

The Role of Self-Worth, Social Support, and Family Religious Environment in Children  
and Adolescents' Religious Coping following Residential Fires

by

Monica S. Parelkar

A thesis submitted to the faculty of  
Virginia Polytechnic Institute and State University  
in partial fulfillment of the requirements for the degree of

MASTER OF SCIENCE

in

Psychology

Russell T. Jones, Committee Chair,  
Thomas H. Ollendick, Committee Member,  
David W. Harrison, Committee Member,

May 10, 2005

Blacksburg, Virginia.

Keywords: Self-Worth, Peer Social Support, Children, Adolescents, Religious Coping, PTSD

© 2005, Monica Parelkar

The Role of Self-Worth, Social Support, and Family Religious Environment in Children and Adolescents' Religious Coping following Residential Fires

by

Monica S. Parelkar

Russell T. Jones, Chair

**(ABSTRACT)**

The present study examined the role of religious coping efforts of children and adolescents, ages 8 to 18, following residential fire. Two types of children's religious coping, spiritually based coping and religious discontent, were examined in response to loss of resources in residential fires. The study further examined the influence and potential moderating effects of internal resources including global self-worth, as well as external resources including social support received from parents, teachers, and friends, and the family religious environment. Consistent with the general coping literature, these resources were expected to beneficially influence and predict spiritually based coping. Contrarily, the lack of these resources was expected to predict religious discontent. Children and adolescents' post-traumatic stress disorder (PTSD) symptoms were also assessed and compared to their coping responses. Religious discontent was found to be positively associated with greater levels of loss, PTSD symptoms and negatively associated with global self-worth and low socio-economic status. It was also significantly predicted by loss and an interaction between loss and social support, where higher social support predicted lower levels of religious discontent under high levels of loss. Post hoc analyses revealed peer social support to interact significantly with loss to buffer religious discontent. Spiritually based coping was found to be significantly predicted by loss, race, age, and family religious environment, where African Americans, and children reported greater spiritually based coping than European Americans, and adolescents. Lastly, loss was significantly and negatively associated with global self-worth and positively associated with PTSD symptoms.

*Acknowledgements*

I would first like to thank my very wise advisor Dr. Russell T. Jones from whom I learned research skills, and who made this study possible. I thank him for his excellent guidance in my thesis and education endeavors. I would also like to thank my committee members, Dr. Thomas H. Ollendick and Dr. David W. Harrison for their valuable feedback, guidance, and encouragement in this process.

TABLE OF CONTENTS

Abstract ..... ii

Acknowledgements..... iii

Table of Contents ..... iv

List of Tables..... v

List of Figures..... ix

Introduction ..... 1

Purpose and Hypotheses ..... 12

Method ..... 15

Results..... 20

Discussion ..... 32

References ..... 43

Tables..... 49

Figures ..... 90

List of Tables

Table 1 Demographic variables of Sample size (N), Age, Sex, Race and Socio-Economic Status (SES) .....49

Table 2 Means and Standard Deviations of Age, Sex, Race, and Socio-Economic Status..50

Table 3 Means, Standard Deviations, and Internal Consistency Reliabilities..... 51

Table 4 Reproduction of Wang’s (2004, p. 76) new factor loading findings following exploratory factor analysis of RCAS children responses.....52

Table 5 Rates of Missing Data in sample (N = 140).....53

Table 6 t tests for Gender group differences across measures .....54

Table 7 t tests for Race group differences across measures.....55

Table 8 t tests for Age group differences across measures .....56

Table 9 t tests for Socio-Economic Status group differences across measures .....57

Table 10 Paired Samples t test for Spiritually based coping and Religious Discontent .....58

Table 11 Zero- Order Correlations among the variables.....59

Table 12 Hierarchical regression analysis for Self- Worth and Spiritually based coping....60

Table 13 Hierarchical regression analysis for Total Social Support and Spiritually based coping.....61

<u>Table 14</u> Hierarchical regression analysis for Family Social Support and Spiritually based coping.....	62
<u>Table 15</u> Hierarchical regression analysis for Teacher Social Support and Spiritually based coping.....	63
<u>Table 16</u> Hierarchical regression analysis for Peer Social Support and Spiritually based coping .....	64
<u>Table 17</u> Hierarchical regression analysis for Family Religious Environment and Spiritually Based Coping.....	65
<u>Table 18</u> Hierarchical regression analysis for Self- Worth and Religious Discontent (original 3 -item scale).....	66
<u>Table 19</u> Hierarchical regression analysis for Total Social Support and Religious Discontent (original 3 -item scale).....	67
<u>Table 20</u> Hierarchical regression analysis for Family Social Support and Religious Discontent (original 3 -item scale).....	68
<u>Table 21</u> Hierarchical regression analysis for Teacher Social Support and Religious Discontent (original 3- item scale).....	69
<u>Table 22</u> Hierarchical regression analysis for Peer Social Support and Religious Discontent (original 3- item scale).....	70
<u>Table 23</u> Hierarchical regression analysis for Family Religious Environment and Religious Discontent (original 3 -item scale).....	71

<u>Table 24</u> Hierarchical regression analysis for Self- Worth and Religious Discontent (2- item scale).....	72
<u>Table 25</u> Hierarchical regression analysis for Total Social Support and Religious Discontent (2- item scale).....	73
<u>Table 26</u> Hierarchical regression analysis for Family Social Support and Religious Discontent (2- item scale).....	74
<u>Table 27</u> Hierarchical regression analysis for Teacher Social Support and Religious Discontent (2- item scale).....	75
<u>Table 28</u> Hierarchical regression analysis for Peer Social Support and Religious Discontent (2- item scale).....	76
<u>Table 29</u> Hierarchical regression analysis for Family Religious Environment and Religious Discontent (2- item scale).....	77
<u>Table 30</u> Hierarchical regression analysis for Self- worth and Spiritually based coping, with added interaction variable of Sex x Race.....	78
<u>Table 31</u> Hierarchical regression analysis for Total Social Support and Spiritually based coping, with added interaction variable of Sex x Race.....	79
<u>Table 32</u> Hierarchical regression analysis for Family Social Support and Spiritually based coping, with added interaction variable of Sex x Race.....	80
<u>Table 33</u> Hierarchical regression analysis for Teacher Social Support and Spiritually based coping, with added interaction variable of Sex x Race.....	81

Table 34 Hierarchical regression analysis for Peer Social Support and Spiritually based coping, with added interaction variable of Sex x Race.....82

Table 35 Hierarchical regression analysis for Family Religious Environment and Spiritually Based Coping, with added interaction variable of Sex x Race.....83

Table 36 Hierarchical regression analysis for Self- Worth and Religious Discontent (2-item scale), with added interaction variable of Sex x Race.....84

Table 37 Hierarchical regression analysis for Total Social Support and Religious Discontent (2- item scale), with added interaction variable of Sex x Race.....85

Table 38 Hierarchical regression analysis for Family Social Support and Religious Discontent (2- item scale), with added interaction variable of Sex x Race.....86

Table 39 Hierarchical regression analysis for Teacher Social Support and Religious Discontent (2- item scale), with added interaction variable of Sex x Race.....87

Table 40 Hierarchical regression analysis for Peer Social Support and Religious Discontent (2- item scale), with added interaction variable of Sex x Race.....88

Table 41 Hierarchical regression analysis for Family Religious Environment and Religious Discontent (2- item scale), with added interaction variable of Sex x Race.....89

List of Figures

Figure 1. The proposed moderator model of factors: Self-Worth, Total Social Support, Family Social Support, or Family Religious Environment moderating the relation between Loss and Children’s Religious Discontent.....90

Figure 2. The proposed prediction model of factors: Resource Loss, Self-Worth, Total Social Support, Family Social Support, or Family Religious Environment predicting Spiritually Based Coping.....91

Figure 3. Interaction between Resource Loss and Total Social Support predicting Religious Discontent .....92

Figure 4. Interaction between Resource Loss and Peer Social Support predicting Religious Discontent.....93

The Role Of Self-Worth, Social Support, And Family Religious Environment In Children  
And Adolescents' Religious Coping With Loss Following Residential Fires

Trauma is no longer something that happens only to veterans or victims of abuse. Public and professional consciousness of the effects of trauma and the need to proactively cope in unexpected times of crisis has increased, especially after 9/11. Unfortunately most studies in the field of trauma have focused on the effects of trauma on mental health outcomes. Few studies have focused on factors and coping strategies that make a person more resilient in times of crisis. Information regarding which factors are protective and their influence on the selection of coping strategies in trauma situations is lacking. This is especially the case for children. In a time of man made disasters, terrorism and unexpected crisis like the California wildfires, the public looks to mental health professionals for answers and ways to help children cope. Therefore the need to be proactive, resilient and prepared with adequate coping and focus on resiliency and coping in the context of trauma has become the need of the hour.

Prominent researchers in the field of coping such as Lazarus and Folkman (1984) have long emphasized the need to include religion in the study of coping. They asserted that coping resources include health and energy, existential beliefs (e.g., about God) or general beliefs about control, commitment, skills, social support, and material resources. Research has been done on several types of coping in children (Sandler, Wolchik, MacKinnon, Ayers, & Roosa, 1997; Spirito, Stark, & Williams, 1988). However, these studies have not addressed the potential role of religion as a coping strategy. Therefore, in spite of the theoretical importance of existential beliefs as a coping resource, little empirical research has been conducted on how these beliefs are manifested in the coping process. Therefore, drawing from Lazarus and Folkman's (1984) theory of coping, it can be said that religious coping is one of the coping strategies individuals use to deal with situations that tax or exceed their resources.

*Definitions of Coping*

Coping has been defined by Lazarus and Folkman (1984) as "constantly changing cognitive and behavioral efforts to manage specific external and/or internal demands that

are appraised as taxing or exceeding the resources of the person" (p. 141). Religious coping has been defined by Tix and Frazier (1998) "as the use of cognitive or behavioral techniques, in the face of stressful life events, that arises out of one's religion or spirituality" (p. 411). Pargament (1997), a key figure in the field of religious coping, defined religious coping as "a search of significance in times of stress" (p. 90).

### *Religious Coping: A Conceptual Framework*

Pargament and his colleagues have carried out a series of studies on religious coping (1990, 1992, 1997, 1998), mainly working toward proposing and empirically building upon models of religious coping. In 1990, Pargament proposed the general conceptual framework of religious coping and gave some examples of religious coping activities. These included religious coping such as interpersonal (e.g., "Received concrete help from the congregation"), spiritual (e.g., "experienced God's love and care"), and emotional (e.g., "Felt angry with or distant from God") (p. 204). This model was based on a review of past theoretical and empirical literature in the field of psychology and coping. He gave three theoretical reasons for the connection between religion and coping and later he and his colleagues conducted a series of studies that found empirical evidence for each of them.

First, religion is a part of the coping process in that it affects the coping process. That is, religion can be a part of the secondary appraisal of the situation, a resource or a constraint to coping or serve important psychological functions. For example, Pargament, et al. (1992) found evidence for different religious beliefs to be significantly and positively correlated with different religious coping activities, when assessed in the same point in time. However, they were not sure of the direction of the relationship between religious beliefs and religious coping. Primarily they found Spiritually based coping to be associated with positive appraisals of the negative life event and problem-solving and Religious Discontent to be associated with active religious struggle.

Second, religion can influence the outcomes of important situations. That is, it can promote adaptive or non-adaptive outcomes. Pargament et al. (1990) did an exploratory study aimed at finding what kinds of religious coping efforts were helpful, harmful and irrelevant to people dealing with significant negative life events. They found spiritually

based coping and religious discontent to be distinct significant predictors of positive and negative physical and mental health outcomes respectively. They concluded that spiritually based coping is a helpful way of coping, whereas religious discontent is a harmful way of coping with negative life events.

And third, religion can be a product of the coping process. Here religious coping is the dependent variable, where the nature of the event affects religious coping. The more loss and stress a situation involves, or higher the appraised loss, harmful or lack of control, the greater is the use of religious coping. Here, Pargament (1997), in his review of religious coping studies, cites studies that empirically support this assumption that people are more likely to use spiritually based coping under high levels of stress.

Pargament, Smith, Koenig, and Perez's (1998) most recent theoretical model entitled "the patterns of positive and negative forms of religious coping" is a synthesis of his earlier work. This model is similar to other models of coping in that it has been primarily built upon Lazarus and Folkman's (1984) transactional model of stress and coping. It differs from other models in that it takes into account the importance of religious coping with stressful life events. Specifically, this model describes how adaptive or positive forms of religious coping such as spiritually based coping can buffer or change the relation between stress and health outcomes to promote better physical and mental health outcomes. Likewise, negative religious coping such as religious discontent is associated with less adaptive physical and mental health outcomes.

Spiritually based coping and religious discontent are the most conceptually, theoretically and empirically different types of religious coping (Pargament et al., 1990). In fact they appear to represent two opposite dimensions or extreme reactions in terms of one's faith and relationship with God. Spiritually based coping involves an intimate, trusting relationship and positive image of God, whereas religious discontent involves expressing anger and doubt with God and members of the church. Spiritually based coping is defined as "the individual's personal loving relationship with God throughout the coping process." It "takes the form of emotional reassurance, positive framing of problems, acceptance of the limits of personal control, and guidance in problem solving." In contrast, religious discontent has been defined as an expression of "anger or distance

from God and the church and questions about one's faith" (Pargament et al., 1990, p. 802).

*Review of literature: Studies of Religious Coping*

*Adult Studies: Religious Coping as a means of dealing with a stressor*

In that few studies examining the topic of religious coping have been reported in the literature, both child and adult studies will be briefly reviewed to provide a context for the present investigation. Several adult studies in the field of coping in the past have acknowledged religious coping as one of the coping strategies available to individuals to deal with stress (Carver, Scheier, & Weintraub, 1989; Lazarus & Folkman, 1984; Stone & Neale, 1984). These studies have found religious coping to be used by a substantial proportion of the population in times of stress. However, most of these studies have viewed religious coping as a single construct. Pargament and his colleagues were among the first to emphasize and empirically assess religious coping as a multidimensional construct and emphasize its beneficial effects.

The need to study religious coping following trauma becomes apparent after a general review of the literature on its beneficial effects. Benefits to both physical and mental health have been reported (Pargament, Ensing, et al., 1990; Pargament & Hahn, 1986). Hood, Spilka, Hunsberger, and Gorsuch (1996) assert that religion performs three major coping functions: answer to the common-man's fundamental needs of meaning, control, and self-esteem, especially in times when the individual is threatened by life stress. Pargament and Park (1995) assert that religious coping may serve to provide comfort, stimulate personal growth, enhance closeness with God and others, and offer meaning and purpose in life.

*Adult Studies: Religious Coping as an outcome*

Few adult studies have examined religious coping as an outcome variable, predicted by life events. In his book entitled: "The Psychology of Religion and Coping," Pargament (1997) adopted Spilka, Shaver, and Kirkpatrick's (1985) framework to classify predictors of religious coping. According to Spilka et al. (1985), whether an event is understood and interpreted from a religious framework or a non-religious framework, depends on three considerations: the nature of the person, the nature of the

event, and the nature of the context surrounding both the person and the situation. Borrowing from this framework, Pargament (1997) classified the predictors of religious coping into three categories: situational forces, cultural forces, and individual forces.

#### *Situational factors*

Situational factors that predict religious coping include high levels of stress, loss, appraisals of loss, harm or threat, and health-related concerns. Pargament (1997) reported that people were more likely to turn to religion and use higher levels of religious coping when the situation was appraised as more stressful, especially if it involved loss. For instance, Pargament, et al. (1992a) examined whether religious and non-religious coping differed across life events such as the degree to which the event was appraised as a threat, challenge/ opportunity, or harm/loss. They subdivided their sample into four groups depending on their experience of one of four negative events over the past year. These included: first, the death of a family member or close friend; second, a work-related problem such as unemployment, or being fired or laid off; third, an interpersonal conflict such as a divorce or a separation; and fourth, a health-related problem. The four groups coped differently in the different situations, making use of different religious and non-religious coping strategies.

The first group who had coped with a severe loss such as the death of a friend or family member as well as the fourth group facing health related problems reported more use of spiritually based coping and received support from the church. The first group dealing with death also engaged more in religious avoidance and turning more to their religion and church for closeness and support. They were less likely than other groups to make use of non religious coping activities. Pargament and Brant (1998) reviewed studies on religion and coping and observed religious coping to be especially useful in disaster situations when circumstances were out of personal control and there existed a high need for support and a sense of control.

