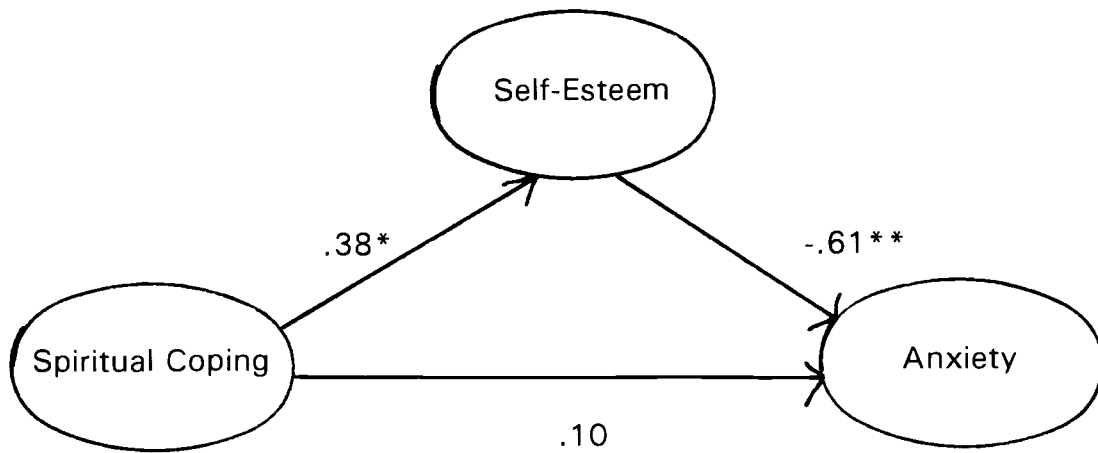
Path Analysis of the Mediating Effect of Self-Esteem  
on  
Spiritual Coping and Depression



\*  $p = .0003$  \*\*  $p = .001$

FIGURE 2

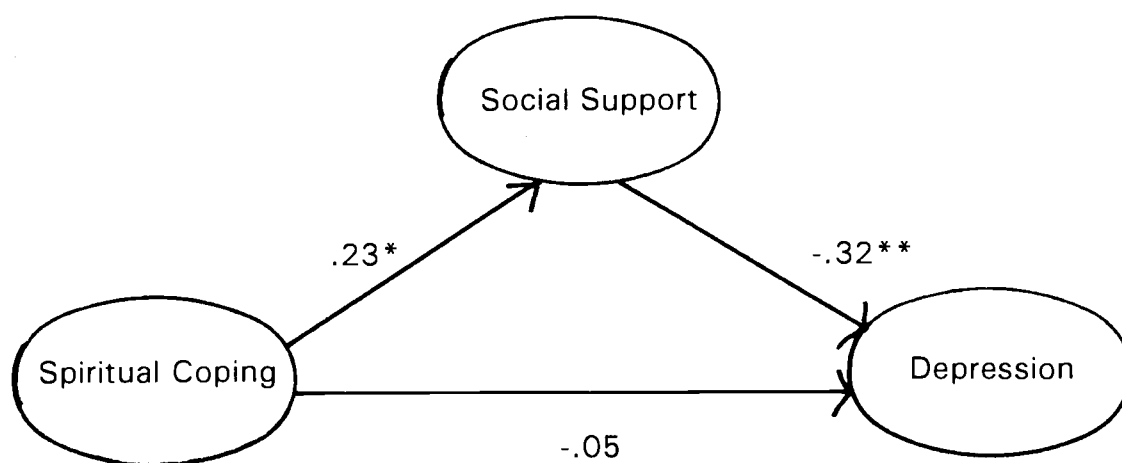
Path Analysis of the Mediating Effect of Self-Esteem  
on  
Spiritual Coping and Anxiety



\* $p = .0003$  \*\* $p = .001$

FIGURE 3

Path Analysis of the Mediating Effect of Social Support  
on  
Spiritual Coping and Depression



\* $p = .04$     \*\*  $p = .005$

Figure 4 reveals similar results for anxiety. Again, a significant path was found between spiritual coping and total social support ( $r = .23$ ;  $p = .04$ ) as well as between total social support and anxiety ( $r = -.33$ ;  $p = .004$ ). There was no significant direct effect between spiritual coping and anxiety.

