

RELIGIOSITY, ATTRIBUTIONS FOR CHILD SEXUAL ABUSE, AND
ADULT MENTAL HEALTH

by

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(Under the Direction of Joan Jackson)

ABSTRACT

The purpose of this study was to determine how religious beliefs and practices affect the attributions that individuals make regarding child sexual abuse, and thereby explain variability in adult psychological symptomatology (PTSD, depression, and overall symptomatology). Participants were 183 female undergraduates with a history of child sexual abuse. Three hypotheses were examined: a) religious beliefs would be associated with internal attributions for abuse, b) religious salience would moderate the relationship between religious beliefs and attributions, and c) attributions would mediate the relationship between religiosity and adult psychological symptomatology. Results of regression analyses indicated partial support for the last two hypotheses. Religious salience in the family-of-origin moderated the relationship between fundamentalist beliefs and internal attributions for abuse. Attributions played a mediating role in the relationship between the fundamentalism by religious salience interaction and psychological outcomes (PTSD, overall symptomatology). Research and practice implications are discussed.

INDEX WORDS: Child sexual abuse, Religiosity, Attributions, Self-blame

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TABLE OF CONTENTS

	Page
ACKNOWLEDGEMENTS	iv
INTRODUCTION	1
Overview	1
Attribution Theory.....	2
Abuse-Specific Attributions and Psychological Outcomes.....	3
Religiosity and the Attributional Process	6
Religiosity and Child Sexual Abuse.....	13
Summary of the Literature	18
RATIONALE AND HYPOTHESES	20
Purpose and Significance	20
Constructs	21
Hypotheses	25
METHODS	29
Participants and Procedure	29
Measures.....	30
RESULTS	41
Hypothesis 1: Relationships between Beliefs and Attributions	41
Hypothesis 2: Moderating Effects of Religious Salience.....	42
Hypothesis 3: Mediational Role of Attributions	46

DISCUSSION	52
Hypothesis 1	52
Hypothesis 2	52
Hypothesis 3	55
Limitations.....	57
Implications and Future Directions	59
REFERENCES	64

INTRODUCTION

Overview

A history of childhood sexual abuse has been consistently related to adult psychological symptomatology, including depression, anxiety, posttraumatic stress disorder, sexual dysfunction, substance abuse, dissociation, somatization, poor social adjustment, and low self-esteem (for reviews, see Neumann & Houskamp, 1996; Beitchman, 1992; Briere & Runtz, 1993; Browne & Finkelhor, 1986; Wyatt & Powell, 1988). However, there exists a great deal of variability among the severity of negative outcomes, suggesting the presence of potential mediating and moderating factors. Factors that have been found to influence adult adjustment include abuse characteristics (e.g., severity, duration; Hazzard, Celano, Gould, Lawry, & Webb, 1995; Morrow & Sorell, 1989), family characteristics (e.g., conflict, lack of cohesion, Benedict & Zautra, 1993), and individual characteristics (e.g., developmental level, gender; Wolfe & McGee, 1994). An emerging body of research has demonstrated a link between cognitive mechanisms, such as attributions for the abuse, and psychological outcomes (for review, see Valle & Silovsky, 2002). Few studies, however, have examined factors that contribute to an individual's tendency to make one type of attribution for the abuse versus another. Religiosity, in terms of religious beliefs and practices, has been found to influence individuals' attributions for negative events (e.g., Burris & Jackson, 1999; Kunst, Bjorck, & Tan, 2000; Landrine & Klonoff, 1994; Park & Cohen, 1993). Therefore, it is possible that religiosity could influence the attributions that individuals make for experiences of child sexual abuse.

Understanding these relationships is clinically significant for at least three reasons: (a) in contrast to abuse-specific characteristics, cognitive appraisals represent a modifiable target for intervention; (b) child sexual abuse is highly prevalent and a large portion of the population is religious, meaning that knowledge gained in these areas would have potential widespread applicability; and (c) practitioners may need to develop a more complex understanding of contextual factors, particularly religiosity, that contribute to the development of cognitions associated with psychopathology. This project will contribute to knowledge in this little-understood area by examining the relationships among religious beliefs and practices, attributions for child sexual abuse, and mental health in a female undergraduate population.

The following literature review concentrates on the connections among religiosity, attributions for child sexual abuse, and psychological outcomes. It will first discuss attribution theory and its application to child sexual abuse research. Secondly, it will cover research documenting how religiosity is related to the attributional process. Finally, the convergence between these two bodies of literature will be addressed in terms of how religiosity impacts attributions for child sexual abuse. This literature review leads to a discussion of the rationale and hypotheses for the current study.

Attribution Theory

Application to Mental Health

Attribution theory is concerned with causal inferences, or the perceived reason why an event has occurred. Within the field of attribution research, three dimensions have been identified: (a) locus, or whether the cause is internal or external to the individual, (b) stability, or whether the cause is constant or variable over time, and (c) controllability, or whether the cause lies within the control of the individual (Weiner & Graham, 1999). The attributions that

individuals make for an event are closely linked to their emotional experiences and resulting actions. For example, an individual who attributes a negative event to internal, controllable causes tends to experience feelings of guilt and to attempt restitution. On the other hand, an individual that attributes the negative event to internal, *uncontrollable* causes is likely to experience shame and to act in a retreating manner (Weiner & Graham, 1999). Attribution theory therefore provides a means of linking cognition, emotions, and behavior.

Because of its explanatory power in linking cognitive appraisals to emotions and actions, attribution theory has understandably been of interest in investigating psychological adjustment and psychopathology. Most notably, the hopelessness theory of depression predicts that depression occurs when negative life events are attributed to internal, stable, and global causes (Abramson, Seligman, & Teasdale, 1978). Several studies have also investigated the relationship between attributions and aggression, documenting that feelings of anger mediate the relation between attributions and aggressive behavior (e.g., Betancourt & Blair, 1992; Graham, Hudley, & Williams, 1992). Of greater relevance to this study, the link between attributions and psychopathology has been established in terms of individuals' responses to traumatic events (e.g., Feiring & Taska, 1998; Valle & Silovsky, 2002).

Abuse-Specific Attributions and Psychological Outcomes

Motivation

Theoretically, individuals are motivated to make attributions to find meaning in events, to feel a sense of control in their lives, and to maintain self-esteem (Hood, Spilka, Hunsberger, & Gorsuch, 1996; Janoff-Bulman, 1983; Weiner & Graham, 1999). The experience of child sexual abuse is one that affects all of these cognitive realms. Janoff-Bulman (1983) proposes that victimization experiences result in the “shattering of an assumptive world.” According to

Janoff-Bulman, the three assumptions that are challenged include: a) the belief in personal invulnerability; b) the perception of the world as meaningful and comprehensible; and c) the view of the self in a positive light. In response, individuals who have experienced a trauma such as child sexual abuse are likely to make causal attributions in order to redefine their assumptive worlds. In other words, the attributional process may provide survivors with a means of bringing meaning and organization into their lives after their cognitive frameworks have been disrupted.

Internal Attributions

Most of the literature in the child sexual abuse arena has focused on the “locus” aspect of the attribution, or whether individuals attribute the abuse to internal versus external factors. In particular, the literature tends to focus on internal attributions. Internal attributions are generally discussed in terms of self-blame for the abuse. Blaming the self can take the form of feeling responsible for participation, for the family’s reaction, and for feeling pleasure during the experience. Individuals may also blame themselves for failing to recognize the abuse, to seek help, to avoid or control the abuse, to protect siblings, and/or to protect the self (Celano, 1992; Miller & Porter, 1983).

Self-blame may serve an adaptive function in terms of satisfying the individual’s need for perceived control, belief in a just world, and need to impose meaning (Miller & Porter, 1983). However, individuals who make internal attributions for their abuse are prone to poor adjustment, psychological distress, depression, anxiety, PTSD, interpersonal problems, and low self-esteem (Feiring & Taska, 1998; Feiring, Taska, & Chen, 2002; Mannarino & Cohen, 1996; Morrow, 1991; Valle & Silovsky, 2002). The relationship between internal attributions and psychopathological symptoms appears to be mediated by feelings of stigma and shame (Coffey, Leitenberg, Henning, Turner, & Bennett, 1996; Feiring, Taska, & Chen, 2002; Feiring, Taska, &

Lewis, 1996). The relationship between self-blaming attributions and adult symptomatology is powerful, as it remains even after controlling for age, gender, abuse characteristics, and general attributional style (e.g., the tendency to attribute all negative events to internal factors) (Brown & Kolko, 1999; Feiring et al., 2002; Mannarino & Cohen, 1996). These relationships appear to hold true specifically for attributions that were made in childhood, as adulthood attributions have been found not to be predictive of current symptomatology (Barker-Collo, 2001).

External and Other Attributional Dimensions

Little has been done to determine the relationship between external attributions and psychological adjustment. However, one study demonstrated a link between external attributions for child physical abuse and externalizing symptoms (e.g., aggression) (Brown & Kolko, 1999). After interviewing 22 child sexual abuse survivors, Valentine and Feinauer (1993) noted that making external attributions of blame for the abuse served as a resilience factor for several women. It is unclear what the most adaptive type of attribution would be. One study suggests that blaming no one for the abuse may be the most desirable scenario, as adults attributing high levels of blame to themselves, perpetrators, and family had more negative perceptions of others than individuals who did not blame anyone (McMillen & Zuravin, 1997).

Some research has examined the stability and controllability dimensions of attributions for child sexual abuse in terms of how they relate to psychological outcomes. It appears that the less control a person feels they had over the abuse (i.e., attributions of stability and uncontrollability), the more poorly adjusted they are in adulthood (Feinauer & Stuart, 1996; Hazzard, Celano, Gould, Lawry, & Webb, 1995). This is congruent with Abramson, Seligman, and Teasdale's (1978) theory that when individuals make stable, uncontrollable attributions for a series of negative events, they are prone to learned helplessness and depression.

Factors Influencing Attributions

Several studies have attempted to elucidate the factors that influence the types of attributions individuals make about child sexual abuse. A close relationship with the perpetrator, as well as child sexual abuse perpetrated by a family member, has been positively associated with internal attributions for the abuse (Barker-Collo, 2001; Quas, Goodman, & Jones, 2003). In contrast, more distant child-perpetrator relationships were associated with higher levels of self-blame in another study (Wyatt & Newcomb, 1990). Age of onset has also been associated with self-blame, with some studies finding earlier onset of the abuse to be positively related to self-blame (Barker-Collo, 2001; Quas, Goodman, & Jones, 2003), while others found the reverse to be true (Steel, Sanna, Hammond, Whipple, & Cross, 2004). Studies have also revealed several measures of severity, including duration, type, and frequency of abuse to be positively related to internal attributions (Beitchman, et al., 1992; Quas, Goodman, & Jones, 2003; Steel, Sanna, Hammond, Whipple, & Cross, 2004). There is some consistency in the finding that greater use of physical force or coercion is associated with external attributions (Chaffin, Wherry, & Dykman, 1997; Hunter, Goodwin, & Wilson, 1992; Wyatt & Newcomb, 1990).

Religiosity and the Attributional Process

Religiosity as a Construct in the Psychological Literature

Religiosity is a multidimensional construct; on the most general level, it has been defined in terms of behaviors, attitudes, and values associated with “the infinite,” “a Beyond,” “the divine,” or “the ultimate” (Hood, Spilka, Hunsberger, & Gorsuch, 1996; Loewenthal, MacLeod, Goldblatt, Lubitsh, & Valentine, 2000). Much work has been done in attempts to delineate the multiple dimensions comprising religiosity, at least within the Christian tradition (e.g., Davidson, 1975; Fukuyama, 1961; Glock, 1962; Hilty, Morgan, & Burns, 1984; King & Hunt, 1975;

Verbit, 1970). Typologies proposed within the psychology of religion typically include the following broad constructs: rituals/practices, ideology/beliefs, emotion/experiential, knowledge, community, and ethics. One study compiled the measures developed for several typologies and subjected them to factor analysis (Hilty et al., 1984). This study identified the following dimensions of religiosity: personal faith (the extent religion influences daily life and decision-making); intolerance of ambiguity; orthodoxy (endorsement of traditional Christian beliefs); social conscience (e.g., attitudes towards minorities); knowledge of religious history; life purpose; and church involvement.