#### *Individual factors*

Individual factors include demographic variables such as race, socioeconomic status, age, and gender, as well as other factors such as religious commitment and involvement. For example, several studies suggest race to be an important factor in coping with stress, where religious coping is used more commonly by African Americans

than other racial sub-groups (Bearon & Koenig, 1990; Ferraro & Koch, 1994; Koenig et al., 1992; Pargament, 1997). Studies also show that poor people are more likely to rely on religious coping in stressful times than people who are financially better off. Some reasons include the persistence of multiple stressors and fewer resources associated with low socioeconomic status (Gurin Veroff & Feld, 1960; Hobfoll, 1989; Pargament, 1997). With respect to age, several studies show that the use of religious coping is associated with old age. That is, older adults tend to use more religious coping than other age groups (Ferraro & Koch, 1994; Koenig et al., 1992). Gender has been found to be an important factor in religious coping. Females are generally found to use religious coping more than males under stressful situations (Bjorck & Cohen, 1993; Ellison & Taylor, 1996; Ferraro & Koch, 1994; Gurin Veroff & Feld, 1960; Koenig, George, & Siegler 1988; Pargament, Olsen, et al., 1992; Park & Cohen, 1993; Sattler et al., 1994).

#### *Cultural Factors*

Cultural factors include the social context, geographic location, local culture and culture of origin. Pargament (1997) views culture as encouraging some religious expressions but discouraging others. He proposed that culture also influences what kind of religious coping methods are used and how the situation is appraised in crisis situations. For instance, a national study found spiritual coping to be a more common response to deal with problems among people living in the South (Ferraro & Koch, 1994). However, most of the studies referred to by Pargament (1997) have compared western culture to other cultures and religions such as Muslims, Balinese and Spanish.

#### *Child Studies: Religious Coping as a means of dealing with a stressor*

Child studies in the trauma area have acknowledged that children may use multiple coping strategies in the face of adversity (Sandler et al., 1997; Spirito et al., 1988). The general coping literature has focused on identifying adaptive and maladaptive forms of coping. Several studies have consistently found problem - focused coping and active coping to be associated with adaptive outcomes, whereas emotion - focused coping and avoidance coping are associated with maladaptive outcomes (Lazarus & Folkman, 1984; Sandler et al., 1997; Spirito et al., 1988).

In a recent study in the field of pediatric psychology, Landolt, Vollrath, and Ribi (2002) were interested in examining how children cope with stressful life events, such as

accidents, being diagnosed with cancer, or being diagnosed with diabetes mellitus. In their sample of 179 hospitalized children, average age of 10.2 years, use of religious coping was found to be a common response in children. Sixty one percent of the children in the accidents diagnostic group reported using religious coping. Fifty six percent of the children in the diabetes diagnostic group, and 73.1% of the children in the cancer diagnostic group reported using religious coping. An important finding was that children of lower socioeconomic status used religious coping strategies significantly more often than those with higher SES. However, the authors were not able to adequately explain this finding and thus recommended the need for future research in this area.

Another pediatric study that found evidence for religious coping as an important coping resource in children was a qualitative study by Pendleton, Cavalli, Pargament, and Nasr (2002). These researchers found approximately 72% of 23 children with cystic fibrosis, ages 5 to 12, used Spiritual Coping, whereas only 9% of the children used Religious Discontent. These findings are consistent with the adult literature (Pargament, 1990) suggesting that children show similar religious coping strategies as adults. In sum, these findings support the advocacy by others including Freedy, Shaw, Jarrell, and Masters (1992) and Jones and Ollendick (2001) to assess religious coping in children in response to resource loss in disaster situations.

#### *Child Studies: Religious Coping as an outcome*

While religious coping has been viewed as an important resource in dealing with stressors, only two studies have looked at the area of children's religious coping in response to stress.. Pendleton, Cavalli, Pargament, and Nasr (2002)'s study proposed a theoretical model for predictors of children 's religious coping. However, a major limitation of this child model is that it was based on a small sample of qualitative data. Therefore, it will not be included as a prominent guiding model in this study.

Only a single study to date has explored predictors of children's religious coping in response to traumatic life events. Wang (2004) examined the predictors of children's religious coping following residential fires. She examined 140 children and adolescents, between the ages 8 and 18 across five states in the south-western portion of the United States. They were individually interviewed approximately 3 months following a major residential fire. She used a modified version of the RCAS to assess children's religious

coping. In an initial analysis she found six factor structure item loading for the children's responses on the Religious Coping Activities Scale (RCAS) as compared to the six factor structure item loading of adult responses in previous research (Pargament et al., 1990). The six factors found on the RCAS for adults included Spiritually based coping, Good Deeds, Religious Support, Plead, Religious Discontent and Religious Avoidance of the RCAS in four of the thirty-two RCAS items loaded differently on the six-factor structure of the scale for children's responses to residential fires. Item 1 ("Trusted that God or a higher power would not let anything terrible happen to me") of the spiritually based coping sub-scale loaded most highly on the Plead factor along with the 5 Plead sub-scale items. Three of the Good Deeds sub-scale items (Item 13. "Tried to be less sinful", Item 14. "Confessed my sins", and Item 15. "Led a more loving life") loaded most highly on the Spiritually based coping factor with the other 11 Spiritually based coping sub-scale items in the RCAS. Consequently, the two types of coping selected for her study were Spiritually Based Coping and Religious Discontent. Support for their distinctiveness was based on their different patterns of correlation with other variables (see Wang, 2004).

Different predictors for children and adolescent's use of religious coping approximately four months following the residential fire were found. Children's spiritually based coping was predicted by parents' own spiritually based coping, resource loss, child's age and days since the fire. Some important predictors for religious discontent included parents' religious discontent and resource loss. Another primary finding was that children endorsed a significantly higher level of spiritually based coping than did adolescents. There were no significant age differences with respect to religious discontent.

As a follow up to Wang's (2004) study, in addition to re-examining the impact of resource loss on children and adolescent's religious coping, the present study will also evaluate the processes by which the protective factors of self-worth, social support, family support, and family religious environment predict children's coping. Specifically, we are looking at the role of resources including global self-worth, social support from parents, teachers, and peers, and, family religious environment in children's religious coping. A brief discussion of the four major predictor variables (resource loss, self-worth, social support, and family religious environment) follows.

*Resource Loss*

Loss was initially defined by Lazarus and Launier (1978) as damage that has occurred to the individual. Lazarus and Folkman (1984) later conceptualized loss as harm and defined it as damage to the individual that has already been sustained. More recently, Hobfoll (1989) conceptualized loss as an undesirable event in which a person is threatened by the potential or actual loss of valued resources, which the person had striven to retain, protect and build. The definition of loss can also include the loss of the expected or envisioned gains. Hobfoll defined resources as “those objects, personal characteristics, conditions, or energies that are valued by the individual or that serve as a means for attainment of these objects, personal characteristics, conditions, or energies” (p. 516).

Hobfoll’s (1989) Conservation of Resources (COR) model is particularly applicable to the field of trauma. According to the COR theory, the threat of a potential or actual loss of resources valued by the individual (such as objects, conditions, personal characteristics and energies) can result in stress. Therefore, the higher the perceived or actual loss of valued resources, the higher will be the lack of resources or depletion of resources used by the individual in the coping process and the higher will be the feelings of stress experienced.

Loss has been found to be an important predictor of children’s post-disaster functioning (Asarnow, Glynn, Pynoos, Nahum, Guthrie, Cantwell, & Franklin, 1999; Freedy et al., 1992; La Greca, Silverman, Vernberg, & Prinstein, 1996; Vernberg, E.M., LaGreca, Silverman, & Prinstein, 1996). More recently, preliminary studies have shown that loss is not only associated with children’s distress following trauma, but can also potentially impact their coping (Jones & Ollendick, 2002; Jones, Vernberg et al., 1996).

In regards to religious coping, Pargament (1997), in his conceptual framework on the predictors of religious coping, attempted to explain the role of loss as an important situational predictor of religious coping. As alluded to earlier, several adult studies have shown religious coping to be dependent on the situational variable, loss. Studies have shown that loss has been associated with higher levels of religious coping (McCrae, 1984; Bjorck and Cohen, 1993; Pargament, 1997; Pargament et al., 1990, 1992, 1998).

With respect to children, Wang (2004) found loss to be a significant predictor of children's religious coping following residential fires. Higher levels of loss were associated with higher levels of spiritually based coping and religious discontent. This present study will examine this relationship further.

### *Self-worth*

Global self-worth has been defined by Harter (1986) as “the overall value that one places on the self as a person in contrast to domain-specific evaluations of one's competence or adequacy” (p. 67). Global self-worth can be conceptualized as a resource. Lazarus and Folkman (1984) have defined a resource as “what an individual draws on in order to cope,” and argue that resources “precede and influence coping” (p.158). A few child studies have found self-worth to be a buffer against stress as well as beneficial to mental health (Bennett & Bates, 1995; La Greca & Fetter, 1995). Other studies with children have examined self-worth as a potential source of resilience in times of adversity (Davey, Eaker, & Walters, 2003; Garmezy & Devine, 1984; Rutter, 1985, 1986; Werner, 1984, 1994). Its stability across time has also been documented and empirically supported by both genetic and environmental studies (Granleese & Joseph, 1994; McGuire, Manke, Saudino, Reiss, Hetherington, & Plomin, 1999).

In one of the few child studies examining the relationship between self-worth and religion, Francis, Gibson, and Robbins (2001) targeted the relationship between positive and negative images of God and Self-Worth. The sample consisted of a total of 866 adolescents between the ages of 12 and 15 in Scotland. They were asked to complete measures of Self-Worth and God images. The Self-Worth rating scale contained 8 items assessing personal meaning, purpose, and satisfaction in life, a sense of control over life and satisfaction with oneself. God images were assessed by a 4 item rating scale. Two items were negative (“I believe that God is cruel” and “I believe that God is like a judge who punishes us”), whereas the other two were positive (“I believe that God is loving” and “I believe that God is forgiving”). Results showed significant positive correlations between self-worth and the positive images of God as loving and forgiving. They also found significant negative correlations between self-worth and the negative images of God as cruel. The researchers concluded that these findings confirmed similar findings by

Benson and Spilka (1973) and Spilka et al. (1975) documenting a clear empirical and concurrent relationship between the religious beliefs and self-worth.

Notwithstanding these interesting findings, no study has specifically explored self-worth as a predictor of coping (Pargament et al., 1990, 1997). In an exploratory study Jones, Wang and Ollendick (2004) found that higher levels of self-worth in children who had experienced a residential fire significantly predicted lower frequencies of coping efforts, regardless of types of coping. They explained this finding in light of the possibility that the higher the children's self-worth the less they felt threatened by stress associated with the fire and, therefore, perceived less demands for making coping attempts. This study will examine this relationship further.

### *Social Support*

Studies in the child literature on coping have found social support to be an important resource and coping mechanism children can access following stressful events (Compas & Epping, 1993; Sandler, Wolchik, MacKinnon, Ayers, & Roosa, 1997). This social support often comes in various forms from parents, family members, friends, teachers, and classmates.

Parents' support has been especially cited as the most important source of social support, followed by teachers' support that can influence children's coping through factors such as modeling or promoting adaptive coping (Pynoos & Nader, 1988; Vogel & Vernberg, 1993; Wills & Cleary, 1996). Some studies have also supported the beneficial effects of friends (La Greca et al., 1995; La Greca & Spetter, 1992). Some studies involving children's reactions following disasters, have found overall perceived access to social support from family, friends, teachers and classmates to be an important buffer against the negative impact of disaster-related loss. Three months after Hurricane Andrew, for example, children reported the highest levels of perceived support from their parents, followed by support from their close friends and teachers. They reported the lowest levels of support from their classmates. Higher levels of perceived social support from parents and friends, as well as an unique contribution from teachers and classmates predicted lower levels of PTSD symptoms (Vernberg, La Greca, Silverman, & Prinstein, 1996; La Greca, Silverman, Vernberg, & Prinstein, 1996). However, these studies did not examine the predictors of children's coping following the disaster. Also most child

studies in the field of trauma and coping have focused mainly on elementary school children. Furthermore, few studies have examined the impact of social support on children's religious coping. The only study so far in the field of child trauma and coping that has looked at this relationship is by Wang (2004).

In examining children and adolescents approximately four months following residential fires, Wang (2004) found family support to be associated significantly with children's adaptive ways of religious coping, namely spiritually based coping. She also found that parent's religious coping predicted children's religious coping. While these findings provide initial insights into aspects of religious coping among children, adolescents and their parents following traumatic experiences, additional relationships need to be examined. In addition to exploring the potential moderating role of each of these relationships, several other relationships will be pursued.

#### *Family Religious Environment*

Family religious environment can be conceptualized as a resource, which includes the family's religious practices, the family's agreement on religious beliefs and perceived access to talk about religious issues. A disagreement between parents and children's use of religious coping, regardless of whether the religious coping strategy is adaptive or maladaptive, may be less likely to be associated with higher levels of general family religious environment. It will be interesting to further explore the relative contributions of family religious support as compared to general family religious environment in predicting children's use of adaptive or less adaptive religious coping.

#### *Purpose of the study and Hypotheses*

The purpose of the present study was to propose and test moderator and predictor models of religious coping. First, a moderator model of factors affecting children and adolescents' religious discontent in response to perceived resource loss. And second, a prediction model of factors affecting spiritually based coping. The first model (see Figure 1) that was investigated in the present study concerned the potential moderating role of self-worth as an internal resource and social support, and family religious environment as external resources in the relationship between resource loss and religious discontent. The second model (see Figure 2) does not propose moderation for loss and spiritually based

coping. Rather it is a prediction model of self-worth, social support, and family religious environment as predicting children and adolescents' spiritually based coping.

Primarily, it was hypothesized that the degree of self-worth, social support, and family religious environment will affect religious coping in children and adolescents victimized by fire. Specifically, the moderator model assessed whether the amount of self-worth, social support reported by children and adolescents, and family religious environment reported by parents differentially influenced children and adolescents' religious discontent. This model is based on the notion that higher levels of self-worth, social support, or family religious environment act as protective factors, whereas, lower levels of self-worth, social support, or family religious environment act as risk factors for religious discontent. The prediction model assessed whether the amount of self-worth, social support reported by children and adolescents, and family religious environment predicted significant proportions of spiritually based coping. This model was based on the notion that higher levels of self-worth, social support, or family religious environment are likely to predict greater use of spiritually based coping, whereas, lower levels of self-worth, social support, or family religious environment predict lesser use of spiritually based coping.

A moderating effect for these variables was considered to be established for loss and religious discontent if the statistical relationship between them was found to be stronger for both children and adolescents indicating lower self-worth and social support than higher levels of self-worth, social support, and family religious environment (Baron & Kenny, 1986; Holmbeck, 1997).

Both models were examined with separate hierarchical regression analyses where variables were entered according to their theoretical significance in the model. These models were developed based on La Greca, Silverman, Vernberg & Prinstein's (1996) work. In their model, theoretical significance has been given to factors in the descending order of first, exposure to the traumatic event including degree of life threat, and property loss and disruption, followed by preexisting child characteristics (i.e., educational level, gender, and ethnicity), and followed by post-disaster characteristics such as major life events, different types of social support from parents friends, classmates and teachers. Lastly, coping efforts such as positive, blame-anger, social withdrawal, and wishful

thinking are considered important in post-disaster coping. Drawing from La Greca et al.'s (1996) model, the present study aims to examine the same predictors of children and adolescents' coping following residential fires. The only difference between La Greca et al.'s (1996) model and the present models is that their model predicted distress, whereas the present models predict coping (i.e., spiritually based coping and religious discontent).

The moderational model as compared to the predictor model had an additional step of entering the interaction term to examine moderation. In each of these analyses, resource loss was entered first into the regression because it was theorized to be the main predictor impacting religious coping, and all other variables were examined as they occurred in the context of loss. Demographic variables were entered at the second step to control for their ability to impact and contribute to religious coping. These variables included sex, followed by race, age and socioeconomic status. In the third step the hypothesized resource (i.e., global self-worth, social support, family support, or family religious environment) was entered to examine its relative contribution to religious coping above and beyond that of loss and demographic variables. An additional fourth step of entering the interaction term (resource loss x resource) was included for testing the moderational model.

In addition, loss was expected to have a positive relation with religious coping because of its roles as a primary stressor eliciting coping responses in people. As seen in the literature, spiritually based coping was expected to be higher than religious discontent.

Demographic variables such as child's sex, race, and parental education level were expected to be related to a child's religious coping in a way similar to that suggested by the adult literature. That is, girls would engage in more religious coping compared to boys. African Americans would engage in more religious coping compared to European Americans. Finally, participants from a lower socio-economic status were expected to engage in more religious coping compared to those from a higher socio-economic status. Socioeconomic status would have a positive relationship with Spiritually based Coping and a negative relationship with Religious Discontent.