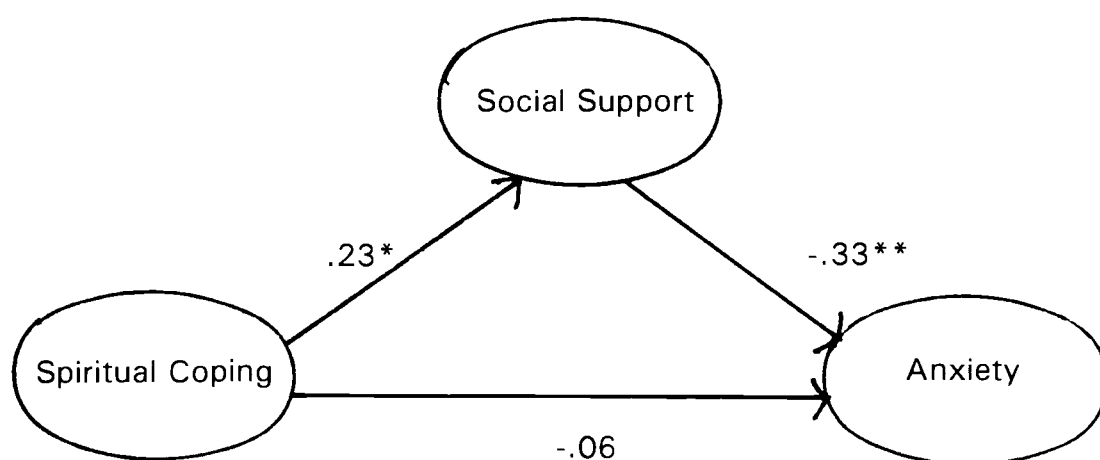
When total social support total was divided into social support from friends and social support from family, some different findings emerged. First, as Figure 5 shows, a significant positive path was found between spiritual coping and social support from friends ( $r = .21$ ;  $p = .05$ ), showing that greater levels of spiritual coping led to greater levels of social support from friends. The path between social support from friends and depression showed a significant negative relationship ( $r = -.35$ ;  $p = .002$ ). Greater levels of social support from friends led to lower levels of depression. There was no significant direct relationship between spiritual coping and depression. Similar results were found for anxiety. As Figure 6 reveals, there were significant paths both between spiritual support and social support from friends ( $r = .21$ ;  $p = .05$ ), and between social support from friends and anxiety ( $r = -.36$ ;  $p = .001$ ). As before, there was no significant direct path between spiritual coping and anxiety.

When social support from family was considered there were no significant paths found for either depression or anxiety.



FIGURE 4

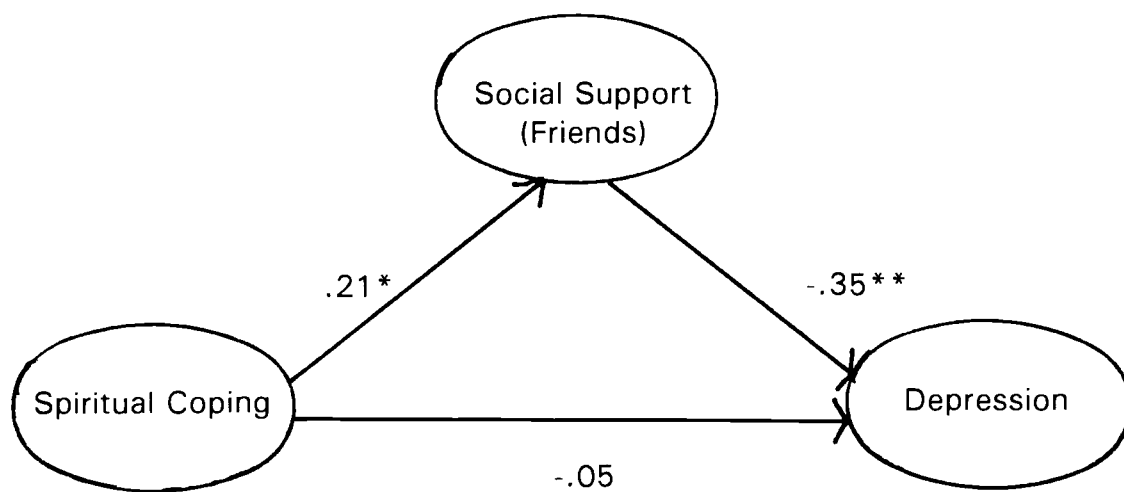
Path Analysis of the Mediating Effect of Social Support  
on  
Spiritual Coping and Anxiety