While several typologies have been proposed, synthesized, and even factor analyzed, most have rarely been utilized in empirical literature examining the relationships between religiosity and psychological variables. By far the most widely employed typology is based on a motivational approach to understanding individual faith, or Allport's intrinsic versus extrinsic conceptualization of religiosity (Allport & Ross, 1967). An individual ascribing to an intrinsic orientation is described as internally motivated while an extrinsic orientation is associated with utilitarian motives, such as the desire for social status. Within the psychological literature, intrinsic orientation has been correlated with religious commitment, spiritual well-being, and positive mood while the extrinsic orientation has been correlated with depression, discriminatory attitudes, and dogmatism (Donahue, 1985; Genia, 1993; Genia, 1996; Kirkpatrick, 1993). Despite its widespread use, the intrinsic/extrinsic typology has been the subject of much criticism. Critics of this scheme have pointed out that the constructs are value-laden, multidimensional, and poorly-defined. Researchers have also noted that the two constructs are not necessarily bipolar, as originally conceptualized, and that their construct validity is questionable (Burris, 1994; Hood, 1985; Kirkpatrick & Hood, 1990). Therefore, the general

psychological literature still awaits the systematic application of an empirically validated, multidimensional operationalization of religiosity.

Religiosity and Mental Health

A growing body of literature has been examining the relationships between religious beliefs and practices and mental health. For the most part, religiosity has been negatively associated with depression, suicide, and self-actualization, and positively associated with well-being, life satisfaction, intolerance of ambiguity, and physical health. Mixed results have been reported in terms of the relationship between religiosity and anxiety, depression, psychosis, self-actualization, and self-esteem (for reviews, see Gartner, Larson, & Allen, 1991; Hackney & Sanders, 2003; Levin & Chatters, 1998; Smith, McCullough, & Poll, 2003; Ventis, 1995).

The equivocal nature of results relating religiosity to mental health is likely due to an overly simplistic conceptualization of religiosity. Often, religiosity is measured by one or two items eliciting information on church attendance or self-identified affiliation with a major religion. In addition, different dimensions of religiosity appear to relate to mental health in different ways. One meta-analysis suggested that when religiosity is measured in terms of institutional religion (e.g., church attendance), it appears to have a more negative relationship with mental health. On the other hand, when it is measured in terms of personal devotion, religiosity has generally demonstrated a more positive relationship with mental health (Hackney & Sanders, 2003). These results underscore the complexity of religiosity as a construct, and the need to measure it in a more sophisticated and consistent manner in order to determine how its multiple dimensions relate to mental health.

In addition to the lack of consistent measurement of religiosity as a well-defined, multifaceted construct, the mechanisms underlying the relationships between religiosity and mental

health have rarely been examined. It is possible that an understanding of these mechanisms could help elucidate the complex nature of the relationship between religiosity and psychological factors. Several studies have investigated the role that religiosity plays in the attributional process, which may represent a mechanism by which religiosity exerts an influence on mental health outcomes.

The Role of Religiosity in the Attributional Process

There appear to be two general ways in which religiosity can influence the attributional process: a) causal explanations can be religious in nature (e.g., “it was God’s will”), and b) religious belief systems may impact the type of attribution indirectly (e.g., “my religion tells me that people deserve what they get; therefore, this is my fault”). The majority of research in this area has focused on religious forms of attributions. According to Hood et al. (1996), religiosity particularly lends itself to attributional processes because it involves the same motivations that underlie naturalistic (non-religious) attributions: a search for meaning, control, and self-esteem. The authors theorize that individuals shift to religious attributions when naturalistic ones don’t meet the aforementioned needs. Situations that may prompt the use of religious attributions are proposed to involve high levels of threat, ambiguity, significance, and personal relevance. These events stimulate questions such as “Why me?” and “Why now?” Some research has supported the theory that individuals are more likely to make religious attributions for significant, personally relevant events (Spilka & Schmidt, 1983). Overall, it appears that individuals are far less likely to make religious attributions for an event (as opposed to naturalistic attributions), especially when the event is extremely negative (Hovemyr, 1998; Kunst et al., 2000; Lupfer, Brock, & DePaola, 1992; Spilka & Schmidt, 1983). One study reported that when individuals do

make religious attributions to God for negative events, they tend to view God as acting in an angry, punishing, wrathful manner (Pargament & Hahn, 1986).

Attributions of a Religious Nature

While not the focus of the current study, the majority of research that investigates the role of religion in the attributional process has centered on how religion specifically enters into the *content* of the attributions. Several types of religious attributions have been described in the literature. These attributions tend to vary in terms of how God is conceptualized and how much control this higher power is perceived to exercise. Mallery, Mallery, and Gorsuch (2000) developed a taxonomy of attributions to God, including the following categories: 1) God's Will-God's Activity, 2) Person Acts-God Responds, 3) Social Environment Acts-God Responds, and 4) Luck. To some extent, these types of attributions overlay Weiner's social psychological attribution theory (with dimensions of locus, stability, and controllability). For example, an attribution such as "God's Will-God's Activity," where God is in control of the cause and the effects, would be similar to making an external, stable, uncontrollable attribution for an event.

In addition to varying in terms of the locus and controllability of an event, religious attributions differ in how God is conceptualized. A factor analysis of adjectives describing God provides an example of how individuals may conceptualize God among several different dimensions: traditional (e.g., companionable, benevolent); wrathfulness; omni-ness; and potentially passive (Gorsuch, 1968). Along similar lines, individuals have been found to shape their attributions around their concept of God. For example, individuals who view God as wrathful may attribute a negative event to his punishment whereas individuals who view God as benevolent may attribute this event to his will to improve their lives through spiritual struggle (Pargament & Hahn, 1986; Pargament, 1990; Shortz & Worthington, 1994). In particular,

individuals who view God as responsive and benevolent may be prone to make external, stable, and controllable attributions for negative events, as they may feel that they exercise some control through God's response to their prayers, even if the cause of the event is located externally (Pargament & Hahn, 1986; Pargament et al., 1988).

Different types of religious attributions have been associated with both positive and negative outcomes. Not surprisingly, attributions to a benevolent or purposeful God have been positively associated with mental health (Pargament, 1990; Park & Cohen, 1993; Loewenthal, MacLeod, Goldblatt, Lubitsh, & Valentine, 2000). Little research has been performed to determine the effects of attributions to an angry or punitive God, though one study found them to be linked to psychological distress in individuals dealing with divorce (Shortz & Worthington, 1994). More studies are needed to determine the relationship between religious attributions and mental health.

Religiosity and Attributions of a Non-Religious Nature

Various aspects of religiosity and previous life experience may affect the types of attributions an individual makes in response to an event. These include the types of religious beliefs the individual endorses, family environment, and salient life experiences such as child sexual abuse. An individual's concept of God and adherence to specific portions of Christian doctrine may play an important role in the attributional process. For example, those who view God as loving, benevolent, and forgiving are more likely to attribute control to themselves, while those who view God as wrathful, stern, and vindictive tend to view themselves as powerless (Hood, Spilka, Hunsberger, & Gorsuch, 1996; Spilka & Mullin, 1977).

Some research has found ascription to Fundamentalist, Conservative Protestant, or biblically literal orientations to be associated with blaming the individual for negative

experiences such as rape (Sheldon & Parent, 2002), crime (Leiber & Woodrick, 1997), and poverty (Zucker & Weiner, 1993). It is significant to note that these attributions of blame may not be religious in nature, but can be *influenced* by religious beliefs. In terms of parenting, individuals ascribing to these orientations tend to support obedience and corporal punishment (Danso, Hunsberger, & Pratt, 1997; Ellison & Sherkat, 1993). Specifically, Ellison and Sherkat (1993) found these parenting practices to be mediated by the following beliefs: biblical literalism, belief that human nature is sinful, and punitive attitudes towards sinners. Children often internalize their parent's religious beliefs (Cornwall, 1987; Parker & Geier, 1980), and view God in a similar manner to the way they view their parents (e.g., authoritarian, loving) (Hertel & Donahue, 1995). Therefore, it is possible that the attributions they make would be partially influenced by beliefs and practices within the family environment (e.g., internal attributions for negative events when parents endorse beliefs such as "human nature is sinful and sinners deserve to be punished"). Again, it is likely that religious beliefs can influence attributions indirectly; for example, an individual may be predisposed to make internal attributions for negative events due to punitive religious beliefs.

Religious Salience and Attributions

The extent to which religious belief systems influence the attributional process may depend on the salience of these beliefs for the individual. Theoretically, the most available belief system will exert the greatest influence on the attributions an individual makes in a given situation (Ajzen & Fishbein, 1983; Spilka, Shaver, & Kirkpatrick, 1985). The recency and frequency of activation of certain cognitive information has been found to increase its accessibility, thereby influencing attributions (Rholes & Pryor, 1982). The availability of both religious and naturalistic belief systems may depend on several factors, including early

socialization, church attendance, strength of beliefs, and knowledge regarding the beliefs (Hood et al., 1996; Spilka et al., 1985).

Little empirical work has investigated how salience of particular belief systems influences the attributional process. However, a few studies have examined the relationship between salience of religious beliefs and tendencies to make religious attributions. In a study of 32 Christian college students' responses to vignettes, Ritzema (1979) found that participants who attributed life events to divine intervention reported more orthodox religious beliefs, more frequent prayer, feelings of greater closeness to God, and greater importance of religious thoughts and feelings. In a similar vignette study involving 329 college students, Kunst, Bjorck, and Tan (2000) found that greater endorsement of religious beliefs and more frequent church attendance were related to attributions to God's will, God's love, and evil spiritual forces for uncontrollable, negative events. Whether religiosity influences the type or the content of an individual's attribution, it is apparent that cognitive and behavioral salience plays an important role in determining the strength of this relationship. However, this relationship has only been examined in terms of religious forms of attribution, and no known study has investigated the relationship between religious salience and the tendency to make internal versus external attributions for specific events.

Religiosity and Child Sexual Abuse

Religiosity in Abused versus Nonabused Individuals

Some research has examined whether differences exist in the religious backgrounds of those who have experienced childhood abuse versus those who were not abused. Several studies have found nonabusive families to place higher emphasis on religious and moral values than abusive families, as assessed by the Family Environment Scale (Davis & Graybill, 1983;

Jackson, Calhoun, Amick, Maddever, & Habif, 1990; Perry, Wells, & Doran, 1983; Ray, Jackson, & Townsley, 1991). In contrast, when religiosity has been assessed in terms of religious or denominational affiliation in the family-of-origin, other studies have reported no relationship between religiosity and prevalence of child sexual abuse (Finkelhor, 1984; Russell, 1986).

A few studies examine the constructs of religiosity and abuse in a more complex manner, yielding different results. For example, Stout-Miller, Miller, and Langenbrunner (1997) examined abuse both within and outside of the family in a sample of 397 students. They found that individuals sexually abused by a relative were much more likely to be affiliated with fundamental Protestant religions, while individuals abused by a non-relative were rarely involved in religious activities and were more likely to be affiliated with liberal religious denominations. In a study of 2,964 professional women, Elliott (1994) found conflicting results in that denominational affiliation had no impact on prevalence. However, for conservative Christians, the prevalence of sexual abuse was differentially mediated by the integration of religious beliefs into family life, as assessed by the Moral/Religious subscale of the Family Environment Scale. The results suggest that parents' endorsement of conservative Christian beliefs, without integration of those beliefs into family life, increased the risk for sexual abuse. The study did not report whether these results differed in terms of intrafamilial versus extrafamilial abuse. Ray, et al. (1991) did analyze religious emphasis within the family environments of both intrafamilial and extrafamilial victims, and reported no significant differences between the two. From these studies, it is apparent that the relationship between religiosity in the family-of-origin and the prevalence of child sexual abuse is a complex one.