## Method

### *Participants*

One hundred and forty children and adolescents, and their parents, participated in the present study. The sample was comprised of children and adolescents between the ages 8 to 18, with a mean age of 12.11 ( $SD = 2.81$ ). Of these, 63 participants (45 percent) were boys and 77 (approximately 55 percent) were girls. Also 74 participants (53 percent) were African Americans and 66 participants (47 percent) were European Americans.

### *Measures*

*Demographic Information.* The demographic information was obtained from parents during the interview. This included information on the child's age, gender, ethnicity, and socio-economic status (see Tables 1-3). Age was categorized as children (age 8 to 12 years, coded as 0) or adolescents (13 to 18 years, coded as 1). Gender was classified as female or male, coded as 0 and 1 respectively. Race was grouped as European Americans and African Americans, coded as 0 and 1, respectively. And socio-economic status was organized as low or high, again coded as 0 and 1, respectively. Here, socio-economic status was the parents' education level. Parents' education information was coded on a scale of 1-7 based on the Educational Factor classification of Hollingshead's (1975) Index of Social Status. The scale was coded as: 1 = less than 7th grade, 2 = junior high school (9th grade), 3 = partial high school (10th or 11th grade), 4 = high school graduate, 5 = partial college (at least one year) or specialized training, 6 = college or university graduation, and 7 = graduate degree. The criterion of whether the participants had completed high school or not was taken as the cut off for high and low socio-economic status, respectively.

*Religious Coping Activities Scale (RCAS; modified by Wang, (2004):* This 32-item self-report scale was originally developed by Pargament et al. (1990) for use with adults. This measure asks participants to rate the extent to which they used each item in their coping with the fire on a 4-point likert scale (1 = Not at all; 2 = Somewhat; 3 = Quite a bit; 4 = A great deal; re-scaled to be 0-3). Wang (2004) found different item loadings for children on the same six factors of religious coping as seen in adults (see Table 4). These factors include Spiritually Based Coping, Good Deeds, Religious

Support, Plead, Discontent, and Religious Avoidance. Internal consistency estimates ranged from .61 to .92 for the six sub-scales in the original study measure (Pargament et al., 1990) and from .69 to .94 in the present child sample as reported by Wang (2004). Wang's (2004) modified version of this scale for children was used in the present study, where items 1 to 14 are items 2 to 15 from Pargament et al.'s (1990) original scale. Specifically, the measures of the sub-scales of Spiritually Based Coping and Religious Discontent were used as outcome measures of religious coping in children. Examples of spiritually based coping items include "Experienced God or a higher power's love and care" and "Tried to be less sinful." Examples of religious discontent items include "Felt angry or distant from God or a higher power," "Felt angry with or distant from the members of the church, synagogue, temple, or place of worship," and "Questioned my religious beliefs and faith."

*Resource Loss Scale for Children (RLSC; Jones & Ollendick, 1994):* The Resources Questionnaire was originally developed by Freedy et al. (1992). It was modified for children by Jones & Ollendick (1994). This modified version of the self-report measure consists of 22 items assessing loss following the fire on four factors: object loss, energy loss, condition loss, and personal characteristic loss. Children were instructed to first respond "yes" or "no" to whether or not they had experienced the loss of each item. If they answered yes to an item, they were further questioned and rated on the extent of loss on a 3-point scale (1 = a little, 2 = some, 3 = a lot). For the present study, the sum of the impact of loss scores across the 22 items was used as a measure of the total loss of resources. An internal consistency of .79 was found for the present sample.

*Global Self- Worth Sub-scale of the Self-Perception Profile for Children (SPPC; Harter, 1985):* The original SPPC is a 36-item scale designed to measure children's self-competence in a number of areas. Each item contains two statements that are antithetical to the other (e.g., "Some kids like the kind of person they are, BUT Other kids wish that they were different") and the child has to choose one of the statements and then rate it as really true or sort-of true. This scale provides different scores for 6 sub-scales (i.e., scholastic competence, social acceptance, athletic competence, physical appearance, behavioral conduct, and global self-worth). However, only the global self-worth (GSW)

sub-scale was used in the present study. This sub-scale contains six items with half of them reverse-worded. The total scores can range from 6 to 24, with higher scores reflecting more positive feelings of self-worth. The total number of six items in the sub-scale divides the total score on the global self-worth sub-scale, to yield a sub-scale mean item score ranging from 1 to 4. The original normative and psychometric data for this scale are available for children in grades three through eight. Harter (1985) has reported acceptable internal consistency coefficients for the GSW ranging from .78 to .84. The present study found an internal consistency coefficient of .71 for the study sample.

*Dubow Social Support Scale (DSSS; Dubow & Ullman, 1989):* This is a 9-item instrument, which contains items with the highest factor loading from the original 41-item version. This scale provides a measure of the participants' subjective perceived appraisals of family, teacher, and peer social support available. Participants responded to the 9 questions using a 5-point Likert scale. Low scores indicate that the participant perceives a low level of availability of support from family, teachers, or peers. High scores indicate that the participant perceives a high level of availability of support. Internal consistency by the original authors has been reported as .88, while test-retest reliability for a 3 – 4 week period has been found to be .75 (Dubow & Ullman, 1989). In order to obtain a measure of fire-related social support, Jones and Ollendick (2001) added three new items to this instrument. For example, "Some kids feel that they are free to talk with their family/teachers/friends about a number of things, but other kids don't feel this way. Do you feel that you are able to talk with your family/teachers/friends about the fire?" Therefore, there are a total of three sub-scales with 4 items each, providing measures for family support, teacher support and friend support. These three sub-scales and their sum of total perceived social support will be used in the present study. The family support sub-scale consisted of the three family support sub-scale items and one fire-related family support item (Wang, 2004). The family support scale has an internal consistency of .84 and the total support scale had a coefficient of .71 for the present sample.

*Family Environmental Scale (FES, Moos & Moos, 1981):* This scale is designed to assess interpersonal relationships and basic organizational structure related to different aspects of the family environment such as cohesion, expressiveness, conflict, and control.

Overall, it evaluates emotional supportiveness and control in the family environment. Its psychometric properties are reported to be adequate. The parents or primary caregivers were asked to respond to these scale items. The instructions ask the examinee to respond based on how he or she sees the family and not based on how other family members see the family. The examinee marks True or False for statements he or she feels are mostly true or false for most of the members of the family. The FES can provide a measure of family religious support or family religious practices as a resource. It includes a Moral-religious emphasis factor on which there are 9 items. These item numbers include Item numbers 8, 18, 28, 38, 48, 58, 68, 78, and 88. These items include “Family members attend church, synagogue, or Sunday School fairly often,” “We don’t say prayers in our family,” “We often talk about the religious meaning of Christmas, Passover, or other holidays,” “We don’t believe in heaven or hell.” Additional items include “Family members have strict ideas about what is right and wrong,” “We believe there are some things where you just have to rely on faith,” “In our family, each person has different ideas about what is right and wrong.” Items also include “The Bible is a very important book in our home,” and “Family members believe that if you sin you will be punished.” The present study found an internal consistency of .61 for the study sample.

*Children’s Reaction to Traumatic Events Scale (CRTES; Jones, 1996):* CRTES is a 15-item self-report checklist assessing children’s PTSD symptoms (Intrusion and Avoidance) in the past week. A 4-point likert scale is used (0 = Not at all, 1 = Rarely, 3 = Sometimes, 5 = Often). The sum of points on each item yields the total CRTES score. Internal consistency for the current sample was .87. Jones, Fletcher, and Ribbe (2002) suggested the following criteria to distinguish different levels of distress based on the total CRTES score: 0-14 indicates a low distress level; 15-27, moderate distress; and 28 and higher, high distress. The present study found an internal consistency of .87 for the study sample.

### *Procedure*

The children, adolescents and their parents were interviewed approximately four months following the residential fires. They were recruited from areas in and surrounding Atlanta, Georgia; Blacksburg and Richmond, Virginia; Charlotte, North Carolina; and Charleston, South Carolina. Each of the participants was interviewed separately by

advanced graduate students in an APA-approved clinical psychology training program and had been trained in the administration of the measures. The interviews were carried out in several locations such as the participants' homes or in public places such as Red Cross offices, neighborhood churches, libraries, or mental health clinics. The measures mentioned in the present study were part of the protocol of instruments administered in an interview of approximately three hours to complete for parents and one and one half-hours for children. Informed consent for assessment was obtained not only from parents or primary care givers but also from the child. Each family was paid a sum of \$75 for their participation in the original Jones and Ollendick (2001) study.

## Results

### *Measure Descriptions*

A summary of all demographic variables is presented followed by their means and standard deviations (see Tables 1 & 2). Internal consistency coefficients and norm comparisons were obtained for each measure used in this study (see Table 3). Mean scores and standard deviations for each scale were found to be consistent with their previously established norms. Acceptable internal consistency coefficients were obtained for each scale. Cronbach's alphas ranged from .61 to .94. Factor loadings based on exploratory factor analyses pertaining to religious coping are presented in Table 4. Rates of missing data from the sample are also presented (see Table 5).

To examine potential differences across the demographic variables of gender, race, age, and socio-economic status in the measures used, a series of independent t-tests were calculated. It was found that gender had marginally significant differences in ratings of resource loss and total social support (see Table 6). Girls reported more loss and greater social support than boys did on the resource loss (RLSC) measure [ $t(98) = 1.77, p = .08$ ] and the social support (DSSS) measure [ $t(98) = 1.87, p = .064$ ]. There were no gender differences found on the other measures used (e.g., HGSW, DSSS, FES, and RCAS).

With respect to race, significant differences were found on ratings of spiritually based coping, resource loss, total social support, and family social support (see Table 7). African Americans reported greater spiritually based coping [ $t(98) = -2.23, p = .028$ ] than European Americans. Whereas, European Americans reported greater loss [ $t(98) = 2.43, p = .017$ ], family support [ $t(98) = 2.19, p = .031$ ] and total social support [ $t(98) = 2.81, p = .006$ ]. There were no race differences found on the other measures used (e.g., HGSW, FES, RCAS religious discontent).

With respect to age, significant differences were found on spiritually based coping (see Table 8). Children used spiritually based coping significantly more than adolescents [ $t(114) = 2.43, p = .017$ ]. There were no age differences found on the other measures used (e.g., RLSC, HGSW, DSSS, FES, and RCAS religious discontent).

With respect to socio-economic status, there were differences in ratings on the religious discontent measure (see Table 9). Children and adolescents with low socio-economic status reported marginally significant higher levels of religious discontent

compared to those with high socio-economic status [ $t(94) = 1.95, p = .054$ ]. In addition, children and adolescents with low socio-economic status reported marginally significant lower levels of self-worth compared to those with high socio-economic status [ $t(94) = -1.95, p = .054$ ]. There were no socio-economic status differences found on the other measures used (e.g., RLSC, DSSS, FES, RCAS spiritually based coping).

To test directionally hypothesized relationships between the demographic variables and religious coping, independent  $t$  tests were conducted at the one-tailed level of significance. As predicted, African Americans used more spiritually based coping [ $t(98) = -2.23, p = .014$ ], than European Americans (see Table 7). Children used spiritually based coping more [ $t(114) = 2.43, p = .009$ ] than adolescents (see Table 8). Both children and adolescents with low socio-economic status reported marginally significant higher levels of religious discontent compared to those with high socio-economic status [ $t(94) = 1.95, p = .027$ ], (see Table 9).

A dependent  $t$  test was conducted to evaluate whether the two dependent variables of spiritually based coping and religious discontent differed significantly (see Table 10). As predicted, the results indicated that the mean of spiritually based coping was significantly greater than the mean of religious discontent [ $t(116) = 17.86, p = .000$ ].

Bonferroni adjustments to control for experiment-wise error rates were applied ( $p < .006$ , 2-tailed levels of significance/  $p < .0005$ , 1-tailed level of significance). Using this approach only the hypothesis stating that spiritually based coping would be higher than religious discontent was significant [ $t(116) = 17.86, p = .000$ ]. However, the Bonferroni approach demands a highly stringent criterion on rejecting the null hypotheses and drastically increases the risk of Type II error. Therefore, relevant precautions should be taken in interpreting the findings. Nonetheless, given the explanatory nature of this investigation, interpretations will be made independent of the Bonferroni corrections.

#### *Relationships among Self-Report Measures*

Correlations were calculated among the total scores of the Spiritually based coping, Religious Discontent, Resource Loss, Self-Worth, Family Support, Total Social Support, PTSD symptoms, and Family Religious Environment measures, as well as demographic factors. All correlational analyses conducted were one-tailed with the purpose of assessing their hypothesized predictive relationships (see Table 11).

Among the demographic variables, sex had significant negative correlations with loss ( $r(96) = -.17, p < .05$ ), age ( $r(96) = -.22, p < .05$ ), social support ( $r(96) = -.17, p < .05$ ), and peer support ( $r(96) = -.25, p < .01$ ). These findings indicate that the gender of girls was associated with higher levels of loss and lower levels of total social support and peer support. The gender of girls was also strongly associated with the elder age group of adolescents. Race had significant negative correlations with loss ( $r(96) = -.23, p < .05$ ), social support ( $r(96) = -.29, p < .01$ ), family support ( $r(96) = -.23, p < .05$ ), and teacher support ( $r(96) = -.30, p < .01$ ), but had a positive correlation with spiritually based coping ( $r(96) = .23, p < .05$ ). These findings indicate that European Americans were associated with higher levels of loss, total, family, and teacher support, but African Americans were associated with higher levels of spiritually based coping. Age had a significant negative correlation with spiritually based coping ( $r(96) = -.30, p < .01$ ), but had significant positive correlations with loss ( $r(96) = .17, p < .05$ ), socio-economic status ( $r(96) = .19, p < .05$ ), and peer support ( $r(96) = .25, p < .01$ ). These findings indicate that younger age group of children were associated with higher levels of spiritually based coping, but adolescents were associated with higher levels of loss, higher levels of socio-economic status, and peer support. Socio-economic status had significant positive correlations with self-worth ( $r(96) = .20, p < .05$ ) and peer support ( $r(96) = .31, p < .01$ ), but had significant negative correlations with religious discontent ( $r(96) = -.20, p < .01$ ) and the anger religious discontent scale ( $r(96) = -.24, p < .01$ ). These findings indicate that high socio-economic status is associated with higher levels of self-worth and peer support, but low socio-economic status is associated with higher levels of religious discontent.

Resource loss was found to be significantly related to religious discontent ( $r(96) = .27, p < .01$ ) and PTSD symptoms. These findings indicate that children and adolescents who reported more loss experiences also tended to report greater religious discontent accompanied by greater PTSD symptoms. As predicted, loss was also found to be more closely associated with religious discontent ( $r(96) = .27, p < .01$ ) than with spiritually based coping ( $r(96) = .14, p = .08$ ). In addition, loss had a significant negative correlation with global self-worth ( $r(96) = -.39, p < .01$ ), indicating that both children and adolescents who reported a high level of loss also reported lower global self-worth.

Self-worth was found to be significantly and negatively related to religious discontent ( $r(96) = -.20, p < .05$ ) and PTSD symptoms ( $r(96) = -.34, p < .01$ ). This indicates that both children and adolescents who reported low global self-worth also tended to report higher religious discontent and PTSD symptoms. This confirmed the prediction of a negative correlation between self-worth and religious discontent. Additionally, social support was found to be significantly correlated with family support ( $r(100) = .83, p < .01$ ), indicating a strong association between family support and the larger concept of total social support.

Family religious environment had a significant positive correlation with spiritually based coping ( $r(96) = .25, p < .01$ ). As was expected in the study, higher reported family religious environment was strongly associated with greater use of spiritually based coping and lesser PTSD symptoms in both children and adolescents. In addition, family religious environment had a significant negative correlation with PTSD symptoms coping ( $r(96) = -.17, p < .05$ ). This indicates that the higher the reported family religious environment, the lesser are the PTSD symptoms reported by both children and adolescents.

Another significant correlation was found between religious discontent and PTSD symptoms ( $r(96) = .18, p < .05$ ), indicating that a higher level of religious discontent was positively associated with higher PTSD symptoms. There were no other significant correlations among the measures.

#### *Prediction of Spiritually based coping*

Four separate hierarchical regression analyses were conducted to explore potential predictors of spiritually based coping including resource loss, global self worth, total social support, family social support and family religious environment. In each of these analyses, loss was first entered into the regression, followed by demographic variables for each analysis. That is, in the first analysis, global self worth was examined. In the second regression, total social support was examined. In the third and fourth regressions, family social support and family religious environment were examined.