\*  $p = .04$     \*\*  $p = .004$

FIGURE 5

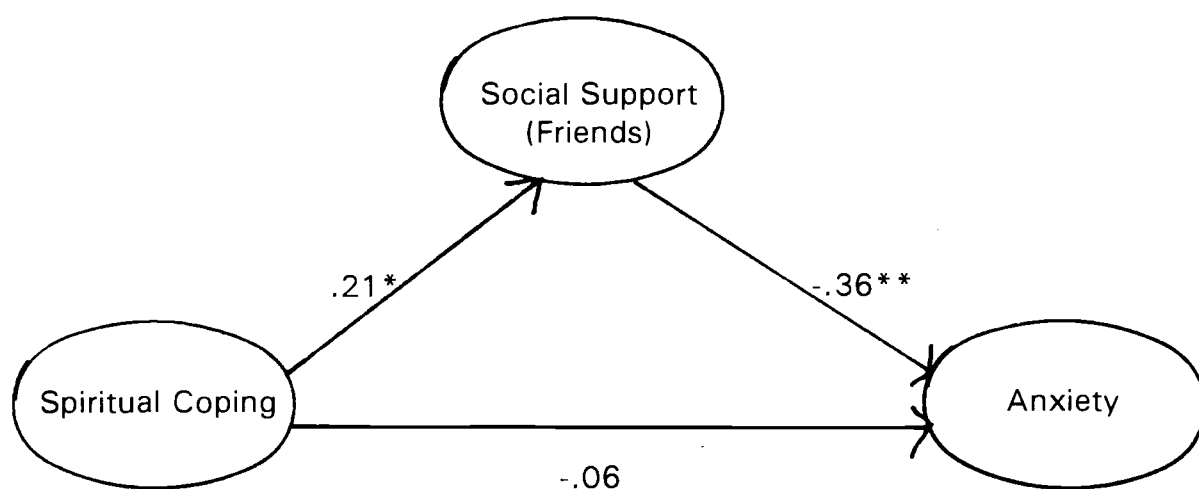
Path Analysis of the Mediating Effect of Social Support From Friends  
on  
Spiritual Coping and Depression



\*  $p = .05$     \*\*  $p = .002$

FIGURE 6

Path Analysis of the Mediating Effect of Social Support From Friends  
on  
Spiritual Coping and Anxiety



\*  $p = .05$     \*\*  $p = .001$

## CHAPTER 5

### DISCUSSION AND CONCLUSIONS

The major objective of this research was to explore the impact that spiritual coping has on the emotional well-being of adolescents. Three possible links between spiritual coping and two measures of emotional well-being, depression and anxiety, were explored. The first possible link was whether spiritually based coping had a direct effect on depression and anxiety. The second link that was considered was whether spiritual coping served to moderate the impact of stress on depression and anxiety. Finally, the third link considered was whether the impact of spiritually based coping on depression and anxiety was mediated by social support and self-esteem.

This study showed that spiritual coping did not impact levels of depression and anxiety directly. Despite its simplicity, this research question was a good place to begin the investigation into the role of spiritually based coping in the lives of adolescents. It is not surprising that the relationship between spiritually based coping is not of a direct linear nature. As so much of the literature in the area of stress and coping points out, relationships between stressors and outcomes are often very complex.