In addition to differing in terms of religious affiliation within the family-of-origin, adult survivors have been found to differ from nonabused individuals in terms of current religious beliefs and practices. Overall, it appears that survivors of child sexual abuse are less likely to be involved in religious practices. Hall (1995) found that Christian women in outpatient psychotherapy who had survived child sexual abuse scored lower on involvement in organized religion than either outpatients who had no abuse history or non-clinical, non-abused women. Russell (1986) also found survivors of incest to reject the religion of their upbringing. Along similar lines, in a sample of 115 Mormon women, Pritt (1998) found survivors of child sexual abuse to score more negatively than nonabused women on scales measuring concepts of God and spiritual well-being. It has been theorized that this negative relationship between child sexual abuse and adult religiosity may be due to a sense of abandonment and mistrust of God (Fortune, 1995; Hall, 1995).

Some studies have found adult religious practices among survivors to depend on certain factors. For example, Elliott (1994) found that women raised by conservative Christian parents were more likely to be religious non-practitioners as adults than non-abused women. However, among women raised by parents of other religious and non-religious orientations, a history of sexual abuse increased the likelihood that they would be involved in religious practices as adults. Finkelhor, Hotaling, Lewis, and Smith (1989) found that survivors who had experienced abuse involving attempted or actual intercourse reported a greater tendency as adults not to practice any religion than those who experienced milder forms of abuse or no abuse at all. These findings suggest that the impact that child sexual abuse has on adult religiosity may depend on several factors, including denominational affiliation and abuse severity. While comparisons between

abused and nonabused individuals are not the focus of the current study, they demonstrate that a significant relationship exists between child sexual abuse and religiosity, albeit a complex one.

Religiosity, Child Sexual Abuse, and the Attributional Process

The experience of child sexual abuse may elicit different types of attributions, depending on family background, religious beliefs, and practices. Some authors have discussed how religiosity can exacerbate the potential for self-blame and stigmatization among survivors of child sexual abuse. In her interviews with nine survivors from Christian backgrounds, Manlowe (1995) highlighted the fact that survivors may feel a sense of abandonment after turning to help from God, eventually focusing inward as a result. Several aspects of Christian religious doctrine that may facilitate self-blame, guilt, and shame in sexual abuse survivors have been consistently identified. For example, the value placed on obedience to authority figures suggests that the abusive adult is in the right and that the child is to blame for any punitive or abusive actions taken against him or her. The emphasis placed on the need for redemption creates a sense of unworthiness and an interpretation of the abuse as evidence for this unworthiness.

Within the literature, other values that have been suggested to have a negative impact on child abuse survivors include the value of suffering and self-sacrifice, the virtue of repentance and forgiveness, the necessity of remaining sexually pure, and women's disproportionate responsibility for original sin (Brown & Parker, 1989; Capps, 1992; Fortune, 1995; Manlowe, 1995; Redmond, 1989; Ruether, 1989). For the most part, the theories that these doctrinal values negatively impact child sexual abuse survivors are based on thematic analyses of the Bible and Christian literature and on authors' interactions with survivors. Therefore, the link between doctrinal values and experiences with child sexual abuse lacks strong empirical validation.

In contrast, other literature has suggested that religiosity can provide a means of constructing positive meaning and purpose from the experience of violence (Pargament, 1996; Ryan, 1999; Valentine & Feinauer, 1993). After conducting open-ended interviews with 22 female survivors who predominantly identified as Latter-day Saints, Valentine and Feinauer (1993) reported that religion assisted these women in making meaning of the abuse in a manner that freed them from blame and guilt. Similarly, in her open-ended interviews with 50 survivors affiliated with a variety of Christian denominations, Ryan (1999) found women to describe their religion as providing direction in their lives, helping to construct meaning out of the experience, and providing a sense of hope and security. In their interviews with 25 individuals who had recently experienced a major stressor, Overcash, Calhoun, Cann, and Tedeschi (1996) discovered that religious beliefs helped some victims maintain their assumptions about a predictable, safe world (e.g., “this is part of God’s plan”). These studies together imply that religion may help trauma survivors to construe their experiences in ways that could be psychologically beneficial. In fact, as Pargament and Hahn suggest, it is possible that non-punitive religious attributions provide a preferable alternative to self-blame (1986). However, the focus of these studies lies mostly in *coping* with the abuse after it has occurred.

These preliminary investigations indicate that the role religiosity plays in interpreting child sexual abuse is a complex one. Elliott’s (1994) study of adult survivors of child sexual abuse provides further, though indirect, support for this point. The main effect for religiosity as it related to mental health (as assessed by the Trauma Symptom Checklist-40) was that women who adhered to a religious belief system were less symptomatic than women who did not practice any religion. However, conservative Christians abused within their immediate families reported increased symptomatology in comparison to incest survivors of other religious

orientations and incest survivors who were non-practitioners. In contrast, conservative Christians abused *outside* of the immediate family were the least symptomatic of any group of survivors. While not measured in this study, it is possible that attributions served as the mechanism by which religious beliefs differentially impacted adult symptomatology. For example, Elliott suggests that conservative Christians abused within the immediate family may experience greater amounts of shame and self-blame due to their religious beliefs. One weakness of this study is that it relied upon a single item to differentiate conservative Christians from adherents of alternative religious belief systems; the item asked respondents to indicate whether they believed in personal salvation based on faith in Jesus Christ. If the study had included measures of other aspects of religious belief systems, such as punitive and biblically literal beliefs, it may have been better able to differentiate adherents of various religious orientations. Nonetheless, differences were found among the survivors, suggesting that further research in the area of religious beliefs and adult symptomatology may be fruitful.

Based on the existing literature, it is difficult to surmise how religiosity impacts the attributional process at the time child sexual abuse occurs. There is also a lack of quantitative, replicable research that clearly defines the constructs of interest. However, these preliminary investigations suggest that a relationship does exist among religious beliefs and practices, attributions for traumatic experiences, and mental health.

Summary of the Literature

In conclusion, it is evident that the attributional process plays a role in mental health for individuals who have experienced child sexual abuse. Religiosity may affect this process either through the content of the attributions or by affecting the forms of naturalistic attributions that are made. The effect that religiosity has on attributions and mental health appears to depend on

family religious environment, conceptualization of God, and adherence to certain aspects of Christian doctrine. While the complex relationship among religiosity, attributions for child sexual abuse, and adult mental health is not clearly understood, explication of these relationships appears to be a promising avenue for future research.

RATIONALE AND HYPOTHESES

Purpose and Significance

The purpose of this project was to determine how religiosity affects the attributions that individuals make regarding child sexual abuse, and thereby may explain some of the variability in adult psychological symptomatology. Specifically, the research questions were: a) How do religious beliefs, family background, and religious practices affect the internality of attributions made at the time that child sexual abuse takes place? b) Is there a relationship between religiosity in the family-of-origin and adult mental health in survivors of child sexual abuse? and c) Do attributions mediate the relationship between religiosity and mental health in child sexual abuse survivors?

These questions are significant for several reasons. In general, there is an emerging interest within the field of clinical psychology to understand the relationship between religiosity and mental health (Miller & Thoresen, 2003). This is not surprising, as about 95% of Americans report a belief in a higher power and about 60% feel that religion is “very important” in their lives (Gallup & Lindsay, 1999, in Miller & Thoresen, 2003). In particular, little work has been done to elucidate the complex relationship between cultural factors such as religiosity and experiences with child sexual abuse. While cognitive processes are known to be involved in the sequelae of abusive experiences, factors that contribute to different forms of causal interpretations are not well-understood. Gaining this information is of clear clinical significance, as cognitive processes represent one of the few areas for effective intervention.

The potential widespread applicability of this research adds to its significance. The experience of child sexual abuse is highly prevalent, as high as 60% of the population (Wyatt, Guthrie, & Notgrass, 1992) and 71% of women (Everill & Waller, 1995). Given this information and the fact that religion plays a part in the majority of American lives, the knowledge acquired from this research may apply to a large portion of the clinical population.

Constructs

The constructs relevant to this study include religious beliefs, religious salience, attributions for child sexual abuse, and adult mental health. They were operationalized based on existing theory and research in order to test specific hypotheses.

Religious Beliefs

The majority of studies and measures have focused on the Christian religion. Therefore, the current study was limited to the measurement of Christian beliefs and practices. Within the literature, these religious beliefs have been conceptualized in a variety of ways. While most studies have measured religious beliefs in a general, unidimensional manner (e.g., Do you believe in God?), a few have been more specific in assessing the content of religious beliefs. One of the more widely used means of measuring the content of religious beliefs has been to assess respondents' concept of God (e.g., Foster & Keating, 1992; Gorsuch, 1968; Greeley, 1989; Kunkel, Cook, Meshel, Daughtry, & Hauenstein, 1999; Nelsen & Kroliczak, 1984). Among these studies, concepts of God are typically represented by adjectives such as benevolent, fatherly, omniscient, or punitive. Concepts of God have been related to psychological constructs such as self-esteem (Benson & Spilka, 1973) and childhood attachments (Kirkpatrick & Shaver, 1990). Of relevance to this study is the fact that concepts of God have been related to self-blame (Nelsen & Kroliczak, 1984) and to attributions (Pargament

& Hahn, 1986). Therefore, concepts of God were used as a measure of religious beliefs in the current study.

More specifically, concepts of God as supportive/benevolent and punitive/wrathful were a focus of this study, as these are the dimensions that have previously been related to self-esteem, self-blame, and attributions. Supportive and benevolent concepts of God were conceptualized as highly overlapping constructs, perhaps representing a higher order “positive concept of God” factor, as they are related to similar outcomes in the literature. Similarly, punitive and wrathful constructs will be conceptualized as representing a more general “negative concept of God” construct. Supportive/benevolent and punitive/wrathful concepts of God have been measured separately in the literature, as opposed to representing two poles of one dimension. Therefore, they were also measured separately in this study.

Another means by which religious beliefs have been operationalized has been to examine sets of beliefs affiliated with a particular denomination or orientation. Fundamentalist religious orientations are perhaps the most frequently measured religious orientations in studies of a psychological nature. Fundamentalism is typically associated with conservative Protestant denominational affiliations. In the literature, the larger construct of fundamentalism is often comprised of the following narrower constructs: biblical literalism, belief in the essential sinfulness of humans, and punitive concepts of God (Ellison & Sherkat, 1993; Gorsuch & Smith, 1983; Kelldstedt & Smidt, 1991). Of these constructs, biblical literalism is the most frequently emphasized as the hallmark of fundamentalism. At this point, the multiple constructs associated with fundamentalism have only been related to each other in theoretical terms, and their relationships to each other and to the larger construct of fundamentalism have yet to be evaluated empirically.

Because fundamentalism and the constructs associated with it have been related to blaming the individual for negative experiences (Leiber & Woodrick, 1997; Nelsen & Kroliczak, 1984; Sheldon & Parent, 2002; Zucker & Weiner, 1993), it was expected to be a relevant construct in terms of understanding attributions for child sexual abuse. In addition, the construct of fundamentalism is associated with certain values, such as the value of obedience to authority (e.g., Ellison & Sherkat, 1993) and the need for redemption, that are expected to exacerbate self-blame and shame in abuse survivors (e.g., Brown & Parker, 1989; Manlowe, 1995; Redmond, 1989). Therefore, adherence to fundamentalist belief systems was utilized in the current study as a measurement of religious beliefs.

Religious Salience

In the literature, the construct of religious salience is typically measured by an item such as “How important is your religion to you?” or “How often do you attend religious services?” However, these items do not thoroughly assess both cognitive and behavioral aspects of religious salience. Some studies have employed lengthier measures that have measured religious salience in terms of how religious beliefs influence decisions in daily life and other more observable behaviors such as participation in a variety of religious activities (e.g., praying, reading the Bible) (King & Hunt, 1972; Kunst et al., 2000; Ritzema, 1979). One study conducted a factor analysis containing King and Hunt’s (1972) multiple cognitive and behavioral salience items (Hilty et al., 1984). Two factors emerged: personal faith and church involvement. Therefore, both of these constructs were utilized in measuring the higher order factor, religious salience. In addition to these measures of individual religious salience, salience of religious beliefs was measured in terms of emphasis within the family-of-origin.