With reference to the initial regression analysis examining the predictor role of global self worth (see Table 12) results indicated that demographic variables at step 2 accounted for a significant portion of the variance in children's spiritually based coping

( $R^2$  change = .20,  $F(4,104) = 6.80$ ,  $p = .000$ ). Additionally, the following variables had significant or marginally significant coefficients: loss ( $\beta = .28$ ,  $t = 2.82$ ,  $p = .006$ ), gender ( $\beta = -.18$ ,  $t = -1.93$ ,  $p = .056$ ), race ( $\beta = .32$ ,  $t = 3.62$ ,  $p = .001$ ), and age ( $\beta = -.35$ ,  $t = -.384$ ,  $p = .000$ ). These results indicate that loss and race predicted spiritually based coping, where African American children used greater spiritually based coping than European American children. Gender and age negatively predicted children's spiritually based coping. That is, more girls than boys and more children than adolescents tended to use spiritually based coping in the presence of the variables of loss and self-worth. When all the variables were entered in the model, they accounted for 24 % of the variance in children's spiritually based coping ( $R^2 = .24$ ,  $F(6,103) = 5.41$ ,  $p = .000$ ).

The second regression analysis examining total social support showed that demographic variables again emerged as significant predictors of children's spiritually based coping ( $R^2$  change = .20,  $F(4,104) = 6.80$ ,  $p = .000$ ) (see Table 13). With reference to coefficients, significant contributions of race ( $\beta = .35$ ,  $t = 3.78$ ,  $p = .000$ ) and age ( $\beta = -.34$ ,  $t = -.382$ ,  $p = .000$ ) were obtained. In addition, loss was significant, indicating an impact on spiritually based coping ( $\beta = .24$ ,  $t = 2.58$ ,  $p = .011$ ). These results indicate that race positively predicted children's spiritually based coping, whereas age negatively predicted spiritually based coping. That is, African American children tended to use greater spiritually based coping than European American children, and children used more spiritually based coping compared to adolescents in the presence of loss and social support. When all the variables were entered, the model accounted for 23.8 % of the variance in children's spiritually based coping ( $R^2 = .24$ ,  $F(6, 103) = 5.36$ ,  $p = .000$ ).

The third regression analysis with reference to family social support showed that demographics again emerged as significant predictors of variance in spiritually based coping ( $R^2$  change = .20,  $F(4,104) = 6.80$ ,  $p = .000$ ), consisting of race and age (see Table 14). The variables that had significant or marginally significant coefficients included loss ( $\beta = .24$ ,  $t = 2.52$ ,  $p = .013$ ), gender ( $\beta = -.16$ ,  $t = -1.80$ ,  $p = .075$ ), race ( $\beta = .33$ ,  $t = 3.58$ ,  $p = .001$ ), and age ( $\beta = -.36$ ,  $t = -.370$ ,  $p = .000$ ). These results indicate that girls reported more spiritually based coping than boys, African American children reported greater spiritually based coping than European American children, and children

used more spiritually based coping compared to adolescents in the presence of loss and family support. When all the variables were entered, the model accounted for 22.9 % of the variance in children's spiritually based coping ( $R^2 = .23$ ,  $F(6, 103) = 5.09$ ,  $p = .000$ ).

Post hoc analyses were later conducted to examine the individual effects of the other sub-types of social support, that is, teacher support and peer support. However, neither forms of social support were found to contribute significantly to spiritually based coping (see Tables 15 and 16).

The last predictor that was examined in the fourth regression analysis was family religious environment (see Table 17). With respect to change in  $R^2$ , demographic variables at step 2 again accounted for a large share of the variance in spiritually based coping ( $R^2$  change = .22,  $F(4, 92) = 6.57$ ,  $p = .000$ ). Family religious environment followed at step 3, also with a significant contribution to spiritually based coping ( $R^2$  change = .04,  $F(4, 104) = 6.80$ ,  $p = .000$ ). The following variables had significant or marginally significant coefficients: loss ( $\beta = .24$ ,  $t = 2.55$ ,  $p = .012$ ), race ( $\beta = .27$ ,  $t = 2.89$ ,  $p = .005$ ), age ( $\beta = -.34$ ,  $t = -.3.60$ ,  $p = .001$ ), and family religious environment ( $\beta = .22$ ,  $t = 2.33$ ,  $p = .022$ ). These results indicate that race and family religious environment positively predicted and influenced both children and adolescents' spiritually based coping, whereas age negatively predicted spiritually based coping. African American children reported greater spiritually based coping than European American children, and children used more spiritually based coping compared to adolescents in the presence of loss and family religious environment. The full model significantly accounted for 28 % of the variance in children's spiritually based coping ( $R^2 = .28$ ,  $F(6, 91) = 5.89$ ,  $p = .000$ ).

Using Bonferroni approach to control for Type I error across the four regressions, a  $p$  value of less than .0125 (.05/4) was required for significance. The results of the regression analyses in Tables 12- 15 show that race and age were consistently significant predictors of children's spiritually based coping.

The variables of race, age and loss had significant or marginally significant regression coefficients across all predictions of spiritually based coping. Demographic variables emerged as a significant predictor at step 2 for spiritually based coping support ( $R^2$  change = .20,  $F(4, 104) = 6.80$ ,  $p = .000$ ) in the presence of self-worth, social support,

and family support (see Tables 12-14). Similarly, demographic variables were also a significant predictor at step 2 for spiritually based coping ( $R^2$  change = .22,  $F(4, 92) = 6.57$ ,  $p = .000$ ) in the presence of the family religious environment (see Table 15).

*Summary of Regression Analyses.* In summary, results of the above models revealed several significant findings. Loss was found to significantly predict variance of spiritually based coping. Demographics variables of race and age emerged consistently as significant predictors. African American children reported greater spiritually based coping than European American children, and children used more spiritually based coping compared to adolescents across all four models. Gender was marginally significant in the presence of self-worth and family support, where more girls than boys reported spiritually based coping. Additionally, family religious environment was also found to significantly predict children's spiritually based coping. All four models were statistically significant.

#### *Moderator Model Tests*

Four separate hierarchical multiple regression analyses were conducted to test the hypothesized moderating roles of global self worth, total social support, family social support and family religious environment. More specifically, the potential moderating role of each of these variables on the relationship between loss and religious discontent was examined. In each of these analyses, loss was first entered into the regression, followed by demographic variables, and then by the proposed moderator (i.e., global self worth, total social support, family social support or family environment). In the last step, the interaction variable (e.g., loss x global self worth) was entered. A moderational effect is seen if the interaction term was a significant predictor of religious discontent when the two main effects had been controlled for (Holmbeck, 1997). Therefore, the hierarchical regression would indicate moderation if the interaction term contributed significantly to the coping outcome.

With reference to the initial moderational analysis examining the moderational role of global self worth (see Table 18), only loss at step 1 contributed a significant portion to the variance of religious discontent ( $R^2 = .12$ ,  $F(1, 109) = 14.99$ ,  $p = .000$ ). The regression coefficients of the proposed model's variables, including loss, demographic variables, self-worth and the variable of loss x global self-worth were found

to be non-significant. The full model accounted for 16 % of the variance in religious discontent ( $R^2 = .11$ ,  $F(7, 103) = 2.82$ ,  $p = .010$ ).

The second moderational analysis examined social support as a moderator (see Table 19). Both loss ( $R^2 = .16$ ,  $F(1, 108) = 13.8$ ,  $p = .000$ ) and the social support x loss interaction ( $R^2 = .04$ ,  $F(1, 102) = 4.34$ ,  $p = .040$ ) made significant contributions to the variance. The following variables had significant regression coefficients: loss ( $\beta = 1.02$ ,  $t = -2.08$ ,  $p = .040$ ) and the social support x loss interaction variable ( $\beta = -.73$ ,  $t = 3.15$ ,  $p = .002$ ). As predicted, the hierarchical regression revealed a significant interaction effect across both combinations of loss and social support. The full model accounted for 17 % of the variance in children's religious discontent ( $R^2 = .17$ ,  $F(7, 102) = 13.8$ ,  $p = .007$ ). The information from these multiple regression results was used to further analyze the relationship between social support and religious discontent as a function of the level of resource loss. Using the full regression equation, terms were rearranged in which religious discontent was regressed on seven independent variables (LOSS, sex, race, age, socioeconomic status, social support and the interaction between LOSS and social support). Three different equations were derived: one for high levels of resource loss (mean + 1 SD), one for moderate levels of resource loss (mean), and one for low levels of resource loss (mean - 1 SD). The three equations were as follows:

Low Resource Loss:  $Y_{RD} = -.215 + .015SS$  (positive)

Moderate Resource Loss:  $Y_{RD} = .47 + .005SS$  (flat)

High Resource Loss:  $Y_{RD} = 1.15 + -.004SS$  (negative)

It seems that for the low resource loss group there was a somewhat stronger positive association between social support and resource loss than for either the moderate resource loss group (where the association was positive but much lower) or the high resource loss group (where the association was negative, but small). The association between social support and religious discontent for those with low resource loss suggests that increases in social support are accompanied by an enhanced tendency to cope with trauma by expressing anger towards God. On the other hand, for those with moderate or high resource loss this tendency is less pronounced.

The results of the third analysis tested the moderational role of family social support (see Table 20). It was found that loss was the only significant predictor of

religious discontent ( $R^2$  change = .11,  $F(1, 108) = 13.8$ ,  $p = .027$ ). There were no variables other than loss ( $\beta = .69$ ,  $t = 2.24$ ,  $p = .027$ ) that had significant regression coefficients. When all the variables were entered into the model, the model accounted for 29 % of the variance in religious discontent ( $R^2 = .29$ ,  $F(7, 102) = 2.45$ ,  $p = .023$ ).

The fourth moderation model examined whether family religious environment interacted significantly with loss to influence religious discontent (see Table 23). Only loss was found to significantly account for change in R square in this model ( $R^2$  change = .07,  $\beta = .40$ ,  $p = .275$ ). The moderator model accounted for only 9.7 % of the variance in children's religious discontent and was non-significant ( $R^2 = .10$ ,  $F(7, 90) = 1.39$ ,  $p = .221$ ).

Using the Bonferroni approach in a similar way as the earlier regression analyses for spiritually based coping, a  $p$  value of less than .0125 (.05/4) was required for significance for the four moderational analyses. With respect to religious discontent, loss relatively and consistently emerged as a significant predictor across all the analyses. More specifically it contributed 12 % of the variance in the presence of self-worth ( $R^2$  change = .12,  $F(1, 103) = 13.8$ ,  $p = .000$ ). 11 % of the variance with respect to total social support ( $R^2$  change = .11,  $F(1, 108) = 13.8$ ,  $p = .002$ ), and 11% of the variance to family support ( $R^2$  change = .11,  $F(1, 108) = 13.8$ ,  $p = .027$ ). Finally, loss contributed 7 % in the presence of the family religious environment  $R^2$  change = .071,  $F(1, 96) = 7.29$ ,  $p = .008$ .

*Summary of Moderator Analyses:* In summary, results of the moderation model tests revealed few significant findings. A moderation or interaction effect was found between loss and total social support. However, it only accounted for 4 % of the total variance. Loss was a significant predictor of religious discontent across all four moderational analyses. All of the models tested, except for family religious environment, were statistically significant.

#### *Post hoc analyses*

Further analyses were done in order to examine some of the results in greater detail. These included post- hoc moderational analyses, additional regression analyses of the impact of social support sub-types, inclusion of an additional variable of the

interaction between sex and race, and reducing the Religious Discontent sub-scale to include only those items that measured anger.

Post- hoc moderational analyses of the impact of total social support on the relationship between loss and religious discontent when plotted on a graph revealed (see Figure 3) that higher levels of loss predicted a significantly higher level of religious discontent when social support was low as compared to the condition of high social support.

To further examine the significant moderational role of total social support in the relationship between loss and religious discontent, the measure of total social support was broken down into sub- types of teacher and peer social support entered into separate hierarchical regressions (see Tables 21 and 22). Peer social support was found to have a significant interaction effect (see Table 22) indicating that peer social support among all the sub-types accounted for the earlier significant interaction between loss and total social support. This relationship when plotted (see Figure 4) indicates that loss when high predicts a significantly higher level of religious discontent when interacting with low peer support than high peer support. As compared to total social support (see Table 19), peer social support has a stronger interaction (see Table 22) with loss in predicting religious discontent. After post hoc analyses, when the Bonferroni approach was applied to control for Type I error across the six regressions, a  $p$  value of less than .008 (.05/6) was required for significance. The results of all the regression analyses of predictors of religious discontent when reviewed (see Tables 18, 19, 20, 21, 22, and 23) show that loss remained a significant predictor of religious discontent in the presence of other predictors such as total social support, as well as peer support, and loss x total social support interaction continued to be significant at the .008 level (see Table 19). A new finding was that loss x peer social support interaction was significant too at the .008 level (see Table 22). Both interactional models were significant too when Bonferroni was applied.

Post hoc analyses of the Religious Discontent items were conducted to determine the reliability and uniqueness of the items with anger content. Only two items from the three item scale that measured anger were retained to separate out anger as an emotional response and a dependent variable. These items included “Felt angry or distant from God or a higher power,” and “Felt angry with or distant from the members of the church,

synagogue, temple, or place of worship.” The religious discontent sub-scale’s reliability when comprised of two anger items was .65, which is quite low as compared to the earlier reliability of .72 for the original 3 item scale. This two- item anger sub-scale was used instead of the original three - item religious discontent scale and six additional hierarchical regressions were conducted with the same steps but using this new dependent variable of anger response (see Tables 24, 25, 26, 27, 28, and 29). Significant results included: loss again emerged as a significant predictor of the two- item religious discontent: anger scale. As before, loss and peer social support interaction contributed significantly to religious discontent: anger, with peer support being a marginally significant predictor (see Table 28). New findings included the contribution of a significant portion of the variance of religious discontent: anger by self-worth (see Table 24), and a marginally significant loss x total social support interaction (see Table 25). The Bonferroni approach when applied to analyze the six regressions for this new dependent variable ( $p = .008$ ), revealed that loss continued to be a significant predictor of religious discontent: anger in the presence of the other predictors such as total social support, and peer support (see Tables 25 and 28); and loss x peer social support interaction and its model continued to be significant at the .008 level (see Table 28). However, compared to the earlier finding (see Table 19), a new finding was that loss x total social support interaction reduced in its beta size and significance level for the new dependent variable of religious discontent: anger and was non- significant ( $p > .008$ ) (see Table 25). These findings indicate that the loss and loss x peer interaction model can meaningfully predict the emotional response of anger in religious discontent and therefore are of practical significance in child religious coping.

Twelve additional hierarchical regressions were conducted with the sex and race interaction entered as an additional variable at the second step with the demographic variables to explore their effect on spiritually based coping (see Tables 30, 31, 32, 33, 34, and 35) and the new dependent variable of religious discontent: anger (see Tables 36, 37, 38, 39, 40, and 41). With reference to spiritually based coping, loss and age emerged as significant predictors across all the regressions. Race was a significant predictor in the presence of self-worth, social support, and the three sub-types of social support (see Tables 30, 31, 32, 33, and 34). Sex was marginally significant in the presence of self-

worth, family social support, and teacher social support (see Tables 30, 32, and 33). As before, family religious environment emerged as a significant predictor (see Table 35). Sex x race interaction was not found to be a significant predictor of spiritually based coping. With reference to religious discontent, self-worth contributed a significant portion of the variance of religious discontent: anger, race was a significant predictor, and loss and sex were marginally significant predictors in the presence of self-worth (see Table 36). Loss and total social support interaction was marginally significant, and loss and race were significant predictors of religious discontent: anger in the presence of total social support (see Table 37). Loss and race continued to be significant predictors in the presence of family support (see Table 38). Race was a significant predictor in the presence of teacher support (see Table 39). Loss and loss x peer support interaction were significant predictors, and race and peer support were marginally significant predictors of religious discontent: anger (see Table 40). Sex and race were marginally significant predictors in the presence of family religious environment (see Table 41). At the Bonferroni level of significance for these six hierarchical regressions ( $p < 0.008$ ), loss continued to be a significant predictor of religious discontent: anger in the presence of total social support, and peer support (see Table 37); and loss x peer social support interaction continued to remain significant in the presence of the additional variable of sex x race interaction (see Table 40). These findings further confirm the significance of loss x peer social support interaction model to predict children and adolescents' religious discontent.

## Discussion

### *Summary of Findings*

This study represents the second attempt to investigate religious coping efforts of children and adolescents in dealing with residential fires. It builds on Wang's (2004) study by exploring potential predictors and moderators affecting children's spiritually based coping and religious discontent responses to the traumatic situation of one's home being burned. Both studies were guided by the concept of coping resources as conceptualized by Lazarus and Folkman (1984), Hobfoll's (1989) Conservation of Resources (COR) theory, and Pargament's (1997) classification of three forces, individual, situational and cultural factors, that shape adult's religious coping. This investigation addressed the following gaps in the literature on children and disaster: first, the findings shed more light on factors that influence both children and adolescents' religious responses to cope with fires. Second, the contribution and impact of the internal resource of global self-worth was investigated. Third, the external resource of social support the child received from family, teachers and friends, as well as the family religious environment was investigated. By addressing these issues, this study provides more understanding on a relatively new area of research.