Contrary to predictions, spiritually based coping did not operate as a moderator of the effects of adolescent stress on depression and anxiety. One factor that has to be considered is the nature of spiritually

based coping. This form of coping is a very specific, activity-based form of coping. Other forms of religious coping, such as seeking counsel from a clergyperson, or vowing to be a better person, may have a different impact on the stress-outcome process. While this study did not provide support for the moderating role of spiritually based coping, it is too early to conclude that religious coping in general does not moderate the impact of life stress. Continued investigation into the relationship between religious coping and stress with a variety of religious coping measures is still important.

The findings of this study support a mediation model in which spiritual coping leads to greater coping resources that are, in turn, related to lower depression and anxiety. Specifically, greater levels of spiritually based coping led to significantly greater levels of self-esteem, which, in turn, led to lower levels of depression and anxiety. While research has supported the importance of self-esteem in moderating the effects of life event stress on a variety of outcomes, much less is known about factors that enhance self-esteem. Results of this study indicated that adolescents who feel loved and cared for by a personal God, and thus have a high level of spiritually based coping, also feel secure and good about themselves. Adolescents who feel secure and good about themselves are less likely to feel anxious and depressed.

One possible explanation for the link between spiritually based coping and self-esteem found in this study is that adolescents who are active in church youth groups may actually be socially rewarded for employing spiritually based coping, which, in turn, leads to a higher

sense of self-esteem. It is the nature of such groups to not only support the social nature of adolescents, but also to affirm the role of spirituality in their lives. So, for example, an adolescent who is involved in a church youth group may report to the group that he or she used prayer to cope with a stressful life event. The group may, in turn, affirm such actions as good, enhancing both the adolescent's self-esteem and likelihood of employing spiritually based coping in times of future stress. For this reason, it will be important for future research to examine the effects of spiritually based coping on self-esteem outside of a church setting. The difficulty of asking questions of a religious nature in a public setting (i. e., a public school system) definitely limits our understanding of this topic.

Social support also was a significant mediator of the relationship between spiritually based coping and depression and anxiety.

Specifically, social support received from friends played a significant mediating role, whereas social support from family did not. This finding is interesting in light of the well-established understanding of the role of social support in adolescence. As adolescents mature from children to adults the support of peers become increasingly important. While most would argue that the importance of peers does not surpass the importance of the family during adolescence, the influence of the peer group nevertheless increases.

Again, in order to understand the findings in this particular study, it is important to consider the role of the church-based youth group in the lives of adolescents. It could be that adolescents who report the

greatest levels of spiritually based coping are more likely to be the most active members of their youth group. In turn, they are the most likely to receive high levels of social support. Another consideration, however, is the "security leading to social success" line of thinking. If an adolescent feels secure in the world because he or she has a personal relationship with a loving God, it is likely that social success will follow. In other words, those individuals who feel the most secure with their position in life are likely to be able to make and maintain friendships more easily.

While it may seem strange that levels of spiritually based coping did not lead to greater levels of social support from the family, there are some important things to consider. First, spiritually based coping measures the activity of using one's religion to cope with stress. This activity is likely to be encouraged by peers with the same philosophies. Religious values, which are not specifically forms of coping, are more likely to be influenced by parents (Erickson, 1992). Thus the role of the family and religion is not at all to be diminished, but rather considered in a separate realm. It is also likely that adolescents are more likely to share their daily life problems with peers rather than parents. How adolescents cope with daily life stress greatly influences their choice of social group. Not surprisingly, if an adolescent has a strong faith in God, he or she will seek out and receive support from adolescents with similar views.

As with self-esteem, it will be important to test the hypotheses on a non-church based group of adolescents. Perhaps future research will shed some light on the confounding nature of social support in this area

of study. For example, does one's religious beliefs lead directly to spiritual coping, which, in turn, leads to increased social support? Or do one's beliefs predict integration into a youth group, which, in turn, leads to increased spiritual coping, which then leads to increased social support. The first would indicate that religious belief enhances levels of religious coping that, in turn, enhances, social support, independent of church group membership. The latter implies that youth group membership may be an additional mediator. A non-church based sample is important to further understand the relationship between spiritual coping and social support.