Attributions

All hypotheses are based on attributions made at the time of abuse, as these have been found to be more predictive of adult symptomatology than attributions made during adulthood (Barker-Collo, 2001). Similarly, examination of religious beliefs and practices focused on the family-of-origin, as these were expected to be the most salient in influencing attributions at the time of abuse. Attributions themselves were examined solely in terms of the “locus” dimension (i.e., internality), as the majority of research within the child sexual abuse arena has focused on this dimension. As constructs, internal attributions and self-blame have been used interchangeably in the child sexual abuse literature (e.g., Celano, 1992; Janoff-Bulman & Frieze, 1983; Mannarino & Cohen, 1996). These constructs have been consistent predictors of psychopathology among survivors of child sexual abuse (e.g., Feiring et al., 2002; Mannarino & Cohen, 1996; Morrow, 1991; Valle & Silovsky, 2002).

Mental Health

Child sexual abuse has been connected with a range of psychopathological symptomatology, including depression, PTSD, anxiety, and sexual dysfunction (see Beitchman, 1992; Briere & Runtz, 1993; Neumann & Houskamp, 1996). Therefore, a general measure of psychopathology was utilized to assess mental health in the current study. PTSD and depression are among the psychological disorders most consistently associated with surviving child sexual abuse. Therefore, posttraumatic stress and depressive symptomatology were examined separately and conceptualized as related constructs comprising adult mental health in a sample of child sexual abuse survivors.

Hypotheses

Based on existing research and theory, three hypotheses were examined in this study.

Hypothesis 1

The first hypothesis was that child sexual abuse survivors' religious beliefs would be associated with the extent to which they make internal attributions for child sexual abuse. Specifically, it was predicted that negative concepts of God and endorsement of fundamentalist belief systems would be associated with more internal attributions for abuse. Conversely, it was expected that positive concepts of God and less endorsement of fundamentalist beliefs would be associated with less internal attributions for abuse. Concepts of God were measured by the Conceptualization of God: Adjective Ratings Scale (Gorsuch, 1968), fundamentalist beliefs were measured by the Fundamentalism Scale-Revised (Gorsuch & Smith, 1983), and internal attributions were measured by the Attributions of Responsibility and Blame Scales, self-blame subscale (McMillen & Zuravin, 1997).

The expectation that concepts of God influence attributions is based on preliminary research suggesting that individuals' concepts of God influence the content and type of their attributions (Pargament, 1990; Pargament & Hahn, 1986). However, these studies focused solely on the content of religious forms of attributions; studies have yet to examine how concepts of God are specifically linked to internal versus external attributions for negative events. The expectation that negative concepts of God would be associated with more internal attributions was indirectly based on findings that punitive/angry concepts of God are associated with poorer adjustment (Foster & Keating, 1990, in Hood et al., 1996), lower self-esteem (Benson & Spilka, 1973), and higher self-blame (Nelsen & Kroliczak, 1984). While these studies did not examine attributions specifically, the fact that internal attributions have been linked to similar constructs

(self-blame, poor adjustment) suggests that they may also be related to negative concepts of God.

The expectation that endorsement of fundamentalist beliefs would also be related to internal attributions is again based on indirect support from the literature. Fundamentalist, biblically literal, and punitive religious beliefs have been associated with placing an emphasis on blame and obedience (Danson et al., 1997; Ellison & Sherkat, 1993; Sheldon & Parent, 2002).

Theoretically, it has been proposed that an emphasis on blame and obedience is partially responsible for self-blame and poor psychological outcomes in abuse survivors (e.g., Brown & Parker, 1989; Manlowe, 1995; Redmond, 1989). The fact that internal attributions are associated with poor psychological outcomes suggests that they may also be related to fundamentalist beliefs.

In contrast, it was expected that positive concepts of God and lower endorsement of fundamentalist beliefs would be associated with less internal attributions. The fact that attributions to a benevolent and purposeful God have been positively associated with a sense of control and better mental health suggests that these individuals may be more prone to utilize external as opposed to internal forms of attributions for negative events (Hood et al., 1996; Loewenthal et al., 2000; Park & Cohen, 1993).

Hypothesis 2

The second hypothesis was that there would be an interaction between types of religious beliefs endorsed and the salience of these beliefs, in terms of how they influence attributions for child sexual abuse. It was hypothesized that the relationship between types of religious beliefs (i.e., concepts of God and fundamentalist belief systems) would be strongest when the belief system was salient, in terms of both personal faith (e.g., influence of beliefs on daily decisions and activities) and family emphasis (e.g., enforcement of religious norms in the family-of-origin)

measures. This hypothesis was based on both theory and research suggesting that availability and salience of a belief system affects the extent to which particular beliefs play a role in the attributional process (Kunst et al., 2000; Rholes & Pryor, 1982; Ritzema, 1979; Spilka et al., 1985). Religious beliefs were measured by the Conceptualization of God: Adjective Ratings Scale (Gorsuch, 1968) and Fundamentalism Scale-Revised (Gorsuch & Smith, 1983). Personal salience of religious beliefs was measured by the Dimensions of Religious Involvement Scale, Revised (Hilty, Morgan, & Burns, 1984), while salience within the family-of-origin was measured by the Religious Emphasis Scale (Altemeyer, 1988). Internal attributions were measured by the Attributions of Responsibility and Blame Scales, self-blame subscale (McMillen & Zuravin, 1997).

Hypothesis 3

The third hypothesis was that attributions for child sexual abuse would play a mediational role between highly salient religious beliefs and adult mental health. It was proposed that the more internal the attributions that were made, the more likely an individual would be to report poor adjustment and psychological symptomatology. It was expected that this relationship would be one of the mechanisms accounting for an association between religious beliefs and mental health within child sexual abuse survivors. Adult mental health was measured by the Symptom Checklist-90-Revised (Derogatis, 1983), the Purdue PTSD Scale-Revised (Lauterbach & Vrana, 1996), and the Beck Depression Inventory-II (Beck, Steer, & Brown, 1996).

While research has yet to establish a relationship between religiosity and indicators of mental health in survivors of child sexual abuse, these relationships have been found among community and clinical samples (Gartner et al., 1991; Levin & Chatters, 1998; Ventis, 1995). Attributions were proposed here as the mechanism accounting for a portion of the expected

relationship between religiosity and mental health. This proposition was based on the previously discussed association between attributions and psychological symptomatology following experiences of child sexual abuse, and the findings that attributions can be influenced by religiosity.

Conceptual Model

In the proposed model, attributions mediate the relationship between religiosity and mental health. In addition, religious salience was expected to moderate the relationship between religious beliefs and attributions for child sexual abuse. Figure 1 depicts the proposed relationships.

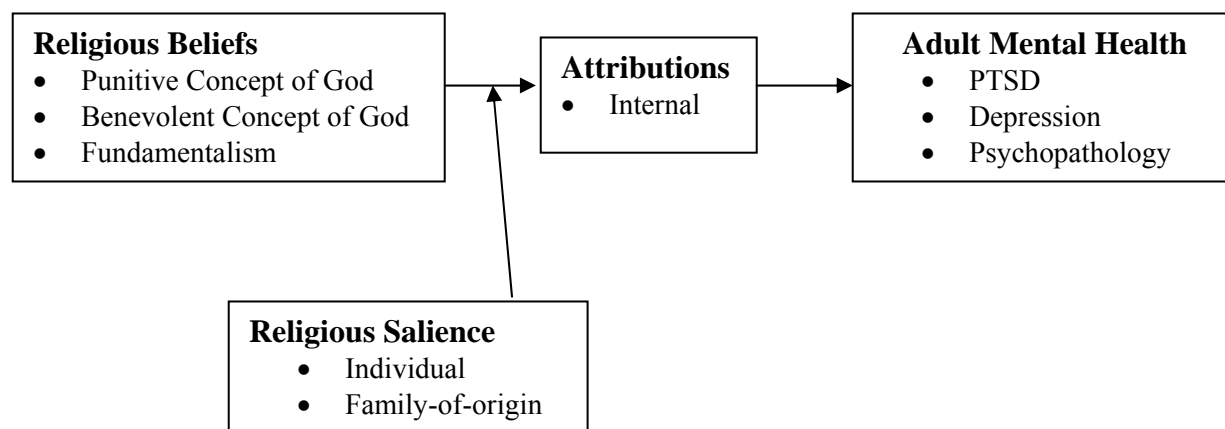


Figure 1. Conceptual Model

METHODS

Participants and Procedure

Participants were 183 female undergraduates enrolled in introductory psychology courses. They were recruited through the research participant pool and received course credit for their participation. They completed self-report questionnaires including measures of sexual abuse histories, religiosity, attributions for the abuse, and psychopathology. A total of 1406 individuals completed the questionnaires. One hundred eighty-three of these participants were selected for this study based on their reports of sexual experiences that met criteria for childhood sexual abuse.

Childhood sexual abuse was defined as sexual activities occurring before age 18 that were perceived as coercive, unwanted, or that involved an individual who was significantly older. Sexual activities could include kissing, fondling, exposure, oral intercourse, vaginal intercourse, and/or anal intercourse. For women reporting sexual experiences before the age of 13, a five-year age difference was considered abusive. For women reporting sexual experiences between age 13 and 17, the experience was labeled as abusive if the perpetrator was at least ten years older and/or if the experience was perceived to be unwanted or coercive.

Abuse survivors included as participants in this study ranged in age from 17 to 32 years, with a mean age of 19. Participants were predominantly Caucasian (73.0%; $n = 130$), while 11.8% ($n = 21$) were Asian American, 10.1% ($n = 18$) were African American, and 5.0% ($n = 9$) identified as multiracial, Hawaiian or Pacific Islander, or Latino. The majority of participants had never married (95.5%; $n = 171$), while 3.9% ($n = 7$) were married or cohabitating. Participants

were predominantly upper-middle class, as indicated by their parents' occupational status (71.7% of participants' fathers and 50.6% of participants' mothers held professional positions). Most participants reported the religious affiliation of their families-of-origin to be Protestant (58.9%; $n = 106$), while 20.6% ($n = 37$) of their families were Catholic, 10.6% ($n = 19$) were nonaffiliated, 2.8% ($n = 5$) were Jewish, and 7.2% (13) were otherwise affiliated. Participants' current religious affiliations were similar in distribution. The majority were Protestant (48.9%; $n = 87$), while 15.7% ($n = 28$) were Catholic, 23.6% ($n = 42$) were nonaffiliated, and 9.0% ($n = 16$) were otherwise affiliated.

In terms of childhood abusive experiences, 58.7% ($n = 105$) endorsed childhood sexual experiences with someone at least five years older, and 57.7% ($n = 101$) endorsed experiencing unwanted and/or coercive sexual contact with someone less than five years older. The majority (77.9%; $n = 159$) reported their first abusive experience to be perpetrated by a non-family member. Participants' ages during their first abusive experiences ranged from 1 to 18, with an average age of 11 years old. Perpetrator age ranged from 4 to 73, with an average age of 53 years old. The most frequent form of abuse was fondling (30.7%; $n = 62$), followed by intercourse (18.8%, $n = 38$) and forced fondling of the perpetrator (11.8%, $n = 24$).

Measures

Demographics and Child Sexual Abuse

Life Experiences Questionnaire (LEQ; Ray, 1993)

The LEQ is a self-report instrument that assesses demographic information, histories of childhood and adolescent sexual and physical abuse, and abuse characteristics. This questionnaire was used to identify child sexual abuse survivors in the current sample. The items were adapted from structured interviews developed by Jackson, Calhoun, Amick, Maddever, and

Habif (1990) and Resick, Calhoun, Atkeson, and Ellis (1981). This instrument has demonstrated significant test-retest reliability among victims' reports across a two-week period. Pearson product moment correlations for abuse characteristics assessed on continuous variables ranged from $r = .83$ to $.93$; Kappa coefficients for categorical abuse characteristics ranged from $.60$ to $.96$ (Ray, 1993).

Religious Salience

Dimensions of Religious Involvement, Revised (Hilty, Morgan, & Burns, 1984)

This instrument is an adaptation of King and Hunt's 1968 questionnaire measuring several dimensions of religious beliefs and practices. The authors applied exploratory factor analysis to arrive at a seven-factor multidimensional model. This model represents a synthesis of several typologies of religiosity existing within the literature. Confirmatory factor analysis demonstrated that this seven-factor model made a statistically significant improvement over the null model ($X^2 = 14618.37$, $df = 96$, $p < .001$). The Tucker and Lewis (1973) reliability index was $.747$ for the seven factor model. Coefficient alpha ranged from $.79$ to $.87$ for the seven factors.