Several findings were found in the present study. Some predictions were supported, while some others were not using the Bonferroni approach. Those that were found to be significant included the expectation of loss as a significant predictor of religious discontent in the presence of total social support and peer social support, and the validation of the loss x peer social support interaction model predicting religious discontent.

Demographic variables were found to contribute significantly to the study variables. Spiritually based coping was found to be significantly predicted by loss, race, age, and family religious environment. Religious discontent was found to be positively associated with greater levels of loss, PTSD symptoms and negatively associated with global self-worth. It was significantly predicted by loss and an interaction between loss and social support. This moderation effect accounted for a significant portion of the variance of religious discontent. Post hoc analyses revealed peer social support interaction with loss to account for a significant portion of the variance of religious

discontent. Lastly, loss was significantly negatively associated with global self-worth and positively associated with PTSD symptoms.

### *Demographics*

Pargament (1997) describes demographic variables as important individual factors and predictors of religious coping. The different impact of the demographic variables of gender, race, age, and socio-economic status on the measures of all the variables were analyzed to determine whether any of the demographic variables significantly influenced the variables and outcome of interest.

Gender was found to marginally influence ratings of resource loss and total social support. Specifically, girls reported more loss and greater social support than did boys on the resource loss (RLSC) measure and the social support (DSSS) measure. These findings are consistent with the previous literature. Females were found to use more religious coping than males under stressful situations (Bjorck & Cohen, 1993; Ellison & Taylor, 1996; Ferraro & Koch, 1994; Gurin, Veroff & Feld, 1960; Koenig, George, & Siegler 1988; Pargament, Olsen, et al., 1992; Park & Cohen, 1993; Sattler et al., 1994). This may be due to girls being socially reinforced to discuss feelings and emotions more so than boys.

Race was studied in terms of the two prominent racial groups of European Americans and African Americans. Race as a factor contributed to significant differences on ratings of spiritually based coping, resource loss, total social support, and family social support. Specifically, African Americans reported higher ratings on spiritually based coping measures and lower ratings on the measures of resource loss, total social support, and family social support compared to European Americans. These findings are consistent with the religious coping studies where African Americans tend to use more religious coping compared to other racial groups (Bearon & Koenig, 1990; Ferraro & Koch, 1994; Koenig et al., 1992; Pargament, 1997). The demographic variable of age indicated a significantly higher use of spiritually based coping in children as compared to adolescents.

Concerning socio-economic status, children and adolescents with low socio-economic status reported marginally significant higher levels of religious discontent compared to those with high socio-economic status. In addition, children and adolescents

with low socio-economic status reported marginally significant lower levels of self-worth compared to those with high socio-economic status. This may be because low socio-economic status is more likely to be associated with fewer resources and more stressors as compared to high socio-economic status. While little attention has been given socio-economic status (Gurin Veroff & Feld, 1960), these findings suggest the need for further study of this variable (Jones & Ollendick, 2002). Additionally, stress and coping theories such as Hobfoll's (1989) conservation of resources theory seems to reinforce the need for further study of this important variable.

The two types of religious coping, namely spiritually based coping and religious discontent, were compared to ensure their distinctive construct validity and relative standing on loss. As predicted, the results indicated that spiritually based coping was used significantly more than religious discontent. This finding is consistent with earlier findings (Landolt, et al., 2002; Pendleton, et al., 2002; Wang, 2004). Children and adolescents tend to use spiritually based coping more than religious discontent, because it may be a more socially acceptable and desirable way of coping. Also, spiritually based coping may involve a more positive, problem-solving approach, where the person is more likely to take responsibility for dealing with the situation rather than feeling discontented, angry, and blaming others.

#### *Moderation Analyses: Religious Discontent*

The study examined the potential moderating roles of global self worth, total social support, family social support and family environment on the relationship between loss and religious discontent. Four separate hierarchical multiple regression analyses were conducted to test the hypothesized moderating roles of each of the four variables. Each will be discussed in order.

Self-worth was hypothesized to moderate the relationship between resource loss and religious discontent in a way that children with high levels of self-worth under high levels of loss would experience lower religious discontent as compared to children with low levels of self-worth under high levels of stress. The results, however, failed to show the role of global self-worth as a moderator. That is, the interaction between loss and self-worth did not differentially affect children and adolescents' reported levels of religious discontent. Loss as a situational factor was a more significant predictor than global self-

worth to explain the outcome. However, self-worth was found to be negatively associated with religious discontent. These findings are consistent with Francis et al.' (2001) study who found significant negative correlations between adolescent's reported self-worth and negative beliefs of God as cruel and punishing. Therefore, this further lends support that low levels of self-worth are likely to be associated with negative religious coping.

Some reasons for the lack of support for these predictions could be the lack of generalization of the concept of global self-worth from general coping to the field of trauma and religious coping. The self-worth and coping literature suggests that global self-worth as the overall value a person estimates for the self may be generalized to everyday life situations and competencies such as academics and social skills (Harter, 1986). However, the present study indicates that this responsibility does not exist in traumatic situations. Global self-worth may cease to be more relevant in religious coping with trauma. The reason for the difference between previous findings of self-worth as a predictor of general coping and not as a predictor of fire-related religious coping may be that in a fire situation, general feelings of self-worth may differ from situational feelings of self-worth related to coping with the fire. A statistical reason could be the emergence of loss as a significant predictor of religious discontent over self-worth due to the sequence by which both were entered into the regression. Both variables may be significant predictors of the same variance in spiritually based coping, and both correlate with one another. But in a hierarchical regression, loss entered at first step may account for larger variance in spiritually based coping as compared to self-worth entered at step three.

Situation specific factors may also influence religious coping. In fact, this is the position Pargament (1997) takes in his theory of predictors of religious coping. According to this theory backed by empirical research, situational factors like appraisal of the situation as harm/loss lead to higher use of religious coping in people. Also another explanation in the context of Lazarus and Folkman's (1982) work, coping in the field of trauma can be conceptualized as the availability of the required resources to cope with the trauma.

In addition, the present study also found a significant negative correlation between global self-worth and loss, indicating that high self-worth is less likely to co-

occur with high loss but more likely to occur with low loss. Self-worth may not be causal but rather may operate through an indirect relationship with loss and religious discontent. Perhaps there could be a third factor like socio-economic status. For example, in the present study, participants with low socio-economic status had lower self-worth and higher religious discontent as compared to those with a high socio-economic status. Post hoc analyses showed self-worth to predict a significant portion of the variance of religious discontent: anger. The future study of situational self-worth in comparison with global self-worth is needed to determine the extent to which situation specific skills and resources facilitate recovery in trauma situations.

The second moderator model hypothesis predicted social support to serve as a moderater between resource loss and religious coping. Specifically, one would expect the interaction between resource loss and social support to significantly predict religious coping. The lesser the social support, the more ineffective it is to serve as a buffer against higher levels of loss that predict more religious discontent. The results supported the predictive role of loss as well as the interaction between loss and social support to predict coping. However, no statistical evidence was found for social support as a predictor in the hierarchical regression.

The reason for this unexpected finding could be due to the use of the unitary global social support construct where several types of social support were combined (i.e., family, teacher, and peer social support). General social support (that is from teachers or peers) as a concept does not measure religious social support (the support one gets from church and religion). Therefore, general social support may not be relevant in predicting religious coping. However, its role as an adaptive form of coping, as based on previous literature (Sandler, et al., 1997; La Greca, et al, 1996; Pynoos & Nader, 1988; and Vernberg et al., 1996), cannot be totally ruled out because of a significant interaction between general social support and loss, indicating a contribution of social support in reducing non adaptive coping. The direction of this relationship was later examined in post hoc analyses of the moderation effect (Holmbeck, 2002). This involved plotting the relationship of social support interacting with loss to predict religious discontent (see Figure 3). As seen, higher levels of loss predicted a significantly higher level of religious discontent when social support was low. This lends support to the prediction that total

social support may serve as a buffer in reducing non-adaptive forms of coping such as religious discontent. This is consistent with Kaniasty and Norris's (1993) stress buffer model according to which social support serves as a protective factor against outcomes of negative stressful events. In their study, Kaniasty, Norris, & Murrell (1990) found that a strong social support network serves as a buffer against post-disaster distress. When under stress, people tend to affiliate with others that may offer support. However, when expected support is not received, people are more likely to feel resentment toward relatives and friends than toward strangers (Kaniasty et al., 1990).

The third model testing moderation examining the interaction of family support (a sub-type of general social support) with loss was not supported. While several child studies have acknowledged the value of social support as a buffer against stress (Pynoos & Nader, 1988; Vernberg et al., 1996; Vogel & Vernberg, 1993; Wills & Cleary, 1996), this relationship was not seen here. Although results indicated family social support to be associated with religious discontent, it was not associated with PTSD symptoms, therefore indicating no adaptive/ predictive role of family support. Family social support may not necessarily be adaptive in inhibiting negative religious coping, because of social learning where children used religious discontent if their parents used it.

In the light of why general social support moderated the relationship between loss and religious discontent, whereas family social support did not, suggests that family social support may not play a role in religious coping. Therefore, the need arose to look at the effects of the other types of social support, such as peer and teacher social supports, and this was done later in post hoc analyses. When social support was dissected into family, teacher and peer support, peer social support was found to have a significant interaction with loss in the post hoc regression predicting religious discontent (see Table 22). This relationship when plotted (see Figure 4) shows that higher levels of loss predict a significantly higher level of religious discontent when interacting with low peer support. Again, peer support seems to act as a buffer in reducing the non-adaptive religious coping response of religious discontent. This finding indicates the potential use of peer social support as a resource to inhibit children and adolescents' non-adaptive coping in trauma interventions, also when seen in light of the significant negative correlations between peer support and religious discontent (see Table 11).

The fourth moderator model examined the interaction of family religious environment with loss. Family religious environment was conceptualized as a resource, which includes the family's religious involvement, the family's agreement on religious beliefs and the perception of the opportunity to talk about one's religious issues. This hypothesis was not supported in the present study. These findings lend some support to the earlier interpretation of family support as a non-significant predictor of religious discontent, in that religious discontent seems to be less likely learned from parents and the family and family may not play a role in religious discontent.

*Regression Analyses: Spiritually based coping*

With reference to spiritually based coping, the study aimed to explore the potential predictors of spiritually based coping including resource loss, demographic variables, self-worth, social support, family support, and family religious environment, separately. Four separate hierarchical regression analyses were conducted for each predictor.

The regression analyses indicated that loss was overall found to emerge as a significant predictor of both children and adolescents' spiritual based coping. This was evident from the relatively substantial amount of variance (i.e.,  $R^2$  change) loss contributed across all four models. This finding can be explained within the context of Pargament's (1997) theory. According to this theory, loss can be viewed in situations where high levels of loss and stress are present. Therefore, loss in a traumatic situation tends to predict higher religious coping.

In addition to loss, significant contributions of race and age were consistently found across the models. The former predicted spiritually based coping positively, while the latter predicted the same coping negatively. With respect to race, African American children reported greater spiritually based coping than European American children. With reference to age, children were found to use spiritually based coping more than adolescents.

It was observed that gender was a marginally significant predictor of spiritually based coping in the presence of the predictors of resource loss, race and age, and self-worth/ social support.

With respect to self-worth, social support, and family social support, the results did not provide evidence for their role as a predictor of spiritually based coping. This is inconsistent with previous theoretical and empirical findings in the general coping literature as well as Pargament's (1997) religious coping research that adaptive coping is facilitated in the presence of resources of social support.

Family religious environment was found to be a significant predictor of spiritually based coping. This finding confirms the theoretical and empirical notions of family religious environment as a resource. Specifically, findings in the general coping literature show that adaptive coping is facilitated in the presence of effective resources (e.g., family religious practices, social support) whereas non-adaptive behavior tends to occur without this buffer. It may be the case that children and adolescents learn religious coping from their parents through modeling of religious practices.

#### *Additional Hypotheses*

Loss was expected to have a positive relation with religious coping. In addition, spiritually based coping was predicted to be higher than religious discontent. As predicted, loss not only positively correlated with both types of coping but was also found to be more associated with religious discontent than with spiritually based coping. Another expectation confirmed was that a greater association between loss and discontent was found than between loss and spiritually based coping.

Other hypotheses confirmed were: the significant positive correlation between spiritually based coping and family religious environment. And the significant negative relationship with self-worth and religious discontent. These findings are consistent with several of the arguments made earlier that resources will facilitate adaptive coping (i.e., spiritually based coping), however, a depletion in resources are likely to encourage non-adaptive coping (i.e., religious discontent).

With reference to demographic variables, African Americans, and children engaged more in spiritually based coping compared to European Americans, and adolescents. On the other hand, the socioeconomic status differences were confirmed for religious discontent, where children and adolescents with low socioeconomic status reported higher levels of religious discontent than those with high socio-economic status. These findings suggest that African Americans, and children engaged in greater levels of

spiritually based coping, theoretically assumed to be an adaptive way of coping. Whereas, children and adolescents from a lower socio-economic status may be at greater risk for using the theoretically assumed non- adaptive coping of religious discontent.

*Relationship between Religious Coping and PTSD symptom*

Children and adolescents' spiritually based coping and religious discontent was compared to their PTSD symptoms to get an estimate of their level of distress associated with each religious coping type. Spiritually based coping was found to have a weak non-significant positive correlation with the PTSD symptom responses. This indicates that it was not meaningfully associated with distress in children and adolescents. Religious discontent, however, had a significant positive relationship with PTSD symptoms, indicating that they tend to co-occur. These results are consistent with the conclusions of a recent meta-analysis, where negative religious coping strategies are positively associated with negative psychological adjustment to stress (Ano & Vasconcelles, 2005). Although post hoc analyses of the reliability of the new religious discontent: anger scale ( $\alpha = .65$ ) was lower than the original religious discontent scale ( $\alpha = .72$ ), it seems useful to separate out the emotional response of anger and study it as a dependent variable. This becomes evident in the light of self-worth now predicting a significant portion of religious discontent: anger in the hierarchical regression (see Table 24). This is consistent with the earlier theoretical notion that self-worth as a resource is likely to deter non-adaptive forms of coping. Here religious discontent is theorized to be a non- adaptive way of coping, especially in light of its strong correlation with PTSD symptoms (see Table 11).

*Potential benefits of the study*

The benefits for this study can be discussed in terms of the impact of the demographic variables, moderator, regression analyses, and additional hypotheses.

The study has a large sample of more than one hundred children and adolescents, as well as an approximately equal number of participants covering demographic differences on gender, age, race, and socio-economic status. The study also measures socio-economic status, a variable that is rarely studied in child trauma and coping literature.

One moderation effect was found for the moderator of social support interacting with resource loss, which although small in variance, nevertheless indicates an important effect of loss and social support interaction on religious discontent that was not found before in this field of child research. Post hoc analyses indicated that peer social support was an important sub- group of total social support which interacted with resource loss to significantly predict religious discontent. Moderation analyses were also helpful in ruling out the predictors that were theoretically proposed but not supported by results, thereby raising new directions for future research.

Hierarchical multiple regressions were helpful in testing hypotheses theoretically derived from general coping theory and research, in the specific context of children's responses in this understudied area of children and adolescents' religious coping following loss due to fires. The regressions also are useful in giving an estimate of the proportion of variance accounted for by a large number of factors or combination of them, which is usually the case in real- life trauma situations.

The advantages of the additional predictions made about the associations among the predictors and outcomes gives information on how these variables tend to co-occur together. This provides directions for new research on possible variables such as resources other than social support that may moderate the complex relationships between several factors following a stressful event. For example, it will be useful to measure religious support that the child gets from the family, or teachers and peers at school, and how this affects religious coping. The hypothesis regarding a higher use of spiritually based coping as compared to religious discontent was confirmed via t test comparing the two measures of religious coping and preference for a religious type response in a disaster situation.

#### *Limitations of the study*

Several limitations of the present study are as follow. First, the study was cross-sectional in design (i.e., the data was analyzed at only one point in time). Second, the interpretation of findings in this study need to take into account the self-report nature of the measures used that could be biased by the children and parents' subjective responses. All measures were child self-reports, except for the measure of the Family Environmental Scale (FES) that was a parent self-report measure. Third, the data had restricted range on

the dependent variables, especially for religious discontent, which reduced ideal conditions for acquiring accurate test results.

The major limitation of this investigation is its' correlational nature of the data. As it is with interpreting correlations, the results indicate associations rather than cause-effect relationships among variables.