Overall, the results of this study are consistent with the literature on both adolescent development and stress and coping in general. First, developmentally, friends take on an increasingly important role in providing social support during adolescence. Not surprisingly, those with the greatest level of social support from friends had the lowest levels of depression and anxiety. Spiritually based coping had a significant influence on the level of social support from friends. This implies that adolescents who actively use their faith to cope with life problems are better integrated into a strong friendship network. This finding appears to support the ever-increasing importance of friendship during adolescence.

Similar support was found in the area of self-esteem. Research supports the fact that self-esteem plays an important role in coping with life stress. This study helped to reveal a significant contributor to self-



esteem. Adolescents who use their faith to cope feel better about themselves and, in turn, feel less depressed and anxious.

Finally, spiritually based coping had no direct effects on depression or anxiety. All the effects were indirect, mediated through self-esteem and social support. While the investigation into religious coping is relatively new, it is clear that the effects of religious coping are complicated. Maton (1989) stated that some might think the relationship between spiritual coping and emotional well-being is obvious and not an important area to research. Maton (1989) argued, however, that the relationship is actually very complex and worthy of careful investigation. This study lends support for the complex nature of this topic. Research designs employed to look further at spiritually based coping need to be sophisticated enough to consider the complexity of the effect of religious coping on different outcome variables

In addition to the need for sophisticated research designs, there must also be further development of valid and reliable measures of religious coping. The scale used for this study is the first to be able to measure the active nature of spiritually based coping. While promising, the concept is new, and continued instrument development and refinement is important.

There are some important limitations to this study that need to be carefully considered. First, and foremost, is the church based sample. As noted earlier, the generalizability of these findings to a non-church based population is a major concern. The religious nature of the study prevented using adolescents from a public school system. While these

results need to be interpreted with caution, it is also important to keep in mind the exploratory nature of this study. Spiritually based coping in adolescents has never been considered before, and this study does provide some useful, albeit preliminary, information.

Despite the church-based sample, there was considerable variability in response to all of the instruments. This was especially important in the measure of spiritually based coping since it could be assumed that adolescents who attend church youth group would automatically have high levels of spiritual coping. This, however, was not the case. Scores for spiritually based coping ranged from a low of 12 to a high of 48, which is the maximum possible range for the scale. The mean score was 28.5 with a standard deviation of 8.3, reflecting considerable variation. Similarly, variable ranges and standard deviations were found for each scale. Such variability lends strength to this study by indicating that even church based samples can be highly variable in nature.

Even within the church based sample another bias may occur. First, only Christian churches were represented in the sample. Second, only certain types of Christian churches were represented. With the exception of the one non-denominational church, the rest of the sample came from either Roman Catholic or mainline Protestant congregations. Churches of a more evangelical nature were not represented in the sample, although they were approached about participating in the study. It is not unusual for churches to be reluctant to participate in scientific studies. As Erickson (1992) pointed out, this might stem from a fear

that they will be unfavorably compared to other churches. An important next step will be to replicate this study on a sample that includes adolescents from other religions and from other Christian denominations.

Finally, the sample size is relatively small, and very homogeneous in terms of several factors. Most of the adolescents were from well-educated, two-parent families with relatively high levels of income. This is reflective of the university community in which the sample was drawn. It will be important to evaluate the effect of spiritually based coping on a sample that is much more diverse, and certainly more reflective of different family forms and levels of income.

Despite the limitations of this study, the results are interesting, and provide some of the first information on this subject. The exploratory nature of this study should not be overlooked, and future research will be able to provide more in-depth understanding of the relationship of religious coping to depression and anxiety in adolescence.

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## APPENDICES

## APPENDIX A

### Inventory of High School Student's Recent Life Experiences (IHSSRLE)



## Inventory of High School Student's Recent Life Experiences

(Kohn & Milrose, 1993)

**Directions:** The following is a list of experiences that many students have at some time or other. Please use the following scale to indicate for each experience how much it has been a part of your life **over the past month**.