The factors comprising this model include: Personal Faith, Intolerance of Ambiguity, Orthodoxy, Social Conscience, Knowledge of Religious History, Life Purpose, and Church Involvement. The Personal Faith factor contains items assessing the degree of active religious faith (e.g., "How often do you pray privately in other places than church?"). The Intolerance of Ambiguity Scale measures rigid, categorical thinking and contains items such as "There is only one right way to do anything." The Orthodoxy factor measures acceptance of traditional beliefs in church doctrines and contains items such as "I believe that the word of God is revealed in the Scriptures." The Social Conscience factor assesses beliefs about one's own and the church's role

in society (e.g., “I believe that my local congregation should sponsor projects to protect the rights of minorities.”) Knowledge of Religious History assesses knowledge of the individual’s religion. The Life Purpose factor contains items like “My life is full of joy and satisfaction.” The Church Involvement factor indicates the degree of financial and social investment in religious practice (e.g., “How often do you spend evenings at church meetings or in church work?”). Each item is rated on a 4-point scale, ranging from “strongly disagree to strongly agree” and from “seldom or never” to “regularly.” Scores are added for each scale to produce a combined score.

For the purposes of this study, respondents were asked to report retrospectively, in terms of how the items applied to them before the age of 18. Two of the seven scales were analyzed in order to measure the construct of religious salience: Personal Faith and Church Involvement. A modified version of the Church Involvement scale was used, as some of the questions did not apply to the sample population (e.g., percentage of income donated to the church; monthly contribution of the family). The Personal Faith scale consists of 14 items with a total possible score ranging from 14 to 56. The revised Church Involvement scale consists of 9 items, with a total possible score ranging from 9 to 36. In the current study, the subscales were combined, as they were highly correlated ($r = .74, p < .01$). The combined score from both subscales may range from 23 to 92. The combined scales demonstrated a Cronbach’s alpha of .95, indicating high internal consistency reliability. The mean score was 48.9, with a standard deviation of 15.7.

Religious Emphasis Scale (Altemeyer, 1988)

This scale was chosen to measure the construct of salience of religious beliefs within the family-of-origin. It asks participants to report the extent to which their parents emphasized the family religion as they were growing up. Respondents are asked to indicate the emphasis their

parents placed on each item using a 6-point response format. Response alternatives include 0 (not at all), 1 (only a little bit), 2 (a mild amount), 3 (a moderate amount), 4 (quite a bit), and 5 (a great deal). The total score is determined by a summation of the item scores and could range from 0 to 55 in the current study. Sample items include “Going to church,” “Praying before meals,” and “Discussing moral ‘do’s’ and ‘don’t’s’ in religious terms.” In this study, “Attending a religious school for your primary education” was added to the scale as an additional measure of religious emphasis within the family. For the current sample, the average score on this scale was 27.3, with a standard deviation of 15.7.

Previous studies have found the average interitem correlation for the original 10 items of the Religious Emphasis Scale to be .55, with a resulting Cronbach’s alpha of .92 (Hill & Hood, 1999). In the current study, Cronbach’s alpha for the 11 items was .87, demonstrating adequate internal consistency reliability. Validity has been established through correlations with other measures of religiosity. For example, the Religious Emphasis Scale has been correlated with Right-Wing Authoritarianism (.37), Religious Doubts (-.30), Religious Pressures (.59), Christian Orthodoxy (.59), and church attendance (.62). Students’ scores on the Religious Emphasis Scale have been corroborated by their parents ($r = .73$) (Hill & Hood, 1999). In the current study, the Religious Emphasis Scale was significantly correlated with the other measure of religious salience, Dimensions of Religious Involvement ($r = .64, p < .01$).

While the Dimensions of Religious Involvement subscales measure salience of religious beliefs and practices for the *individual*, the Religious Emphasis Scale measures salience within the *family-of-origin*. Both constructs (individual religious involvement and family emphasis) were expected to comprise the larger construct of religious salience. However, within the current study, the Dimensions of Religious Involvement composite scale was analyzed separately from

the Religious Emphasis Scale, as the measures were not so highly correlated as to indicate they were measuring identical constructs ($r = .64$).

Religious Beliefs

Fundamentalism Scale-Revised (Gorsuch & Smith, 1983)

The Fundamentalism Scale was revised from the Religious Attitude Inventory developed by Broen (1957). Items assess the extent to which one subscribes to the orthodox tenets of Christian faith with an emphasis on a literal interpretation of the Bible as the word of God, the essential sinfulness of humans, and the need for the rightful fear of a punishing God. Individuals scoring low on this scale would tend to adopt a more liberal view of the Scriptures and a humanistic view of the human condition. There are 33 items; sample items include, “Sin brings forth the wrath of God,” “Man is by nature sinful and unclean,” and “No one should question the authority of the Bible.” The instrument is scored by adding the number of items with which the respondent agreed, resulting in a score ranging from 0 to 33. In prior studies conducted at Christian universities, the mean score on this measure was 15.3 ($SD = 5.1$) and 23.9 ($SD = 5.3$). In the present sample, the average score was 12.3 with a standard deviation of 7.5. Reliability coefficients were previously unavailable for the 33-item scale. However, the interitem consistency coefficient for all of the fundamentalism items in Broen’s Religious Attitude Inventory was .76 (K-Richardson formula) (Hill & Hood, 1999). In the current study, Cronbach’s alpha for the 33-item scale was .90, demonstrating high internal consistency reliability.

Conceptualization of God: Adjective Ratings (Gorsuch, 1968)

This scale consists of 91 adjectives that have been used to describe and conceptualize God. Adjectives are rated on a 3-point scale (1= “The word does not describe God,” 2= “The

word describes God,” 3= “The word describes God particularly well”). A factor analysis revealed five dimensions with at least three strongly loading variables: Traditional Christian, Wrathfulness, Deisticness, Omni-ness, and Irrelevancy (Gorsuch, 1968). Cronbach’s alpha was .94 for the Traditional Christian subscale, .83 for Wrathfulness, .71 for Deisticness, .89 for Omni-ness, and .49 for Irrelevancy. These factors demonstrate strong overlap with the five factor finding in Spilka, Armatas, and Nussbaum (1964). Each dimension is reflected in a subscale that can be scored by adding responses to its constituent items. A higher score on a subscale would reflect higher endorsement of that particular conceptualization of God.

For the purposes of this study the Traditional Christian and Wrathfulness subscales were analyzed, as they most closely embody the supportive/benevolent and the punitive/wrathful concepts of God. For example, adjectives comprising the Traditional Christian subscale include “charitable,” “comforting,” “loving,” and “merciful.” Adjectives comprising the Wrathfulness subscale include “avenging,” “critical,” “cruel,” “damning,” and “punishing.” The Traditional Christian subscale consists of 50 items, for a total possible score ranging from 50 to 150. In this study, the average score was 119, with a standard deviation of 22.8. Cronbach’s alpha for the subscale was .97, indicating very high internal consistency reliability. The Wrathfulness subscale consists of 13 items, for a total possible score ranging from 13 to 39. In the present sample, the average score was 18.4, with a standard deviation of 4.9. The distribution on this scale was positively skewed and restricted in range, as the majority of participants did not endorse wrathful adjectives as representing their concepts of God. Cronbach’s alpha for the Wrathfulness subscale was .86. It does not appear that Traditional Concepts of God and Wrathful Concepts of God represent opposite ends of one continuum, as they were slightly positively correlated in the

current study ($r = .27, p < .01$). Therefore, the two subscales were assumed to represent separate constructs and were analyzed separately.

Attributions

Attributions of Responsibility and Blame Scales (ARBS; McMillen & Zuravin, 1997)

This instrument measures the extent to which individuals attribute blame to the self or to others for experiences of child sexual abuse. Item analysis and multiple groups confirmatory factor analysis have revealed three subscales: self-blame, perpetrator blame, and family blame. Examples of items from these scales include: “I blame myself for allowing the sexual contact to occur,” “I think the person who had the unwanted sexual contact with me intended to do these things,” and “I blame someone who may have known about the sexual contact for not stopping it.” Respondents rate the items on a 5-point scale ranging from “strongly disagree” to “strongly agree.” In McMillen & Zuravin’s study (1997), alpha internal consistency reliability coefficients were .91 for both self-blame and family-blame. Alpha was .68 for the perpetrator blame scale.

For this study, the self-blame scale was utilized because it most closely resembles the construct of internal attributions for child sexual abuse. The self-blame scale consists of 20 items, with a total possible score ranging from 20 to 100. Higher scores on this scale represent greater amounts of internal attributions made for the abuse. In the current study, the mean score was 53.6 with a standard deviation of 19.0. Cronbach’s alpha indicated high internal consistency reliability ($\alpha = .89$).

Psychological Outcomes

Symptom Checklist-90-Revised (SCL-90-R; Derogatis, 1983)

This measure was designed as a screening tool for psychopathology for nonpatient, medical, and psychiatric populations. It is a 90 item self-report instrument with three global

indices of distress: a positive symptom total, a positive symptom distress index, and a global severity index. There are nine subscales for psychological symptomatology, including somatization, obsessive-compulsive, interpersonal sensitivity, depression, anxiety, hostility, phobic anxiety, paranoid ideation, and psychoticism. Items are rated on a five point Likert-type scale of distress.

Internal consistency coefficients have ranged from .77 to .90 for the subscales. Test-retest coefficients, calculated over a one-week interval within a psychiatric sample, range from .78 to .90 (Derogatis, 1983). In terms of convergent validity, the SCL-90-R has been shown to correlate highly with the Beck Depression Inventory, particularly for the Depression subscale ($r = .73$). Each of the dimensions of the SCL-90-R was significantly related to similar MMPI scales, with correlations ranging from .12 to .64 (Brophy, Norvell, & Kiluk, 1988). In the current sample, the SCL-90-R was highly correlated with the Beck Depression Inventory-II ($r = .78$) and moderately correlated with the Purdue PTSD Scale-Revised ($r = .41$). The SCL-90-R has also been shown to discriminate between clinical groups and healthy individuals from the general population. In addition, inpatients reported more distress than outpatients on both subscale and global scale levels (Hafkenscheid, 1993).

For this study, the Global Severity Index (GSI) was used as a general measure of psychological distress. The Global Severity Index is obtained by calculating the mean response to the 90 items. Cronbach's alpha for the 90 items in the current study was .97. The mean GSI was .78, with a standard deviation of .58

Beck Depression Inventory-II (BDI-II; Beck, Steer, & Brown, 1996)

This 21 item measure assesses severity of depressive symptoms, with scores ranging from 0 to 63. The BDI-II has been found to demonstrate high internal consistency ($\alpha = .93$

among college students, $\alpha = .92$ among outpatients; Beck et al., 1996). Similar to previous studies, Cronbach's alpha was .92 in the current study. A psychometric evaluation of the BDI-II indicated that it is highly congruent with the BDI, which has been shown to differentiate between psychiatric and nonpsychiatric patients and between subtypes of depression (Dozois, Dobson, & Ahnberg, 1998). However, the BDI-II has been modified to be more congruent with the DSM-IV criteria, including a change in timeframe from a one- to a two-week period. Like the original BDI, the BDI-II is comprised of two factors, a Cognitive-Affective dimension and a Somatic-Vegetative dimension. Suggested cutoff scores are as follows: 0-12 = Nondepressed; 13-19 = Dysphoric; and 20-63 = Dysphoric-Depressed (Dozois, et al. (1998). The average score in the current sample was 11.0 (nondepressed), with a standard deviation of 9.0.

Purdue PTSD Scale-Revised (PPTSD-R; Lauterbach & Vrana, 1996)

This instrument was used as a measure of PTSD among the sample population. The PPTSD-R is a self-report measure comprised of 17 items corresponding to the symptoms found within PTSD criteria B, C, and D in the DSM. Respondents rate the frequency of occurrence within the previous month of each item on a five-point scale ranging from 1 (not at all) to 5 (often). The scale can be scored to yield a dichotomous index of PTSD, or to yield a continuous measure of severity. Continuous scores are obtained by summing the 17 items, for a total score ranging from 17 to 85. In the current sample, the continuous scale was used; the mean score was 33.7, with a standard deviation of 14.4. The diagnosis of PTSD requires the endorsement of at least one *reexperiencing* (criterion B) symptom (items 1-4, 8), three *avoidance* (criterion C) symptoms (items 5-7, 9-12) and two *arousal* (criterion D) symptoms (items 13-17).