#### *Future Directions*

Based on the present findings, some suggestions for future directions are as follows. First, more research is required in this area of child and adolescent coping with fires and disasters on what are some resources and coping strategies that are needed to effectively deal with a specific crisis. This is mainly because the current investigation failed to show global self-worth and social support as effective in promoting adaptive coping.

Second, future research should consider investigating how resources and coping strategies differ in their effectiveness as a function of the situation and age group. For example, family religious environment was found to be effective in predicting spiritually based coping that is theoretically viewed to be an adaptive way of coping. Whereas, social support, which is usually effective in predicting general adaptive coping such as problem-solving, seemed to be irrelevant to the present stressful situation of residential fires.

Third, this study raises an important issue of resources available and what resources are needed to facilitate adaptive coping. For example, even if individuals appear or report as being high on resources such as global self-worth or social support, one needs to exercise caution before assuming that if individuals are high on adaptive resources then they will always engage in adaptive coping and do not need intervention. Rather, a lack of the resources required to adapt to the specific trauma situation seem to be more likely to predict non-adaptive coping.

## References

- Ano, G. G., & Vasconcelles, E. B. (2005). Religious Coping and Psychological Adjustment to Stress: Meta- Analysis. *Journal of Clinical Psychology*, 61 (4), 461-480.
- American Psychological Association. (2004). *Publication Manual of the American Psychological Association* (5<sup>th</sup> ed.). Washington DC: American Psychological Association.
- Asarnow, J., Glynn, S., Pynoos, R. S., Nahum, J., Guthrie, D., Cantwell, D. P., & Franklin, B. (1999). When the Earth Stops Shaking: Earthquake Sequel Among Children Diagnosed for Pre-Earthquake Psychopathology. *American Academy of Child and Adolescent Psychiatry*, 38(8), 1016-1023.
- Baron, R. M., Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality & Social Psychology*, 51(6), 1173-1182.
- Bearon, L.B., & Koenig, H.G. (1990). Religious cognitions and use of prayer in health and illness. *Gerontologist*, 30, 249-253.
- Bennett, D. S., & Bates, J. E. (1995). Prospective models of depressive symptoms in early adolescence: Attributional style, stress, and support. *Journal of Early Adolescence*, 15, 299-315.
- Bjorck, J. P., & Cohen, L. H. (1993). Coping with threats, losses, and challenges. *Journal of Social and Clinical Psychology*, 12, 56-72.
- Carver, C. S., Scheier, M. F., Weintraub, J. K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality & Social Psychology*, 56(2), 267-283.
- Compas, B. E., & Epping, J. E. (1993). Stress and coping in children and families: Implications for children coping with disaster. In C. F. Taylor (Ed.), *Children and disasters*, (pp. 11-28). New York: Plenum Press.
- Davey, M., Eaker, D. G., & Walters, L. H. (2003). Resilience Processes in Adolescents: Personality Profiles, Self-Worth, and Coping. *Journal of Adolescent Research*, 18 (4), 347- 362.

- Dubow, E. F., & Ullman, D. G. (1989). Assessing social support in elementary school children: The Survey of Children's Social Support. *Journal of Clinical Child Psychology*, 18, 52-64.
- Ellison, C. G., & Taylor, R. J. (1996). Turning to prayer: Social and situational antecedents of religious coping among African Americans. *Review of Religious Research*, 38, 111-131.
- Ferraro, K.F., & Koch, J. R. (1994). Religion and health among black and white adults: Examining social support and consolation. *Journal for the Scientific Study of Religion*, 33, 362-375.
- Freedy, J.R., Shaw, D.L., Jarrell, M.P., & Masters, C.R. (1992). Towards an understanding of the psychological impact of natural disasters: An application of the Conservation of Resource model. *Journal of Traumatic Stress*, 5, 441-454.
- Francis, L. J., Gibson, H. M., Robbins, M. (2001). God images and self-worth among adolescents in Scotland. *Mental Health, Religion & Culture*, 4(2), 103-108.
- Harter, S. (1982). The Perceived Competence Scale for Children. *Child Development*. 53(1), 87-97.
- Harter, S. (1985). *Manual for self-perception profile for children*. Denver, CO: University of Denver.
- Harter, S. (1986). Cognitive-developmental processes in the integration of concepts about emotions and the self. *Social Cognition*, 4, 119-151.
- Harter, S. (1988). Developmental and dynamic changes in the nature of the self-concept: Implications for child psychotherapy. In Shirk, S. R. (Ed). *Cognitive development and child psychotherapy: Perspectives in developmental psychology*. (pp. 119-160). New York, NY, US: Plenum Press.
- Harter, S. (1990). Causes, correlates, and the functional role of global self-worth: A life-span perspective. In Sternberg, R. J. & Kolligian, J. (Eds). (1990). *Competence considered*. (pp. 67-97). New Haven, CT, US: Yale University Press.
- Hobfoll, S. E. (1989). Conservation of resources: A new attempt at conceptualizing stress. *American Psychologist*, 44, 513-524.
- Holmbeck, G. N. (1997). Toward terminological, conceptual, and statistical clarity in the study of mediators and moderators: Examples from the child-clinical and pediatric psychology literatures. *Journal of Consulting & Clinical Psychology*, 65(4), 599-610.

- Holmbeck, G. N. (2002). Post- hoc probing of significant moderational and mediational effects in studies of pediatric populations. *Journal of Pediatric Psychology*, 27(1), 87-96.
- Hood, R. W., Spilka, B., Hunsberger, B., & Gorsuch, R. (1996). *The psychology of religion: An empirical approach* (2<sup>nd</sup> ed.). New York: Guilford.
- Garnezy, N., & Devine, V. (1984). Project Competence: The Minnesota studies of children vulnerable to psychopathology. In Watt, N. F., Anthony, E. J., Wynne, L. C., & Rolf, J. E. (Eds), *Children at risk for schizophrenia: A longitudinal perspective*, (pp. 289-303). New York, NY, US: Cambridge University Press.
- Granleese, J., & Stephen, J. (1994). Reliability of the Harter Self-Perception Profile for Children and Predictors of Global Self-Worth. *The Journal of Genetic Psychology*, 155 (4), 487- 492.
- Gurin, G., Veroff, J., & Feld, S. (1960). *Americans view their mental health: A nationwide interview survey*. New York: Basic Books.
- Jones, R. T., Fletcher, K., & Ribbe, D. R. (2002). Child's Reaction to Traumatic Events Scale-Revised (CRTES-R): A self report traumatic stress measure. Available from the first author, Department of Psychology, Stress and Coping Lab, Virginia Tech University, Blacksburg, VA 24060.
- Jones, R. T., & Ollendick, T. H. (2002). The impact of residential fire on children and their families. In A. La Greca, W. Silverman, E. Vernberg, & M. Roberts (Eds.), *Helping children cope with disasters: Integrating research and practice* (pp. 175- 200). Washington, DC: American Psychological Association.
- Jones, R. T., Wang, Y., & Ollendick, T. H. (2001). *Predictors of coping strategies following residential fire*. Unpublished manuscript. Virginia Polytechnic Institute and State University, Virginia.
- Jones, R. T., Wang, Y., & Ollendick, T. H. (2004). *Predictors of coping strategies following residential fire*. Unpublished manuscript. Virginia Polytechnic Institute and State University, Virginia.
- Koenig, H.G., Cohen, J.J., Blazer, D.G., Pieper, C., Meador, K.G., Shelp, F., Goli, V., & DiPasquale, B. (1992). Religious coping and depression among elderly, hospitalized medically ill men. *American Journal of Psychiatry*, 149, 1693-1700.

- Koenig, H.G., George, L. K., & Seigler, I. C. (1988). The use of religion and other emotion-regulating coping strategies among older adults. *Gerontologist*, 28, 303-310.
- La Greca, A. M., Auslander, W. F., Greco, P., & Spetter, D. (1995). I get by with a little help from my family and friends: Adolescents' support for diabetes care. *Journal of Pediatric Psychology*, 20(4), 1995, 449-476.
- La Greca, A. M., & Fetter, M. D. (1995). Peer relations. In A. R. Einsen & P. A. Kearney, (Eds.), *Clinical handbook of anxiety disorders in children and adolescents*, (pp. 82-130). Northvale, NJ: Jason Aronson, Inc.
- La Greca, A. M., Silverman, W. K., Vernberg, E. M., & Prinstein, M. J. (1996). Symptoms of posttraumatic stress in children after Hurricane Andrew: A prospective study. *Journal of Consulting and Clinical Psychology*, 64, 712-723.
- La Greca, A. M., Spetter, D. S. (1992). Psychosocial aspects of childhood diabetes: A multivariate framework. In Schneiderman, N. & McCabe, P. (Eds). *Stress and disease processes: Perspectives in behavioral medicine*, (pp. 249-273). Hillsdale, NJ, England: Lawrence Erlbaum Associates.
- Landolt, M. A., Vollrath, M., & Ribl, K. (2002). Predictors of coping strategy selection in pediatric patients. *Acta Paediatrica*, 91, 954-960.
- Lazarus, R. S. & R. Launier (1978). Stress- related transactions between persons and environment. In L. S. Perum & M. Lewis (Eds.) *Perspectives in Interactional Psychology*, (pp. 287- 327). New York: Plenum Press.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal and coping*. New York: Springer.
- Masten, A. S. (2001). Ordinary magic: Resilience processes in development. *American Psychologist*, 56(3), 227-238.
- McCrae, R. R. (1984). Situational determinants of coping response: Loss, threat, and challenge. *Journal of Personality and Social Psychology*, 46, 919-928.
- McGuire, B. M., Saudino, K. J., Manke, B., Reiss, E. M., Hetherington, E. M., & Plomin. (1999). Perceived Competence and Self-Worth during Adolescence: A Longitudinal Behavioral Genetic Study. *Child Development*, 70 (6), 1283- 1296.
- Moos, R. H., & Moos, B. S. (1981). *Family Environment Scale*. Palo Alto, CA: Consulting Psychologists Press.

- Pargament, K. (1990). God Help me: Toward a theoretical framework of coping for the psychology of religion. In, M. L. Lynn & D. O. Moberg (Eds.), *Research in the Social Scientific Study of Religion*, 2, (pp. 195-224).
- Pargament, K. I. (1997). *The psychology of religion and coping: Theory, research, practice*. New York: Guilford.
- Pargament, K. I., & Brant, C. R. (1998). Religion and coping. In H. G. Koenig (Ed.), *Handbook of religion and mental health* (pp. 111- 128). Academic Press.
- Pargament, K., Ensing, D. S., Falgout, K., Olsen, H., Reilly, B., Van Haitsma, K., & Warren, R. (1990). God Help Me: (I): Religious Coping Efforts as Predictors of the Outcomes to Significant Negative Life Events. *American Journal of Community Psychology*, 18 (6), 793-824.
- Pargament, K. I., & Hahn, J. (1986). God and the just world: Causal and coping attributions to God in health situations. *Journal for the Scientific Study of Religion*, 25, 193-207.
- Pargament, K., Olsen, H., Reilly, B., Falgout, K., Ensing, D. S., & Van Haitsma, K. (1992). God Help Me (II): The Relationship of Religious Orientations to Religious Coping with Negative Life Events. *Journal for the Scientific Study of Religion*, 31 (4): 504-513.
- Pargament, K. I., & Park, C. L. (1995). Merely a defense? The variety of religious means and ends. *Journal of Social Issues*, 51, 13-32.
- Park, C. L., & Cohen, L. H. (1993). Religious and non-religious coping with the death of a friend. *Cognitive Therapy and Research*, 17, 561-577.
- Patterson, J. M., & McCubbin, H. I. (1983). Family stress and adaptation to crises: A double ABCX model of family behavior. In Olsen, D., & Miller, B. (Eds.), *Family studies review yearbook*, (pp. 125-135). Beverly Hills, CA: Sage.
- Patterson, J. M., & McCubbin, H. I. (1987). Adolescent coping styles and behaviors: conceptualization and measurement. *Journal of Adolescence*, 10, 163-186.
- Pendleton, S. M., Cavalli, K. S., Pargament, K. I., & Nasr, S. Z. (2002). Religious/spiritual coping in childhood cystic fibrosis: A qualitative study. *Pediatrics*, 109, E8.
- Pynoos, R. S. Nader, K. (1988). Psychological first aid and treatment approach to children exposed to community violence: Research implications. *Journal of Traumatic Stress*, 1(4), 445-473

- Sandler, I. N., Wolchik, S. A., MacKinnon, D., Ayers, T. S., & Roosa, M. W. (1997). Developing linkages between theory and intervention in stress and coping processes. In S. A. Wolchik & I. N. Sandler (Eds.), *Handbook of children's coping: Linking theory and intervention* (pp. 3-40). New York: Plenum Press.
- Spilka, B., Hood, R. W., & Gorsuch, R. L. (1985). *The Psychology of Religion: An Empirical Approach*. Englewood Cliffs, NJ: Prentice-Hall.
- Spirito, A., Stark, L. J., & Williams, C. (1988). Development of a brief coping checklist for use with pediatric populations. *Journal of Pediatric Psychology*, 13 (4), 555- 574.
- Stone, A. & Neale, J. (1984). New measure of daily coping: Development and preliminary results. *Journal of Personality and Social Psychology*, 46(4), 892-906.
- Rutter, M. (1985). Resilience in the face of adversity: Protective factors and resistance to psychiatric disorders. *British Journal of Psychiatry*, 147, 598-611.
- Rutter, M. (1986). Myerian psychobiology, personality, development, and the role of life experiences. *American Journal of Psychiatry*, 143, 1077-1087.
- Tix, A. P., & Frazier, P. A. (1998). The use of religious coping during stressful life events: Main effects, moderation, and mediation. *Journal of Counseling and Clinical Psychology*, 66, 411-422.
- Vernberg, E.M., LaGreca, A.M., Silverman, W.K., & Prinstein, M.J. (1996). Predictors of post traumatic stress symptoms in children after Hurricane Andrew. *Journal of Abnormal Psychology*, 105, 237-248.
- Vogel, J. M., & Vernberg, E. M. (1993). Psychological responses of children to natural and human-made disasters: I. Children's psychological responses to disasters. *Journal of Clinical Child Psychology*. 22(4), 464-484.
- Wang, Yanping (2004). *Children's Religious Coping Following Residential Fires: An Explorative Study*. Unpublished doctoral dissertation, Virginia Polytechnic Institute and State University, Virginia.
- Werner, E. E. (1984). Resilient children. *Young Children*, 40, 68-72.
- Werner, E. E. (1994). Overcoming the odds. *Journal of Developmental and Behavioral Pediatrics*, 15 (2), 131-136.

Table 1

*Demographic variables of Sample size (N), Age, Sex, Race and Socio-Economic Status**(SES)*

		African Americans			European Americans			
		Boys	Girls	Subtotal	Boys	Girls	Subtotal	Total
Children (8-12yrs)	<i>N</i>	<b>24</b>	<b>15</b>	<b>39</b>	<b>16</b>	<b>22</b>	<b>38</b>	<b>77</b>
	SES	4.48	4.13	4.34	4.00	4.73	4.42	4.38
Adolescents (13-18yrs)	<i>N</i>	<b>12</b>	<b>23</b>	<b>35</b>	<b>11</b>	<b>17</b>	<b>28</b>	<b>63</b>
	SES	4.50	4.71	4.64	5.36	4.44	4.81	4.72
Subtotal	<i>N</i>	<b>36</b>	<b>38</b>	<b>74</b>	<b>27</b>	<b>39</b>	<b>66</b>	<b>140</b>
	SES	4.49	4.47	4.48	4.56	4.61	4.58	4.53

Table 2

*Means and Standard Deviations of Age, Sex, Race, and Socio-Economic Status*

Variable	N	Mean	SD	Range
<i>Age</i>				
Total	140	12.11	2.08	8 – 18
Children	77	9.95	1.44	8 - 12
Adolescents	63	14.75	1.49	13 -18
<i>Sex</i>				
Total	140	---	---	---
Males	63			
Females	77			
<i>Race</i>				
Total	140	---	---	---
African Americans	74			
European Americans	66			
<i>Socio-Economic Status</i>				
Total	136	4.53	1.12	2 – 7
High	111	4.92	.81	4 - 7
Low	25	2.80	.41	2 - 3

Table 3

*Means, Standard Deviations, and Internal Consistency Reliabilities*

	N	Mean	SD	Range (Min – Max)	<u>Alpha</u>
Spiritually Based Coping Religious Coping (RCAS)	116	1.97	.79	0 - 3	.94
Religious Discontent Religious Coping (RCAS sub-scale)	117	.42	.67	0 – 3	.72
Religious Discontent: Anger 2 item scale Religious Coping (RCAS sub –scale items)	110	.34	.66	0 - 3	.65
Resource Loss (RLS)	140	14.91	8.99	0 – 45	.79
Harter Global Self-Worth (HGSW)	136	3.07	.66	1.33 – 4	.71
Family Support (DSSS sub- scale)	136	11.71	4.36	1 – 16	.71
Teacher Support (DSSS sub- scale)	136	9.91	3.64	1 – 16	.65
Peer Support (DSSS sub -scale)	136	10.41	3.69	1 – 16	.66
Total Social Support (DSSS)	136	32.04	9.34	10- 48	.84
Total PTSD Symptoms (CRTES)	140	24.18	16.59	0 – 67	.87
Family Religious Environment Family Environment Scale (FES)	124	7.05	1.66	2 - 9	.61

Table 4

*Reproduction of Wang's (2004, p. 76) new factor loadings of RCAS children responses*

Factor	Alpha	Factor loading
Spiritually Based Coping	.94	
Item 2		.42
3		.46
4		.70
5		.56
6		.66
7		.67
8		.81
9		.67
10		.60
11		.70
12		.81
<b>13</b>		.40
<b>14</b>		.41
<b>15</b>		.36
Good Deeds	.81	
16		.71
17		.87
18		.35
Religious Support	.85	
19		.43
20		.66
21		.52
Plead	.84	
<b>1</b>		.48
22		.50
23		.67
24		.66
25		.54
26		.64
Discontent	.69	
27		.72
28		.63
29		.54
Religious Avoidance	.83	
30		.84
31		.64
32		.56

Note: Item numbers in bold for each factor indicate the new items that loaded on that factor.