1 = not at all a part of my life

2 = only slightly a part of my life

3 = definitely part of my life

4 = very much a part of my life

- \_\_\_ 1) Being let down or disappointed by friends
- \_\_\_ 2) Disagreements with teachers
- \_\_\_ 3) Being left out of things by people
- \_\_\_ 4) Too many things to do at once
- \_\_\_ 5) Being taken for granted
- \_\_\_ 6) Disagreements with family members about money
- \_\_\_ 7) Having your trust being betrayed by a friend
- \_\_\_ 8) Separation from people you care about
- \_\_\_ 9) Having your ideas or efforts overlooked
- \_\_\_ 10) Struggling to meet your own standards of performance at school
- \_\_\_ 11) Being taken advantage of
- \_\_\_ 12) Not enough time to do the things you enjoy most
- \_\_\_ 13) Struggling to meet other people's standards of performance at school
- \_\_\_ 14) A lot of responsibilities
- \_\_\_ 15) Dissatisfaction about romantic relationship(s)
- \_\_\_ 16) Decisions about romantic relationship(s)
- \_\_\_ 17) Not enough time to meet your responsibilities
- \_\_\_ 18) Dissatisfaction with your mathematical ability
- \_\_\_ 19) Important decisions about your future career
- \_\_\_ 20) Money problems
- \_\_\_ 21) Important decisions about your education
- \_\_\_ 22) Loneliness
- \_\_\_ 23) Lower grades than you hoped for
- \_\_\_ 24) Not enough time for sleep
- \_\_\_ 25) Disagreements with your family

- \_\_\_ 26) Finding subjects at school too demanding
- \_\_\_ 27) Disagreements with friends
- \_\_\_ 28) Hard effort to get ahead
- \_\_\_ 29) Poor health of a friend
- \_\_\_ 30) Disliking your studies
- \_\_\_ 31) Getting "ripped off" or cheated in the purchase of services
- \_\_\_ 32) Social disagreements over smoking
- \_\_\_ 33) Disliking fellow student(s)
- \_\_\_ 34) Disagreements with boyfriend/girlfriend
- \_\_\_ 35) Dissatisfaction with your ability at written expressions
- \_\_\_ 36) Interruption of your school work
- \_\_\_ 37) Being without company
- \_\_\_ 38) Being ignored
- \_\_\_ 39) Dissatisfaction with your looks
- \_\_\_ 40) Gossip concerning someone you care about
- \_\_\_ 41) Dissatisfaction with your athletic skills

Appendix B  
Center For Epidemiologic Studies Depression Scale  
(CES-D)

Center For Epidemiologic Studies Depression Scale  
(National Institute of Mental Health)

Use the following scale to indicate how often you have felt or behaved this way  
**DURING THE PAST WEEK.**

0 = Less than one day

1 = 1-2 days

2 = 3-4 days

3 = 5-7 days

- \_\_\_\_\_ 1. I was bothered by things that usually don't bother me
- \_\_\_\_\_ 2. I did not feel like eating; my appetite was poor
- \_\_\_\_\_ 3. I felt that I could not shake off the blues even with the help of my family or friends
- \_\_\_\_\_ 4. I felt that I was just as good as other people
- \_\_\_\_\_ 5. I had trouble keeping my mind on what I was doing
- \_\_\_\_\_ 6. I felt depressed
- \_\_\_\_\_ 7. I felt that everything I did was an effort
- \_\_\_\_\_ 8. I felt hopeful about the future
- \_\_\_\_\_ 9. I thought my life had been a failure
- \_\_\_\_\_ 10. I felt fearful
- \_\_\_\_\_ 11. My sleep was restless
- \_\_\_\_\_ 12. I was happy
- \_\_\_\_\_ 13. I talked less than usual
- \_\_\_\_\_ 14. I felt lonely
- \_\_\_\_\_ 15. People were unfriendly
- \_\_\_\_\_ 16. I enjoyed life
- \_\_\_\_\_ 17. I had crying spells
- \_\_\_\_\_ 18. I felt sad
- \_\_\_\_\_ 19. I felt that people disliked me
- \_\_\_\_\_ 20. I could not get "going"

APPENDIX C  
The Provisions of Social Relations Scale  
(PSR)

## The Provisions of Social Relations Scale

(Turner, Frankel & Levin, 1983)

**Directions:** Now I would like to know something about your relationships with other people. For each of the statements below please use the following scale to tell me what best describes your experience.