The PPTSD-R has demonstrated excellent internal consistency overall ($\alpha = .91$) and very good internal consistency for the symptoms subscales ($\alpha = .79$ to $.84$). In the current sample,

Cronbach's alpha for the entire scale was .92. Test-retest reliability for 51 undergraduate students over 2 weeks reflected adequate stability in the total score ($r = .72$). In terms of validity, the PPTSD-R has exhibited a stronger relationship with other measures of PTSD symptomatology ($r = .50$ to $r = .66$) than with measures of anxiety ($r = .37$) and depression ($r = .39$). Further, students who experienced at least one traumatic event scored higher than those who did not report any traumatic events (Lauterbach & Vrana, 1996). In addition, individuals with a history of sexual abuse scored significantly higher than nonvictims (Timmons-Mitchell, Chandler-Holtz, & Semple, 1996), and Vietnam veterans with more combat experience and higher distress have been shown to score higher on the PPTSD-R (Hendrix, Anelli, Gibbs, & Fournier, 1994).

Table 1. Correlation between Measures and Abuse Characteristics

Variables	1	2	3	4	5	6	7	8	9	10	11	12
1. Wrathful concepts of God	--											
2. Traditional concepts of God	.27**	--										
3. Fundamentalism scale-revised	.11	.44**	--									
4. Religious emphasis scale	.04	.43**	.50**	--								
5. Dimensions of religious involvement	.18*	.42**	.55**	.64**	--							
6. ARBS--Self-Blame	.00	-.10	-.08	-.04	-.01	--						
7. PPTSD-R	.04	-.06	.18*	-.01	.06	.24**	--					
8. BDI-II	-.03	.04	.00	.00	-.06	.11	.40**	--				
9. SCL-90-R	.03	.00	-.01	-.02	-.07	.19**	.41**	.78**	--			
10. Abuse duration	.09	.01	-.03	-.22**	-.05	.25**	.14	-.01	-.07	--		
11. Abuse frequency	-.06	-.01	.02	-.18*	.03	-.19**	-.01	.14	.12	-.61**	--	
12. Abuse severity	.11	-.10	-.14	-.13	-.10	.31**	.15*	-.04	-.11	.16*	-.05	--
13. Abuse age of onset	-.06	.00	-.10	-.10	-.11	.15*	-.08	-.11	-.10	-.26**	.10	.25**

N = 183. * $p < .05$; ** $p < .01$

RESULTS¹²

Hypothesis 1: Relationship between Beliefs and Attributions

To test whether types of religious beliefs influence the extent to which child sexual abuse survivors make internal attributions for abuse, three separate regression analyses were performed. The attributions term (Attributions of Responsibility and Blame Scale, self-blame subscale) was regressed on the three measures of religious beliefs (Wrathful Concepts of God scale, Traditional Concepts of God scale, and Fundamentalism Scale-Revised). None of these analyses yielded significant results, indicating that religious beliefs alone were not related to self-blame for the abuse (see Table 2).

Table 2. Religious Beliefs Predicting Internal Attributions

Measure of Religious Beliefs	<i>B</i>	<i>SE B</i>	β	<i>p</i>
1. Wrathful Concepts of God	.00	.27	.00	.99
2. Traditional Concepts of God	-.08	.06	-.10	.18
3. Fundamentalism Scale-Revised	-.20	.18	-.08	.26

¹ To avoid the influence of missing data on total scores, a participant's mean score on a measure was substituted for missing data points within that measure. No measures were missing more than 1% of data prior to the substitution.

² As the distribution on the Wrathful Concepts of God scale was positively skewed (skew = 1.0) and the distribution on the Traditional Concepts of God scale was negatively skewed (skew = -1.0), the scales were transformed using reciprocal and square root transformations, respectively. The results of the analyses that were conducted using these transformed scales did not differ from the results utilizing non-transformed data. Therefore, non-transformed data are reported.

Hypothesis 2: Moderating Effects of Religious Salience

To test whether salience of religiosity moderates the relationship between religious beliefs and attributions, Baron and Kenny's (1986) model was followed. The internal attributions term (Attributions of Responsibility and Blame Scale, self-blame subscale) was regressed on types of religious beliefs (Wrathful Concepts of God scale, Traditional Concepts of God scale, and Fundamentalism Scale-Revised), religious salience (Religious Emphasis Scale, Dimensions of Religious Involvement), and the product of beliefs and salience. To reduce multicollinearity among predictors in the moderation analyses, the predictor variables were centered prior to creating the interaction terms and conducting the analyses (following recommendations of Aiken & West, 1991). Interaction terms were created by multiplying the centered predictor variables for each analysis. Because there were three different measures of religious beliefs and two measures of religious salience, six interaction terms were created (1. Wrathful * Religious Emphasis; 2. Wrathful * Dimensions of Religious Involvement; 3. Traditional * Religious Emphasis; 4. Traditional * Dimensions of Religious Involvement; 5. Fundamentalism * Religious Emphasis; 6. Fundamentalism * Dimensions of Religious Involvement), and six tests of moderation were conducted.

Results indicated that, while controlling for the main effects of types of beliefs and religious salience, one of the moderation terms was significant and five of the moderation terms were nonsignificant. The significant moderator was Fundamentalism * Religious Emphasis ($\beta = .163, p < .05$). The overall model did not account for a significant portion of the variance in attributions ($R^2 = .04, p = .09$). Table 3 illustrates the results of the tests for moderation.

*Table 3. Regression Models Testing the Significance of Religious Belief*Saliency Interaction Terms in Predicting Internal Attributions*

Predictors	<i>B</i>	<i>SE B</i>	β
Model 1			
Fundamentalism	-.28	.21	-.12
Dimensions of Religious Involvement	.04	.10	.04
Fundamentalism * Dimensions of Religious Involvement	.01	.01	.08
Model 2			
Fundamentalism	-.23	.20	-.10
Religious Emphasis	.02	.10	.01
Fundamentalism * Religious Emphasis	.03	.01	.17*
Model 3			
Wrathful Concepts of God	.04	.28	.01
Dimensions of Religious Involvement	-.02	.09	-.01
Wrathful * Dimensions of Religious Involvement	-.02	.02	-.08
Model 4			
Wrathful Concepts of God	-.01	.27	.00
Religious Emphasis	-.04	.09	-.04
Wrathful * Religious Emphasis	-.02	.02	-.07
Model 5			
Traditional Concepts of God	-.12	.07	-.16
Dimensions of Religious Involvement	.06	.09	.05
Traditional * Dimensions of Religious Involvement	-.01	.00	-.12
Model 6			
Traditional Concepts of God	-.08	.07	-.10
Religious Emphasis	.01	.10	.01
Traditional * Religious Emphasis	.00	.00	.01

Note. * $p < .05$

Exploration of the Significant Interaction

To examine the nature of the significant interaction, a post-hoc simple slope analysis was performed according to procedures specified by Aiken and West (1986). That is, the regression coefficient for the regression of Internal Attributions on Fundamentalism was calculated at three different levels of the moderator (Religious Emphasis). The three levels of the moderator at which the slopes were computed included: 1) one standard deviation below the mean of Religious Emphasis, 2) the mean of Religious Emphasis, and 3) one standard deviation above the mean of Religious Emphasis. As depicted in Figure 2, results indicated that the relationship between Fundamentalism and Internal Attributions was negative at low levels of Religious Emphasis ($B = -.62$), slightly negative at average levels of Religious Emphasis ($B = -.23$), and positive at high levels of Religious Emphasis ($B = .16$). Only the slope representing the relationship between Fundamentalism and Internal Attributions at low levels of Religious Emphasis was significantly different from zero ($p = .02$).

The results of the moderation analyses were inconsistent with hypotheses, particularly in terms of the negative relationship between Fundamentalism and Internal Attributions at low levels of Religious Emphasis. Therefore, further analyses were conducted to explore variables that could potentially account for this effect. In the literature, several abuse characteristics (duration, age of onset, frequency, type, relationship to perpetrator) have been associated with internal attributions for child sexual abuse (Barker-Collo, 2001; Quas, Goodman, & Jones, 2003; Steel, Sanna, Hammond, Whipple, & Cross, 2004). It is possible that religious beliefs and practices are associated with certain abuse characteristics that account for the relationship between religiosity and attributions. Therefore, correlational analyses were performed to determine if any significant relationships existed between fundamentalism, religious emphasis,

internal attributions, and abuse characteristics (frequency, duration, age of onset, relation to perpetrator, type of abuse).

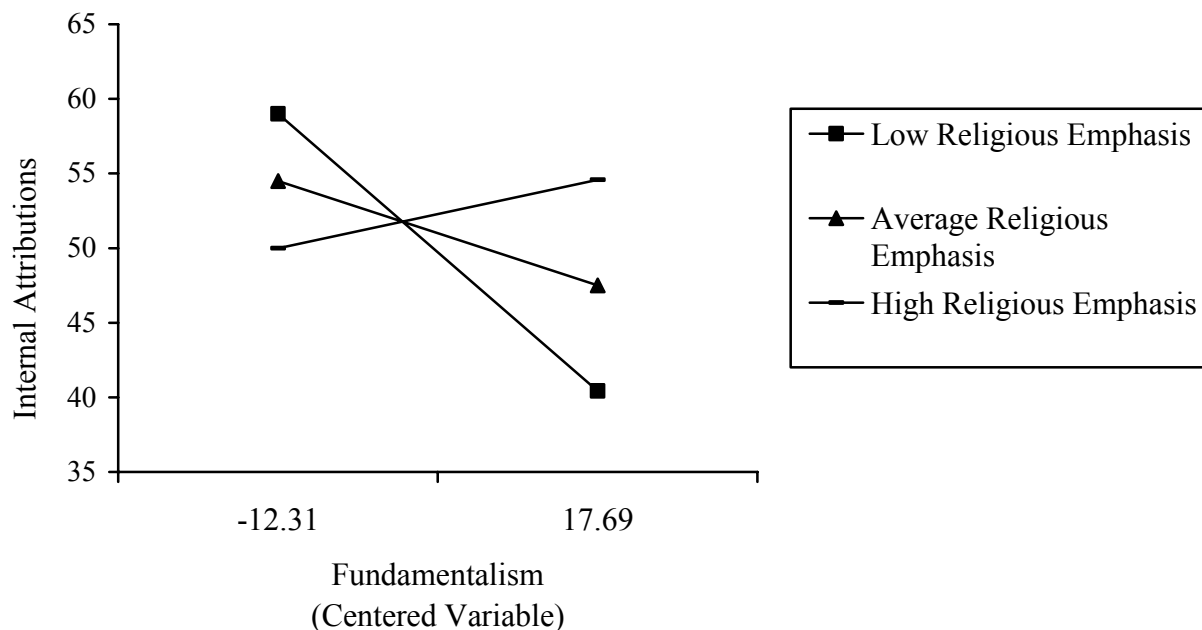


Figure 2. Relationship between fundamentalism and internal attributions at three levels of religious emphasis

Correlational analyses revealed a significant negative correlation between family religious emphasis and frequency of the abuse ($r = -.18, p < .01$), as well as duration of the abuse ($r = -.25, p < .05$). In addition, internal attributions were positively related to age of onset of the abuse ($r = .15, p < .05$), duration ($r = .27, p < .01$), and type ($r = .31, p < .01$; type of abuse ranged in severity from kissing and fondling to anal intercourse). Internal attributions were negatively related to frequency of abuse ($r = -.19, p < .01$). No other relationships were significant. Multiple regression analyses to test for moderation were repeated with type, duration, frequency, and age of onset entered as control variables. Results indicated that the Fundamentalism * Religious Emphasis interaction term was no longer significant in predicting

internal attributions after controlling for abuse characteristics. It appears that abuse characteristics play a larger role than the Fundamentalism by Religious Emphasis interaction, and that these characteristics may partially account for the unexpected results from the initial moderation analyses.