Table 5

*Rates of Missing Data in sample (N = 140)*

Variable	n	Missing rate (in percent)
Child's Sex	140	0
Child's Age	140	0
Child's Race	140	0
Socio-Economic Status	136	2.9
Spiritually Based Coping	116	17.1
Religious Discontent	117	16.4
Resource Loss	140	0
Harter Global Self-Worth	136	2.9
Family Support	139	0.7
Total Social Support	136	2.9
Family Religious Environment	124	11.4
Total PTSD Symptoms	140	0

Table 6

*t tests for Gender group differences across measures*

Variable	Females (n = 55)		Males (n = 45)		t	p 2 - tailed
	Mean (SD)	Alpha	Mean (SD)	Alpha		
Spiritually Based Coping (RCAS)	2.02 (.82)	.94	1.86 (.80)	.93	.95	.343 a .172
Religious Discontent (RCAS)	.41 (.69)	.76	.36 (.55)	.66	.42	.678 a .339
Resource Loss (RLS)	15.91 (8.86)	.80	12.71 (9.19)	.77	1.77	.080
Harter Global Self-Worth (HGSW)	3.06 (.67)	.76	3.24 (.65)	.62	-1.37	.174
Family Support (DSSS)	12.58 (3.91)	.88	11.67 (4.53)	.91	1.08	.281
Total Social Support (DSSS)	34.15 (9.07)	.86	30.76 (8.93)	.81	1.87	.064
Family Environment Scale (FES)	7.09 (1.79)	.64	7.02 (1.64)	.57	.193	.848
Total PTSD Symptoms (CRTES)	25.24 (18.85)	.85	21.04 (16.66)	.88	1.24	.216

**Note:** p < .05, p < .01, p < .001, 2- tailed

a. p &lt; .025, p &lt; .005, p &lt; .0005, 1- tailed

Females were coded as 0 and males were coded as 1

Table 7

*t tests for Race group differences across measures*

Variable	European Americans (n = 47)		African Americans (n = 53)		t	p 2 - tailed
	Mean (SD)	Alpha	Mean (SD)	Alpha		
Spiritually Based Coping (RCAS)	1.76 (.87)	.95	2.12 (.73)	.92	- 2.23	.028 a .014
Religious Discontent (RCAS)	.38 (.55)	.71	.40 (.70)	.72	-.133	.895 a .448
Resource Loss (RLS)	16.77 (10.03)	.80	12.43 (7.73)	.76	2.43	.017
Harter Global Self-Worth (HGSW)	3.05 (.68)	.73	3.23 (.64)	.69	-1.31	.192
Family Support (DSSS)	13.13 (3.10)	.84	11.32 (4.85)	.92	2.19	.031
Total Social Support (DSSS)	35.26 (7.96)	.84	30.28 (9.52)	.84	2.81	.006
Family Environment Scale (FES)	6.78 (2.01)	.71	7.31 (1.36)	.42	-1.53	.129
Total PTSD Symptoms (CRTES)	25.43 (16.73)	.87	21.51 (16.82)	1.17	1.17	.247

**Note:** p < .05, p < .01, p < .001, 2- tailed

a. p &lt; .025, p &lt; .005, p &lt; .0005, 1- tailed

European Americans were coded as 0 and African Americans were coded as 1

Table 8

*t tests for Age group differences across measures*

Variable	Children (n = 77)		Adolescents (n = 63)		t	p 2 - tailed
	Mean (SD)	Alpha	Mean (SD)	Alpha		
Spiritually Based Coping (RCAS)	2.13 (.69)	.89	1.78 (.87)	.96	2.43	.017 a .009
Religious Discontent (RCAS)	.39 (.68)	.80	.46 (.66)	.62	-.57	.568 a .284
Resource Loss (RLS)	14.04 (9.03)	.80	15.97 (8.89)	.78	-1.27	.208
Harter Global Self-Worth (HGSW)	3.10 (.64)	.65	3.04 (.70)	.77	.49	.623
Family Support (DSSS)	11.91 (4.40)	.90	11.48 (4.34)	.88	.56	.577
Total Social Support (DSSS)	31.77 (9.17)	.81	32.37 (9.61)	.88	-.37	.710
Family Environment Scale (FES)	7.15 (1.47)	.51	6.92 (1.88)	.68	.76	.448
Total PTSD Symptoms (CRTES)	24.38 (16.07)	.85	23.94 (17.33)	.89	.15	.878

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .00625$ , 2- taileda.  $p < .025$ ,  $p < .005$ ,  $p < .0005$ , 1- tailed

Children were coded as 0 and adolescents were coded as 1

Table 9

*t tests for Socio-Economic Status group differences across measures*

Variable	Low Socio-Economic Status (n = 16)		High Socio-Economic Status (n = 80)		t	p 2 - tailed
	Mean (SD)	Alpha	Mean (SD)	Alpha		
Spiritually Based Coping (RCAS)	2.24 (.74)	.91	1.88 (.83)	.94	1.60	.114 <sup>a</sup> .057
Religious Discontent (RCAS)	.66 (.86)	.71	.33 (.56)	.73	1.95	.054 <sup>a</sup> .027
Resource Loss (RLS)	17.81 (7.38)	.61	13.85 (9.47)	.81	1.58	.118
Harter Global Self-Worth (HGSW)	2.86 (.67)	.65	3.21 (.64)	.70	-1.95	.054
Family Support (DSSS)	13.13 (3.30)	.85	11.90 (4.42)	.90	1.05	.296
Total Social Support (DSSS)	31.13 (8.33)	.70	32.68 (9.43)	.87	-.611	.543
Family Environment Scale (FES)	6.48 (1.44)	.39	7.18 (1.76)	.64	-1.49	.139
Total PTSD Symptoms (CRTES)	26.88 (16.60)	.81	22.45 (16.90)	.88	.96	.340

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ , 2- tailed $p < .025$ ,  $p < .005$ ,  $p < .0005$ , 1- tailed

Low SES was coded as 0 and high SES was coded as 1

Table 10

*Paired Samples t test for Spiritually based coping and Religious Discontent*

	Mean	SD	N	Paired Differences	
				t	Sig. (2-tailed)
Spiritually Based Coping	1.97	.79	116	17.86	.000
Religious Discontent	.42	.66	116		

**Note:** p < .05, p < .01, p < .001, p < .00625, 2- tailed

a. p &lt; .025, p &lt; .005, p &lt; .0005, 1- tailed

Table 11

*Zero- Order Correlations among the variables*

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1 Loss	1.0														
2 Sex	-.17*	1.0													
3 Race	-.23*	.05	1.0												
4 Age	.17*	-.22*	.09	1.0											
5 SES	-.16	-.09	.02	.19*	1.0										
6 Self-Worth	-.39**	.13	.11	-.02	.20*	1.0									
7 Social Support	.04	-.17*	-.29**	-.07	.06	.14	1.0								
8 Family Support	.03	-.09	-.23*	-.07	-.11	.01	.83**	1.0							
9 Teacher Sup.	.07	-.07	-.30**	-.01	-.04	.06	.78**	.52**	1.0						
10 Peer Support	-.05	-.25**	-.16	.25**	.31**	.30**	.76**	.47**	.36**	1.0					
11 Family Religious Envir.	-.09	-.01	.15	-.10	.15	.03	.00	.02	-.06	.08	1.0				
12 Spiritually based Cop.	.14	-.07	.23*	-.30**	-.16	.07	-.04	-.02	-.03	-.06	.25**	1.0			
13 Religious Discontent	.27**	-.02	.02	.12	-.20*	-.20*	-.09	-.04	.05	-.22*	-.01	.15	1.0		
14 Rel. Dis. Anger	.24**	.04	.06	.12	-.24**	-.28**	-.15	-.10	-.02	-.24*	-.09	.10	.91**	1.0	.18*
15 PTSD	.41**	-.14	-.11	.06	-.10	-.34**	.01	.03	.08	-.11	-.17*	.13	.18*	.18*	1.0

Note: N = 96 (list wise), \*p < .05, \*\* p < .01, \*\*\* p < .001, one - tailed

Table 12

*Hierarchical regression analysis for Self- Worth and Spiritually based coping*

Steps	Predictors	$R^2$ Change	$p$	$R^2$	$\beta^a$ Beta	$p^a$
Step 1	LOSS	.03	.095	.03	.28	.006
Step 2	DEMOGRAPHICS	.20	.000	.23		
	SEX				-.18	.056
	RACE				.32	.000
	AGE				-.35	.000
	SOCIO-ECONOMIC STATUS				-.09	.342
Step 3	SELF-WORTH	.01	.206	.24	.12	.206

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$ 

a.  $\beta$  and  $p$  were obtained at the last step when all variables were entered into the regression equation. The same applies to the following regression tables.

Table 13

*Hierarchical regression analysis for Total Social Support and Spiritually based coping*

Steps	Predictors	$R^2$ Change	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.03	.095	.03	.24	.011
Step 2	DEMOGRAPHICS	.20	.000	.23		
	SEX				-.15	.101
	RACE				.35	.000
	AGE				-.34	.000
	SOCIO-ECONOMIC STATUS				-.08	.358
Step 3	TOTAL SOCIAL SUPPORT	.01	.246	.24	.11	.246

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$

Table 14

*Hierarchical regression analysis for Family Social Support and Spiritually based coping*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.03	.095	.03	.24	.013
Step 2	DEMOGRAPHICS	.20	.000	.23		
	SEX				-.16	.075
	RACE				.33	.001
	AGE				-.34	.000
	SOCIO-ECONOMIC STATUS				-.07	.446
Step 3	FAMILY SOCIAL SUPPORT	.00	.716	.23	.03	.716

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$

Table 15

*Hierarchical regression analysis for Teacher Social Support and Spiritually based coping*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.03	.095	.03	.23	.016
Step 2	DEMOGRAPHICS	.21	.000	.23		
	SEX				-.15	.088
	RACE				.35	.000
	AGE				-.33	.000
	SOCIO-ECONOMIC STATUS				-.11	.236
Step 3	TEACHER SOCIAL SUPPORT	.01	.231	.24	.11	.231

Table 16

*Hierarchical regression analysis for Peer Social Support and Spiritually based coping*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.03	.095	.03	.24	.011
Step 2	DEMOGRAPHICS	.21	.000	.23		
	SEX				-.13	.158
	RACE				.35	.000
	AGE				-.36	.000
	SOCIO-ECONOMIC STATUS				-.13	.148
Step 3	PEER SOCIAL SUPPORT	.01	.187	.25	.13	.187

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$

Table 17

*Hierarchical regression analysis for Family Religious Environment and Spiritually Based Coping*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.02	.176	.02	.24	.012
Step 2	DEMOGRAPHICS	.22	.000	.24		
	SEX				-.13	.173
	RACE				.27	.005
	AGE				-.34	.001
	SOCIO-ECONOMIC STATUS				-.11	.239
Step 3	FAMILY RELIGIOUS ENVIRONMENT	.04	.022	.28	.22	.022

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$

Table 18

*Hierarchical regression analysis for Self- Worth and Religious Discontent (original 3 - item scale)*

Steps	Predictors	$R^2$ Change	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.12	.000	.12	.68	.105
Step 2	DEMOGRAPHICS SEX RACE AGE SOCIO-ECONOMIC STATUS	.02	.663	.14	.06 .14 -.02 .04	.526 .148 .870 .664
Step 3	SELF-WORTH	.02	.183	.16	-.01	.942
Step 4	LOSS x SELF-WORTH	.01	.409	.16	-.32	.409

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$ ,  $p < .008$

Table 19

*Hierarchical regression analysis for Total Social Support and Religious Discontent  
(original 3 -item scale)*

Steps	Predictors	$R^2$ Change	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.11	.000	.11	1.02	.002
Step 2	DEMOGRAPHICS	.02	.636	.14		
	SEX				.06	.562
	RACE				.16	.113
	AGE				-.03	.758
	SOCIOECONOMIC STATUS				-.01	.890
Step 3	TOTAL SOCIAL SUPPORT	.00	.839	.14	.27	.112
Step 4	LOSS x TOTAL SOCIAL SUPPORT	.04	.040	.17	-.73	.040

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$ ,  $p < .008$

Table 20

*Hierarchical regression analysis for Family Social Support and Religious Discontent  
(original 3 -item scale)*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.11	.000	.11	.69	.027
Step 2	DEMOGRAPHICS	.02	.636	.14		
	SEX				.04	.699
	RACE				.15	.124
	AGE				-.03	.753
	SOCIO-ECONOMIC STATUS				-.01	.947
Step 3	FAMILY SOCIAL SUPPORT	.00	.964	.14	.14	.395
Step 4	LOSS x FAMILY SOCIAL SUPPORT	.01	.290	.14	-.36	.290

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$ ,  $p < .008$

Table 21

*Hierarchical regression analysis for Teacher Social Support and Religious Discontent  
(original 3- item scale)*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.11	.001	.11	.48	.059
Step 2	DEMOGRAPHICS	.03	.509	.14		
	SEX				.04	.647
	RACE				.18	.071
	AGE				-.01	.908
	SOCIO-ECONOMIC STATUS				-.09	.359
Step 3	TEACHER SOCIAL SUPPORT	.02	.173	.16	.20	.237
Step 4	LOSS x TEACHER SOCIAL SUPPORT	.01	.601	.16	-.15	.601

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$ ,  $p < .008$

Table 22

*Hierarchical regression analysis for Peer Social Support and Religious Discontent  
(original 3- item scale)*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.11	.001	.11	1.10	.000
Step 2	DEMOGRAPHICS	.03	.509	.14		
	SEX				.28	.769
	RACE				.14	.138
	AGE				.03	.798
	SOCIO-ECONOMIC STATUS				-.03	.713
Step 3	PEER SOCIAL SUPPORT	.03	.070	.17	.31	.087
Step 4	LOSS x PEER SOCIAL SUPPORT	.08	.001	.25	-.92	.001

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$ ,  $p < .008$

Table 23

*Hierarchical regression analysis for Family Religious Environment and Religious Discontent (original 3 -item scale)*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.07	.008	.07	.40	.275
Step 2	DEMOGRAPHICS	.02	.673	.09		
	SEX				.05	.662
	RACE				.05	.628
	AGE				.12	.273
	SOCIO-ECONOMIC STATUS				-.10	.347
Step 3	FAMILY RELIGIOUS ENVIRONMENT	.00	.652	.10	.11	.560
Step 4	LOSS x FAMILY RELIGIOUS ENVIRONMENT	.00	.689	.10	-.15	.689

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$ ,  $p < .008$

Table 24

*Hierarchical regression analysis for Self- Worth and Religious Discontent: Anger (2-item scale)*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.10	.001	.12	.73	.075
Step 2	DEMOGRAPHICS	.05	.237	.14		
	SEX				.10	.305
	RACE				.15	.116
	AGE				.04	.663
	SOCIO-ECONOMIC STATUS				-.11	.242
Step 3	SELF-WORTH	.04	.028	.16	-.05	.787
Step 4	LOSS x SELF-WORTH	.01	.237	.16	-.45	.237

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 25

*Hierarchical regression analysis for Total Social Support and Religious Discontent:  
Anger (2- item scale)*