1 = Very much like my experience

2 = Much like my experience

3 = Somewhat like my experience

4 = Not very much like my experience

5 = Not at all like my experience

\_\_\_\_\_ No matter what happens, I know that my family will always be there for me should I need them

\_\_\_\_\_ Sometimes I'm not sure if I can completely rely on my family

\_\_\_\_\_ My family lets me know they think I'm a worthwhile person

\_\_\_\_\_ People in my family have confidence in me

\_\_\_\_\_ People in my family provide me with help in finding solutions to my problems

\_\_\_\_\_ I know my family will always stand by me

\_\_\_\_\_ When I'm with my friends I feel completely able to relax and be myself

\_\_\_\_\_ I share the same approach to life that many of my friends do

\_\_\_\_\_ People who know me trust me and respect me

\_\_\_\_\_ When I go out to do things I know that many of my friends would enjoy doing these things with me

\_\_\_\_\_ I have at least one friend that I could tell anything to

\_\_\_\_\_ I feel very close to some of my friends

\_\_\_\_\_ People who know me think I am good at what I do

\_\_\_\_\_ My friends would take the time to talk over my problems, should I ever want to

\_\_\_\_\_ Even when I am with my friends I feel alone

## APPENDIX D

### The Religious Coping Activities Scale

The Religious Coping Activities Scale  
The Spiritually Based Coping Subscale  
(Pargament et al. 1990)

**Directions:** The next group of statements indicate ways in which God or your religion may help you when you face difficult life situations. Please use the following scale to rate how important each strategy is to you when faced with a tough life situation.

1 = Not at all    3 = Quite a bit  
2 = Somewhat    4 = A great deal

- \_\_\_\_\_ I trusted that God would not let anything terrible happen to me
- \_\_\_\_\_ I experienced God's love and care
- \_\_\_\_\_ I realized that God was trying to strengthen me
- \_\_\_\_\_ In dealing with the problem I was guided by God
- \_\_\_\_\_ I realized I didn't have to suffer since Jesus suffered for me
- \_\_\_\_\_ I used Christ as an example of how I should live
- \_\_\_\_\_ I took control of what I could, and gave the rest up to God
- \_\_\_\_\_ My faith showed me different ways to handle the problem
- \_\_\_\_\_ I accepted that the situation was not in my hands, but in the hands of God
- \_\_\_\_\_ I found the lesson from God in the event
- \_\_\_\_\_ God showed me how to deal with the situation
- \_\_\_\_\_ I used my faith to help me decide how to cope with the situation



APPENDIX E  
Rosenberg Self-Esteem Scale

## Rosenberg Self-Esteem Scale

(Rosenberg, 1965)

1. I feel that I am a person of worth, at least on an equal plane with others.  
1. ☐ Strongly Agree    2. ☐ Agree  
3. ☐ Disagree    4. ☐ Strongly Disagree
2. I feel that I have a number of good qualities.  
1. ☐ Strongly Agree    2. ☐ Agree  
3. ☐ Disagree    4. ☐ Strongly Disagree
3. All in all, I am inclined to feel that I am a failure.  
1. ☐ Strongly Agree    2. ☐ Agree  
3. ☐ Disagree    4. ☐ Strongly Disagree
4. I am able to do things as well as most other people.  
1. ☐ Strongly Agree    2. ☐ Agree  
3. ☐ Disagree    4. ☐ Strongly Disagree
5. I feel I do not have much to be proud of.  
1. ☐ Strongly Agree    2. ☐ Agree  
3. ☐ Disagree    4. ☐ Strongly Disagree
6. I take a positive attitude toward myself.  
1. ☐ Strongly Agree    2. ☐ Agree  
3. ☐ Disagree    4. ☐ Strongly Disagree
7. On the whole, I am satisfied with myself.  
1. ☐ Strongly Agree    2. ☐ Agree  
3. ☐ Disagree    4. ☐ Strongly Disagree
8. I wish I could have more respect for myself.  
1. ☐ Strongly Agree    2. ☐ Agree  
3. ☐ Disagree    4. ☐ Strongly Disagree
9. I certainly feel useless at times.  
1. ☐ Strongly Agree    2. ☐ Agree  
3. ☐ Disagree    4. ☐ Strongly Disagree
10. At times I think I am no good at all.  
1. ☐ Strongly Agree    2. ☐ Agree  
3. ☐ Disagree    4. ☐ Strongly Disagree