Hypothesis 3: Mediational Role of Attributions

To test whether attributions serve as a mediator between the significant Fundamentalism * Religious Emphasis interaction term and psychological adjustment, Baron and Kenny's (1986) framework for combining moderation and mediation was used. According to this model, Step 1 consists of regressing the outcomes term (Psychological Adjustment) on the predictor (Fundamentalism), the moderator (Religious Emphasis), and the interaction of predictor and moderator (Fundamentalism*Religious Emphasis). In Step 2, two equations are estimated. First, the mediator (Internal Attributions) is regressed on the predictor (Fundamentalism), the moderator (Religious Emphasis), and the interaction of predictor and moderator (Fundamentalism*Religious Emphasis). Second, the outcome (Psychological Adjustment) is regressed on the predictor (Fundamentalism), the moderator (Religious Emphasis), the interaction of predictor and moderator (Fundamentalism*Religious Emphasis), and the mediator (Internal Attributions).

According to Baron and Kenny (1986), mediated moderation is indicated by the interaction term affecting the outcomes term in Step 1 (path "c" in Figure 3), and in Step 2, the interaction term affecting the mediator (path "a") and the mediator affecting the outcome (path "b"). According to Baron and Kenny, path c should also be weaker in Step 2 (when the mediator is included) than in Step 1. However, Shrout and Bolger argue that when examining distal effects, such as long-term psychological outcomes, the relationship between predictor and

outcome (path c) may be small in magnitude. This is due to the fact that the effect is more likely to be transmitted through additional links in the causal chain, to be affected by competing causes, and to be affected by random factors. In such cases, the mediated effect may be detected even when the overall effect is not. A path from the initial variable to the outcome is implied if there is a significant relationship between the initial variable and the mediator and between the mediator and the outcome. Therefore, it has been recommended not to require the establishment of a significant relationship between predictor and outcome variables in order to study mediation, as recommended in Step 1 of Baron and Kenny's (1986) original procedure (Kenny, Kashy, & Bolger, 1998; Shrout & Bolger, 2002). This newer procedure was followed for the purposes of this study, as the mediation of distal effects (adult psychological adjustment) was examined.

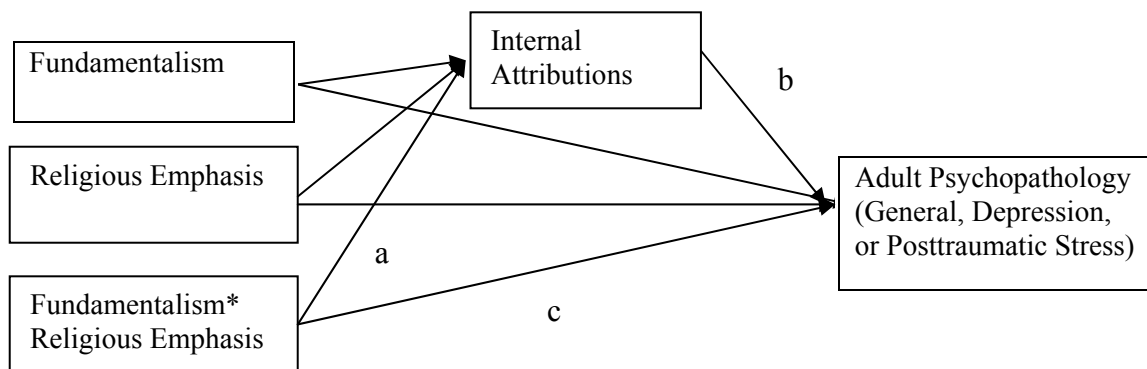


Figure 3. Path diagram for combining mediation and moderation. Paths a, b, and c indicate pathways of interest.

As anticipated, the results for Step 1 were not significant in terms of Fundamentalism*Religious Emphasis predicting any of the three long-term outcomes (General Psychopathology, Depression, and Posttraumatic Stress; see Tables 4-6). However, as discussed

above, the test for mediation may proceed if Step 1 is assumed to be testing a distal pathway. The first part of Step 2 had already been completed in testing the second hypothesis (significance of the interaction term in predicting the attributions term). The second piece of Step 2 (testing path b) indicated that the Attributions term significantly predicted General Psychopathology and Posttraumatic Stress, but not Depression, when holding the effects of Fundamentalism, Religious Emphasis, and Fundamentalism*Religious Emphasis constant (see Tables 7-9). Therefore, the internal attributions term appears to serve as a mediator between Fundamentalism*Religious Emphasis and General Psychopathology and between Fundamentalism*Religious Emphasis and Posttraumatic Stress.

Following Shrout and Bolger's (2002) recommended procedure for assessing the strength of the mediated effect, the effect proportion mediated was calculated for each significant model. This consists of calculating the ratio of the indirect (mediated) effect to the direct effect: $(a \times b)/c$, whereby a and b are estimated in Step 2 and c is estimated in Step 1. For the model predicting General Psychopathology, the effect proportion mediated was 48.2%. For the model predicting Posttraumatic Stress, the effect proportion mediated was 53.5%. Therefore, the mediated effect appears to account for about half of the direct pathway from Fundamentalism*Religious Emphasis to long-term outcomes in each instance.

The significance of the mediated effect can also be tested by a procedure described in Kenny, Kashy, and Bolger (1998). The product of paths a and b is divided by a standard error term. This yields a z score of the mediated effect. If the z score is greater than 1.96, the effect is significant at the .05 level. The error term is the square root of $b^2sa^2 + a^2sb^2 + sa^2sb^2$, where a and b are unstandardized regression coefficients and sa and sb are their standard errors. Following this formula, the z score for the mediated effect was 1.91 for the model predicting

general psychopathology, and 1.89 for the model predicting posttraumatic stress. Therefore, according to this procedure, the mediated effect was not significant at the .05 level for either of these models.

Based on these analyses, it appears that internal attributions may serve as a partial mediator (as indicated by meeting requirements for mediation and by the effect proportion mediated), although the mediated path is not strong enough to reach statistical significance. As described by Shrout and Bolger (2002), there are several instances when partial mediation might occur: a) when the predictor has both a direct and specific path to the outcome and a mediated path to the outcome, b) when there are additional, unspecified processes that together completely mediate the relation between predictor and outcome, c) when different mediation mechanisms apply to different portions of the population under study, and d) when the mediator is measured with error. The present study likely resembles the second instance described above, as several mediators are likely to intervene when examining the relationships between childhood processes and adult outcomes (i.e. distal effects). In such instances, it may be more useful to interpret the effect proportion mediated, as opposed to relying on null-hypothesis significance testing.

*Table 4. Step 1: Fundamentalism Scale-Revised, Religious Emphasis Scale, and Fundamentalism * Religious Emphasis Predicting General Psychopathology (SCL-90R)*

Predictors	<i>B</i>	<i>SE B</i>	β
Fundamentalism	.00	.01	-.03
Religious Emphasis	.00	.00	.03
Fundamentalism * Religious Emphasis	.00	.00	-.07

*Table 5. Step 1: Fundamentalism Scale-Revised, Religious Emphasis Scale, and Fundamentalism * Religious Emphasis Predicting Depression (BDI-II)*

Predictors	<i>B</i>	<i>SE B</i>	β
Fundamentalism	-.04	.10	-.04
Religious Emphasis	.04	.05	.07
Fundamentalism * Religious Emphasis	-.01	.01	-.08

*Table 6. Step 1: Fundamentalism Scale-Revised, Religious Emphasis Scale, and Fundamentalism * Religious Emphasis Predicting Posttraumatic Stress Symptoms (PPTSD-R)*

Predictors	<i>B</i>	<i>SE B</i>	β
Fundamentalism	.46	.16	.24
Religious Emphasis	-.13	.08	-.13
Fundamentalism * Religious Emphasis	.01	.01	.08

*Table 7. Step 2: Fundamentalism Scale-Revised, Religious Emphasis Scale, Fundamentalism * Religious Emphasis, and Internal Attributions Predicting General Psychopathology (SCL-90R)*

Predictors	<i>B</i>	<i>SE B</i>	β
Fundamentalism	.00	.01	-.01
Religious Emphasis	.00	.00	.03
Fundamentalism * Religious Emphasis	.00	.00	-.11
Internal Attributions	.01	.00	.21**

*Table 8. Step 2: Fundamentalism Scale-Revised, Religious Emphasis Scale, Fundamentalism * Religious Emphasis, and Internal Attributions Predicting Depression (BDI-II)*

Predictors	<i>B</i>	<i>SE B</i>	β
Fundamentalism	-.03	.10	-.02
Religious Emphasis	.04	.05	.07
Fundamentalism * Religious Emphasis	-.01	.01	-.10
Internal Attributions	.06	.04	.13

*Table 9. Step 2: Fundamentalism Scale-Revised, Religious Emphasis Scale, Fundamentalism * Religious Emphasis, and Internal Attributions Predicting Posttraumatic Stress Symptoms (PPTSD-R)*

Predictors	<i>B</i>	<i>SE B</i>	β
Fundamentalism	.51	.16	.27
Religious Emphasis	-.13	.08	-.13
Fundamentalism * Religious Emphasis	.01	.01	.04
Internal Attributions	.20	.06	.25**

Note. The Fundamentalism, Religious Emphasis, and Fundamentalism*Religious Emphasis interaction terms were based on centered variables. ** $p < .01$

DISCUSSION

Hypothesis 1

The hypothesis that religious beliefs alone would predict internal attributions for child sexual abuse was not supported. While previous literature has demonstrated associations between religious beliefs and self-blame (Nelsen & Kroliczak, 1984), self-esteem (Benson & Spilka, 1973) and sense of control (Hood et al., 1996; Loewenthal et al., 2000), no previous studies have specifically examined the link between religious beliefs and attributions for child sexual abuse. The current study did not find support for such a link. This may be due to the fact that other factors moderate the relationship between religious beliefs and attributions, therefore obscuring any main effects. In fact, it was expected that salience would play a moderating role. Therefore, salience was examined as a moderator of the relationship between religious beliefs and attributions in Hypothesis 2.

Hypothesis 2

The prediction that personal and familial religious salience would moderate the relationship between beliefs and attributions was partially supported. Whereas five of the six interaction terms did not significantly predict internal attributions, the Fundamentalism by Religious Emphasis term did predict internal attributions. Contrary to predictions, the relationship between Fundamentalism and Internal Attributions was not stronger at high levels of Religious Emphasis, as opposed to moderate and low levels of Religious Emphasis. The relationship between Fundamentalism and Internal Attributions was only significant at low levels of Religious Emphasis and, unexpectedly, was reversed in direction. Specifically, increased

endorsement of fundamentalist beliefs was associated with decreased self-blame when religious emphasis was low within the family-of-origin. Further research is necessary to determine why fundamentalist beliefs may exert a different effect on attributions at low levels of religious emphasis. However, such an exploration may not be of relevance to the general population, as fundamentalist beliefs are correlated with religious emphasis and are less likely to be endorsed at low levels of religious emphasis. Therefore, the construct validity of fundamentalism within a population that does not emphasize religious practices may not be tenable.

One potential explanation for the unexpected findings regarding the relationships among Fundamentalism, Religious Emphasis, and Internal Attributions is that other variables associated with fundamentalist beliefs and/or familial religious emphasis account for the relationship of the Fundamentalism by Religious Emphasis interaction to attributions. For example, religious beliefs and practices may affect parenting style (Danso, et al., 1997; Ellison & Sherkat, 1993), and parents' reactions to child sexual abuse have been related to self-blame (Hazzard et al., 1995). Other factors that have a demonstrated effect on self-blame for child sexual abuse include abuse characteristics (duration, age of onset, frequency, type, relationship to perpetrator) (Barker-Collo, 2001; Quas, Goodman, & Jones, 2003; Steel, Sanna, Hammond, Whipple, & Cross, 2004). If these characteristics were to be associated with religiosity, then they may affect or account for the relationship between religiosity and attributions.

An analysis of this sample revealed a significant negative association between Religious Emphasis and duration and frequency of child sexual abuse. In other words, greater religious emphasis within the family-of-origin was associated with decreased abuse severity, as indicated by frequency and duration. Therefore, it is possible that the severity of the sexual abuse represents a confound in understanding the observed relationships between fundamentalism,

religious emphasis, and attributions. Overall, it appears that abuse characteristics offer more explanatory power in predicting self-blame, as indicated by the lack of relationship between Fundamentalism, Religious Emphasis, and Internal Attributions when abuse characteristics were controlled. Future research is necessary to elucidate how abuse characteristics might influence the relationship between religiosity and self-blame.