Steps	Predictors	$R^2$ R Change	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.10	.001	.10	.916	.005
Step 2	DEMOGRAPHICS	.05	.219	.15		
	SEX				.09	.352
	RACE				.15	.124
	AGE				.01	.884
	SOCIOECONOMIC STATUS				-.04	.145
Step 3	TOTAL SOCIAL SUPPORT	.00	.550	.15	.21	.216
Step 4	LOSS x TOTAL SOCIAL SUPPORT	.03	.057	.18	-.67	.057

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 26

*Hierarchical regression analysis for Family Social Support and Religious Discontent:  
Anger (2- item scale)*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.10	.001	.10	.60	.053
Step 2	DEMOGRAPHICS	.05	.219	.15		
	SEX				.08	.434
	RACE				.15	.125
	AGE				.01	.918
	SOCIO-ECONOMIC STATUS				-.14	.129
Step 3	FAMILY SOCIAL SUPPORT	.00	.688	.15	.09	.587
Step 4	LOSS x FAMILY SOCIAL SUPPORT	.01	.353	.15	-.31	.353

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 27

*Hierarchical regression analysis for Teacher Social Support and Religious Discontent:  
Anger (2- item scale)*

Steps	Predictors	$\Delta$ R Change	$p$	$\Delta$ R	Beta	$p$
Step 1	LOSS	.10	.001	.10	.42	.104
Step 2	DEMOGRAPHICS	.05	.219	.15		
	SEX				.08	.405
	RACE				.17	.085
	AGE				.02	.834
	SOCIO-ECONOMIC STATUS				-.15	.123
Step 3	TEACHER SOCIAL SUPPORT	.00	.497	.15	.12	.497
Step 4	LOSS x TEACHER SOCIAL SUPPORT	.00	.712	.15	-.11	.712

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 28

*Hierarchical regression analysis for Peer Social Support and Religious Discontent:  
Anger (2- item scale)*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.10	.001	.10	1.06	.000
Step 2	DEMOGRAPHICS	.05	.219	.15		
	SEX				.07	.453
	RACE				.14	.120
	AGE				.06	.555
	SOCIO-ECONOMIC STATUS				-.10	.298
Step 3	PEER SOCIAL SUPPORT	.03	.064	.17	.31	.095
Step 4	LOSS x PEER SOCIAL SUPPORT	.08	.002	.25	-.91	.002

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 29

*Hierarchical regression analysis for Family Religious Environment and Religious Discontent: Anger (2- item scale)*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.06	.017	.06	.43	.226
Step 2	DEMOGRAPHICS	.07	.114	.13		
	SEX				.10	.339
	RACE				.10	.354
	AGE				.15	.163
	SOCIO-ECONOMIC STATUS				-.21	.049
Step 3	FAMILY RELIGIOUS ENVIRONMENT	.00	.711	.13	.06	.755
Step 4	LOSS x FAMILY RELIGIOUS ENVIRONMENT	.00	.531	.14	-.24	.531

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 30

*Hierarchical regression analysis for Self- worth and Spiritually based coping, with added interaction variable of Sex x Race*

Steps	Predictors	$R^2$ Change	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.03	.095	.03	.28	.006
Step 2	DEMOGRAPHICS	.21	.000	.24		
	SEX				-.25	.058
	RACE				.26	.031
	SEX x RACE				.13	.396
	AGE				-.33	.000
	SOCIO-ECONOMIC STATUS				-.13	.147
Step 3	SELF-WORTH	.01	.203	.25	.12	.203

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 31

*Hierarchical regression analysis for Total Social Support and Spiritually based coping, with added interaction variable of Sex x Race*

Steps	Predictors	<sup>2</sup> R Change	<i>p</i>	<sup>2</sup> R	Beta	<i>p</i>
Step 1	LOSS	.03	.095	.03	.24	.011
Step 2	DEMOGRAPHICS	.21	.000	.24		
	SEX				-.22	.090
	RACE				.29	.022
	SEX x RACE				.13	.405
	AGE				-.33	.000
	SOCIO-ECONOMIC STATUS				-.12	.175
Step 3	TOTAL SOCIAL SUPPORT	.01	.282	.25	.10	.282

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 32

*Hierarchical regression analysis for Family Social Support and Spiritually based coping, with added interaction variable of Sex x Race*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.03	.095	.03	.24	.013
Step 2	DEMOGRAPHICS	.24	.000	.24		
	SEX				-.24	.064
	RACE				.26	.035
	SEX x RACE				.14	.373
	AGE				-.32	.001
	SOCIO-ECONOMIC STATUS				-.12	.205
Step 3	FAMILY SOCIAL SUPPORT	.24	.780	.24	.03	.780

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 33

*Hierarchical regression analysis for Teacher Social Support and Spiritually based coping, with added interaction variable of Sex x Race*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.03	.095	.03	.24	.013
Step 2	DEMOGRAPHICS	.21	.000	.24		
	SEX				-.24	.070
	RACE				.28	.023
	SEX x RACE				.14	.374
	AGE				-.32	.001
	SOCIO-ECONOMIC STATUS				-.12	.192
Step 3	TEACHER SOCIAL SUPPORT	.01	.234	.25	.11	.234

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 34

*Hierarchical regression analysis for Peer Social Support and Spiritually based coping, with added interaction variable of Sex x Race*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.03	.095	.03	.25	.009
Step 2	DEMOGRAPHICS	.21	.000	.24		
	SEX				-.20	.138
	RACE				.29	.019
	SEX x RACE				.11	.475
	AGE				-.35	.000
	SOCIO-ECONOMIC STATUS				-.14	.130
Step 3	PEER SOCIAL SUPPORT	.01	.230	.25	.12	.230

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$

Table 35

*Hierarchical regression analysis for Family Religious Environment and Spiritually Based Coping, with added interaction variable of Sex x Race*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.02	.176	.02	.26	.009
Step 2	DEMOGRAPHICS	.22	.000	.24		
	SEX				-.21	.114
	RACE				.20	.119
	SEX x RACE				.16	.336
	AGE				-.32	.001
	SOCIO-ECONOMIC STATUS				-.11	.253
Step 3	FAMILY RELIGIOUS ENVIRONMENT	.04	.021	.28	.22	.021

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < .0125$

Table 36

*Hierarchical regression analysis for Self- Worth and Religious Discontent: Anger (2-item scale), with added interaction variable of Sex x Race*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.10	.001	.10	.74	.073
Step 2	DEMOGRAPHICS	.06	.171	.17		
	SEX				.24	.074
	RACE				.27	.031
	SEX x RACE				-.24	.135
	AGE				.03	.762
	SOCIO-ECONOMIC STATUS				-.09	.335
Step 3	SELF-WORTH	.04	.030	.20	-.04	.840
Step 4	LOSS x SELF-WORTH	.01	.213	.22	-.47	.213

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 37

*Hierarchical regression analysis for Total Social Support and Religious Discontent: Anger (2- item scale), with added interaction variable of Sex x Race*

Steps	Predictors	$R^2$ Change	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.10	.001	.10	.90	.006
Step 2	DEMOGRAPHICS	.06	.175	.16		
	SEX				.23	.104
	RACE				.27	.040
	SEX x RACE				-.23	.173
	AGE				.00	.999
	SOCIOECONOMIC STATUS				-.12	.211
Step 3	TOTAL SOCIAL SUPPORT	.00	.603	.16	.21	.199
Step 4	LOSS x TOTAL SOCIAL SUPPORT	.03	.057	.19	-.67	.057

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 38

*Hierarchical regression analysis for Family Social Support and Religious Discontent: Anger (2- item scale), with added interaction variable of Sex x Race*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.10	.001	.10	.61	.048
Step 2	DEMOGRAPHICS	.06	.175	.16		
	SEX				.22	.112
	RACE				.27	.035
	SEX x RACE				-.24	.147
	AGE				-.01	.995
	SOCIO-ECONOMIC STATUS				-.12	.198
Step 3	FAMILY SOCIAL SUPPORT	.00	.689	.16	.11	.527
Step 4	LOSS x FAMILY SOCIAL SUPPORT	.01	.300	.17	-.35	.300

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 39

*Hierarchical regression analysis for Teacher Social Support and Religious Discontent: Anger (2- item scale), with added interaction variable of Sex x Race*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.10	.001	.10	.39	.129
Step 2	DEMOGRAPHICS	.06	.175	.16		
	SEX				.22	.118
	RACE				.28	.028
	SEX x RACE				-.23	.170
	AGE				.01	.942
	SOCIO-ECONOMIC STATUS				-.13	.186
Step 3	TEACHER SOCIAL SUPPORT	.00	.489	.16	.11	.512
Step 4	LOSS X TEACHER SUPPORT	.00	.741	.17	-.10	.741

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 40

*Hierarchical regression analysis for Peer Social Support and Religious Discontent: Anger (2- item scale), with added interaction variable of Sex x Race*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.10	.001	.10	1.04	.000
Step 2	DEMOGRAPHICS	.06	.175	.16		
	SEX				.18	.181
	RACE				.23	.056
	SEX x RACE				-.18	.256
	AGE				.04	.663
	SOCIO-ECONOMIC STATUS				-.08	.366
Step 3	PEER SOCIAL SUPPORT	.02	.094	.19	.32	.082
Step 4	LOSS x PEER SOCIAL SUPPORT	.08	.002	.26	-.90	.002

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Table 41

*Hierarchical regression analysis for Family Religious Environment and Religious Discontent (2- item scale), with added interaction variable of Sex x Race*

Steps	Predictors	$\Delta R^2$	$p$	$R^2$	Beta	$p$
Step 1	LOSS	.06	.017	.06	.42	.238
Step 2	DEMOGRAPHICS SEX RACE SEX x RACE AGE SOCIO-ECONOMIC STATUS	.10	.079	.15	.27 .25 -.29 .11 -.17	.070 .077 .110 .303 .121
Step 3	FAMILY RELIGIOUS ENVIRONMENT	.00	.588	.16	.04	.810
Step 4	LOSS x FAMILY RELIGIOUS ENVIRONMENT	.00	.509	.16	-.25	.509

**Note:**  $p < .05$ ,  $p < .01$ ,  $p < .001$ ,  $p < 0.008$

Figure 1. The proposed moderator model of factors: Self-Worth, Total Social Support, Family Social Support, or Family Religious Environment moderating the relation between Loss and Children's Religious Discontent

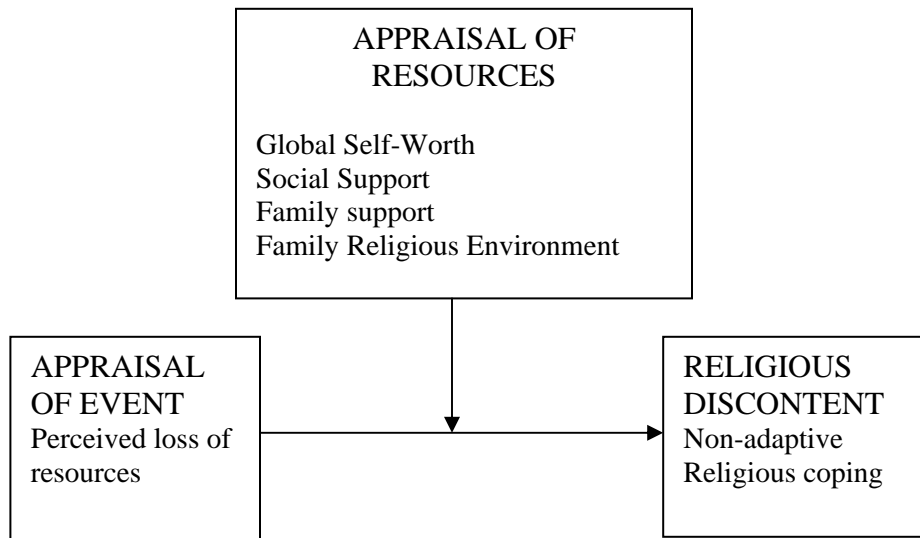


Figure 2. The proposed prediction model of factors: Resource Loss, Self-Worth, Total Social Support, Family Social Support, or Family Religious Environment predicting Spiritually Based Coping

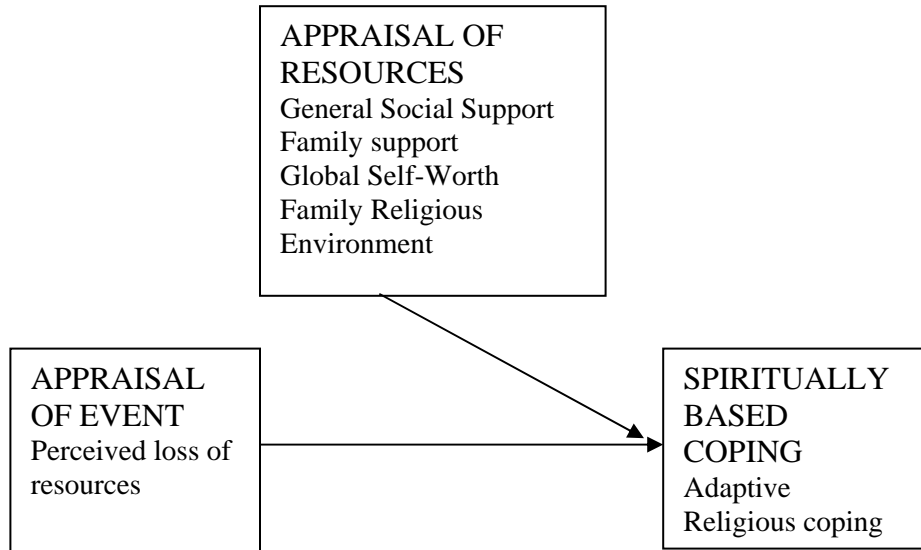


Figure 3. Interaction between Resource Loss and Total Social Support predicting Religious Discontent

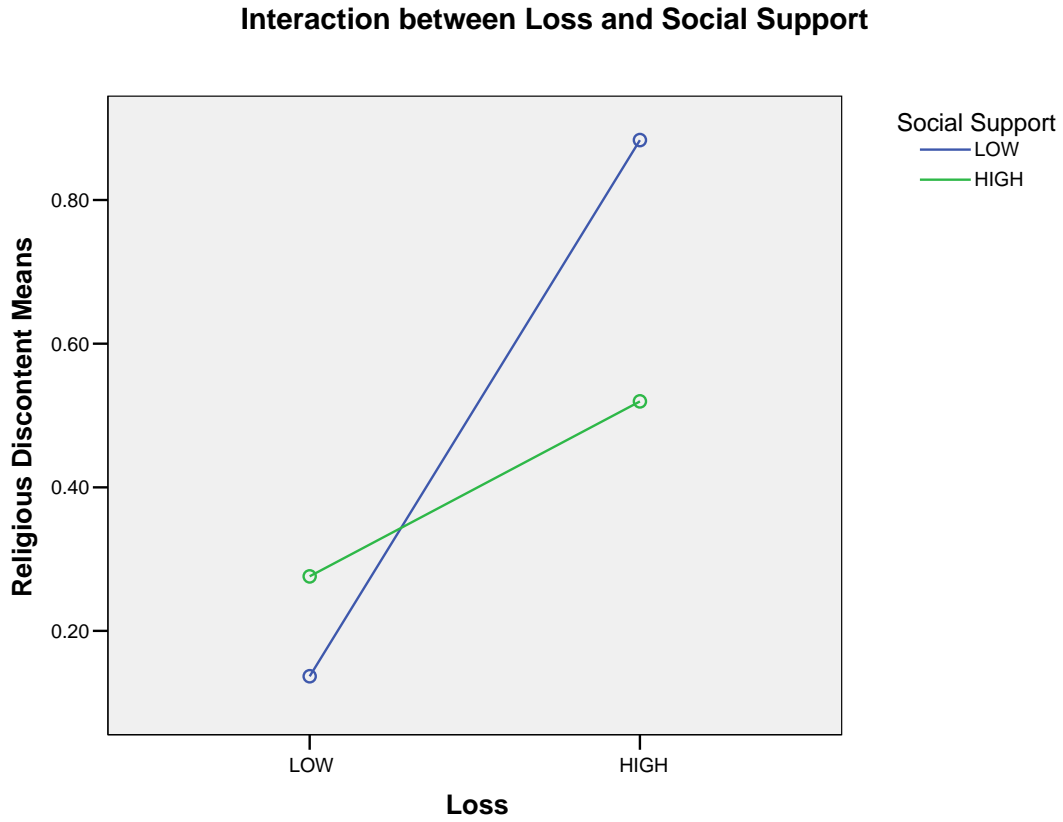


Figure 4. Interaction between Resource Loss and Peer Social Support predicting Religious Discontent