## APPENDIX F

### The Revised Children's Manifest Anxiety Scale

## The Revised Children's Manifest Anxiety Scale

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## APPENDIX G

### Informed Consent Form

November 15, 1993

Dear Parent

My name is Mary Olszewski and I am currently working on my PhD in Human Development and Family Studies at Oregon State University. I am interested in the relationship between religion and life stress in adolescence. I think this is an important area to study, but it has rarely been considered in research. For my research project I am conducting a study that examines the role that religion plays in adolescent coping processes.

I would like your permission to have your child(ren) fill out a questionnaire. The questionnaire includes several measures designed to assess the many ways in which adolescents cope with stress, as well as measures of general anxiety and depression. The questionnaire will take about 45 minutes to complete and will be given to your child at a youth group or Sunday school meeting once your permission is granted.

Because of the specific religious content of the questionnaire I am counting on church youth groups to provide the important information that might not be available through the public school system. I would greatly appreciate your help in gathering this very important information. All information that you and your child provide will be kept completely confidential. Once the initial information is gathered your child's questionnaire will be assigned a number and only I will know to whom each number is assigned. As a further assurance of confidentiality you should know that I will only look at general group trends, and will not consider individual responses.

On the back of this form are some questions regarding family income. This information is necessary in order to completely understand the results of the study, and will, of course, be kept entirely confidential. If you could please fill out the information before you return this form that would be very helpful.

Should you have any questions regarding my study please feel free to call me at 737-2516 and I will be happy to discuss the project with you.

Thank you for your help!

Sincerely,

Mary Olszewski

(Please fill out other side)

My child(ren) \_\_\_\_\_ (please print) have my permission to complete the questionnaire designed by Mary Olszewski to assess religion & coping in adolescents.

Parent's Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

### Family Background Information:

Father's Occupation: \_\_\_\_\_

Mother's Occupation: \_\_\_\_\_

Highest Level of Education Obtained:

Father: \_\_\_\_\_ Mother: \_\_\_\_\_

Marital Status of Child's Parents: \_\_\_\_\_

If parents are not married, who does child live with? \_\_\_\_\_

Total Household Size: \_\_\_\_\_

Number of adults: \_\_\_\_\_

Number of Children: \_\_\_\_\_

#### Estimate of Household Income Per Year:

(please check one)

\_\_\_\_\_ Under \$8,000

\_\_\_\_\_ \$8,001-\$20,000

\_\_\_\_\_ \$20,001-\$30,000

\_\_\_\_\_ \$30,001-\$40,000

\_\_\_\_\_ \$40,001-\$50,000

\_\_\_\_\_ \$50,001-\$60,000

\_\_\_\_\_ Over \$60,000

Who in your family attends church? \_\_\_\_\_

How often does your family attend church services? \_\_\_\_\_

How often does the child who will fill out the questionnaire attend church functions (including regular services, youth group, and special events)? \_\_\_\_\_

On a scale of 1 to 5, with 5 being very important and 1 being not important at all how important is religion to your family life? \_\_\_\_\_

On the same scale how important do you think religion is to the child who will be answering the questionnaire? \_\_\_\_\_

-----  
(This section for research use only)

Church: \_\_\_\_\_

ID \_\_\_\_\_ Permission: \_\_\_\_\_ Questionnaire: Given \_\_\_\_\_ Returned \_\_\_\_\_