The fact that the remaining five moderation terms did not predict attributions is inconsistent with the literature that has demonstrated relationships between religious beliefs and the attributional process (Pargament, 1990; Sheldon & Parent, 2002) and between salience of beliefs and their influence on attributions (Rholes & Pryor, 1982). However, prior empirical studies have not specifically analyzed the relationship between religious beliefs, religious salience, and attributions for child sexual abuse. The current study adds to the literature by investigating these relationships, although it fails to support a significant role for religious beliefs and religious salience in the abuse-specific attributional process.

The absence of significant relationships between the five religious beliefs by salience interaction terms and attributions in the current study may be due to several factors. First, other variables may moderate the relationship between religious beliefs and attributions (e.g., social support, family-of-origin characteristics, coping style, abuse characteristics). Because there is little empirical investigation within the literature regarding child sexual abuse, religiosity, and attributions, it is difficult to specify exactly which factors might serve as moderators of the relationship between religious beliefs and internal attributions.

A second reason for the lack of support for a religious belief by salience interaction could be that the constructs measured may not have represented the aspects of religiosity that exert the most influence on the attributional process. For example, it is conceivable that the *interpretations*

of the specific beliefs measured here are more critical in understanding the relationship between religiosity and attributions. For instance, an individual who believes in a benevolent God could either believe that she is to blame because a benevolent God would never allow abuse to happen to a good person *or* she could believe that she is *not* to blame because a benevolent God is supportive, in control, and non-punitive towards children.

Third, stronger relationships may have been observed between more proximal variables (e.g., current attributions, current religious beliefs and practices) than between the distal variables measured in this study. Finally, several methodological limitations, such as retrospective reporting, restricted range among the measures of religious beliefs and psychopathology, and poor construct validity within the religiosity measures, could account for the lack of significant findings.

Hypothesis 3

The prediction that internal attributions would serve as a mediator between the significant religious belief by salience interaction and psychological outcomes was partially supported. The fact that the religious variables did not predict mental health outcomes is inconsistent with the literature, which has generally demonstrated a relationship between religiosity and psychiatric symptoms among a variety of populations (Hackney & Sanders, 2003; Smith, McCullough, & Poll, 2003), including child sexual abuse survivors (Elliott, 1994). However, prior studies have primarily examined current religiosity, as opposed to religiosity within the family-of-origin. The inability to detect relationships between religiosity and psychological outcomes in this study may be due to the fact that distal relationships were analyzed, allowing for an increased influence of other intervening variables.

It appears that internal attributions serve as a partial mediator between the Fundamentalism by Religious Emphasis interaction and two adult psychological outcomes (PTSD and general symptomatology), accounting for approximately half of the direct relationship in each case. The evidence for the significant role of attributions in this model is consistent with the literature establishing a relationship between internal attributions for child sexual abuse and psychological outcomes (Brown & Kolko, 1999; Feiring et al., 2002; Mannarino & Cohen, 1996). It is also consistent with attribution theory, which posits a link between cognition, emotions, and behavior (Weiner & Graham, 1999).

While the magnitude of the relationships between attributions, PTSD, and overall symptomatology was consistent with effect sizes from prior studies, the lack of support for a relationship between internal attributions and depression was unexpected. This may be ascribed to the fact that the current study investigated distal relationships, while the link between attributions and depression has previously been documented primarily in child and adolescent samples (e.g., Feiring, Taska, & Chen, 2002; Kolko, Brown, & Berliner, 2002). In addition, the average score on the BDI-II in the current sample fell within the subclinical range, which may have attenuated the relationship between attributions and depression.

The fact that a fully mediated model was not supported is possibly due to the influence of other intervening factors. Prior research has found factors such as coping mechanisms, external attributions, responses to disclosure, social support, locus of control, and feelings of shame to mediate the relationship between child sexual abuse characteristics and later psychological adjustment (Barker-Collo & Read, 2003; Steel, et al., 2004; Valle & Silovsky, 2002; Wyatt & Newcomb, 1990). It is possible that factors such as these could represent additional mechanisms mediating the relationship between religiosity and mental health.

Limitations

There are several methodological limitations of the current study that may have contributed to the lack of significant findings. First, the data were obtained through retrospective reporting. It may have been difficult for participants to report accurately on childhood experiences within their families-of-origin. Their current mental states and behaviors may have been more accessible, thus interfering with their ability to report accurately regarding prior mental states and behaviors (e.g., reports of self-blame at the time of the abuse may be influenced by current level of self-blame; current church attendance or religious beliefs may influence judgments of prior religious beliefs and the salience of those beliefs). Accuracy of recall may also have differed between participants, adding to the error variance.

A related limitation is that distal relationships between variables were examined. In other words, the relationship between childhood experiences and adult experiences was analyzed. As a result, multiple intervening variables may have exerted an effect on the adult outcomes, thus reducing the effect of the childhood variables on these outcomes. In addition, the time elapsed since the abusive incident(s) and the administration of the survey may differ among participants, thus adding to variability in the potential influence of intervening factors and to the error variance.

Another aspect of this study that limits the ability to determine the true relationships among the constructs of interest is its correlational nature. In studies of child sexual abuse and other naturally-occurring phenomena, it is not feasible to manipulate predictor variables in a randomly selected sample of individuals. Therefore, causal linkages between variables cannot be established. Furthermore, the influence of confounding variables (e.g., family environment, socioeconomic status) is difficult to anticipate or control. For example, in this study, religious

salience may have been confounded with social support received from religious institutions, which has been associated with desirable psychological outcomes (Strayhorn, Weidman, & Larson, 1990; Taylor & Chatters, 1988). If this were the case, then creating an interaction term between religious salience and wrathful concepts of God may have obscured any negative relationship existing between wrathfulness and psychological outcomes. It is likely that the model proposed in this study was not fully specified, and that inclusion of other variables may have allowed for a clearer understanding of relationships among the variables of interest.

Other limitations of the current study involve the measures. In particular, the religiosity measures may lack construct validity for the purposes intended here. Very few studies have been conducted to validate these measures, and the studies that were conducted typically sampled a highly religious, Christian population. It is possible that the religiosity measures were not measuring similar constructs among the current sample, which included nonpractitioners and individuals from varying religious backgrounds. Participants may not have understood how to answer particular items that did not apply to their own religious beliefs and family background (e.g., answering “disagree” vs. “neutral”). It is also possible that the constructs were not sufficiently distinct, as there was significant overlap among measures of religious beliefs and salience in the current study. This multicollinearity, or shared variance between predictors, could have diminished the ability to detect the unique relationships between the specific constructs of interest and the outcome variables.

In addition to these challenges to construct validity, some of the religiosity constructs exhibited skewed distributions. For example, most individuals highly endorsed traditional concepts of God and did not endorse wrathful concepts of God. The lack of variability among these constructs may have limited their utility in predicting the outcomes of interest.

Further limitations to this study involve the nature of the current sample. Since the sample consists of a convenience population of undergraduate students, the participants are likely more homogeneous than a community population of child sexual abuse survivors on several of the variables of interest. Therefore, the range of responses on certain variables was restricted and relationships between variables may have been attenuated. In addition, the current sample likely differs from the larger CSA survivor population in several ways, including socioeconomic status, degree of psychological impairment, and cognitive functioning. For example, the average level of psychiatric symptoms in this sample fell below the clinical range. Not only does this lack of impairment affect the ability to detect relationships between predictor and criterion variables, but it also compromises the ability to generalize the results to the larger population of sexually abused women.

Implications and Future Directions

The current study represents the first known empirical investigation of the relationships among religiosity, attributions for child sexual abuse, and adult mental health. It is also one of the few studies to measure religious constructs in a multidimensional manner. The primary finding was that the interaction between religious salience and fundamentalist beliefs may play a role in self-blame for child sexual abuse and therefore, account for variation in adult psychological symptomatology. The results of this study highlight three key areas that warrant further research and potential application to treatment of child sexual abuse survivors: a) attributions and psychological symptomatology, b) religiosity and attributions, and c) religiosity and mental health.

First, the significant relationship between internal attributions for child sexual abuse and adult psychological symptomatology suggests the need for continued research and clinical

interventions targeting the attributional process. Studies have yet to clearly isolate the critical factors influencing the tendency to make internal attributions for abuse. The current findings suggest that cultural and familial factors, such as religious beliefs and practices, may play an important role in the attributional process. The results also indicate that abuse characteristics, such as abuse frequency and duration, are associated with self-blame. Future research should attempt to replicate these findings, isolate the relative contributions of abuse characteristics and psychosocial factors to the attributional process, and investigate the roles of other cultural and familial factors. In addition, further studies are necessary to determine whether other attributional dimensions (e.g., controllability, stability, other-blame) account for later psychological symptomatology.

In addition to highlighting the need for further research, the finding that internal attributions are related to symptomatology has implications for clinical interventions. These findings suggest that adult survivors of child sexual abuse who experience psychological symptoms may derive benefits from decreasing self-blaming attributions. In fact, interventions that target self-blame have already demonstrated effectiveness in treating sexually abused children (see Celano, Hazzard, Campbell, & Lang, 2002), adult rape victims (Resick & Schnicke, 1996), and adult survivors of child sexual abuse (Resick, Nishith, & Griffin, 2003). As more is understood about which factors are associated with self-blame, clinicians may be better able to identify which individuals would benefit most from these interventions.

The general relationship between religiosity and mental health represents another emerging area that is furthered by the current study. The overlap among religious constructs, as well as the unexpected nature of the interaction between fundamentalism and salience, underscores the complexity of measuring religious beliefs and practices and examining their

relationships with psychological phenomena. This finding, in addition to the mounting empirical evidence that relationships *do* exist between religiosity and mental health (Hackney & Sanders, 2003) points to the need to continue refining our understanding of religiosity and how it exerts an influence on psychological well-being. Such knowledge would be highly applicable to the treatment of sexual abuse survivors, as these individuals are at-risk for experiencing a wide range of psychological symptomatology.

Research on religiosity and mental health also remains significant due to its applicability to the large population of individuals who identify themselves as religious. In addition, it appears that religious clients prefer to discuss religious and spiritual issues in counseling (Rose, Westefeld, & Ansley, 2001). As recognition of these issues has increased, there has been rising emphasis on the integration of religiosity into psychotherapy (Miller, 1999; Richards & Bergin, 2000; Shafranske, 1996). This integration is reinforced by the American Psychological Association's ethical guidelines for psychological service providers, which obligate mental health professionals to seek competence in treating religiously diverse clients, understand the role that cultural factors such as religiosity play in mental health, and help clients increase their awareness and application of their own cultural values and norms (APA, 2003).

In addition to acquiring an understanding of how religiosity impacts mental health, the APA ethical guidelines suggest that mental health professionals apply culturally appropriate skills in clinical practice. In terms of treating religious clients, the application of culturally appropriate skills may range from building rapport through appropriate use of religious language to integrating prayer into psychotherapy. Other techniques include using biblical verses to dispute distorted religious beliefs, practicing mindfulness and meditation, encouraging forgiveness, using religious imagery, presenting a religious rationale for therapy, and consulting

with religious resources and community leaders (Johnson, Ridley, & Nielsen, 2000; Richards & Bergin, 1997; 2000).

In general, additional research in the area of religiosity and mental health is needed to better inform clinical practices with religious clients. First, the measurement of religious beliefs and practices requires further refinement. For example, since the larger construct of fundamentalism appeared to play a significant role in this study, it would be interesting to isolate the underlying constructs comprising fundamentalism, validate them, and analyze their relationships with psychological variables. Because the measures of religiosity demonstrated a large degree of overlap, it may be beneficial to improve the distinctiveness of the instruments and the constructs that they measure. In addition to refining the measures of Christian beliefs and practices, the measurement of religiosity should be extended to include alternative religious traditions.

Second, several potential mediators and moderators of the relationships between religiosity, attributions for child sexual abuse, and mental health have been implicated by this study and prior literature for future investigation. These include: a) coping mechanisms, b) religious attributions, c) familial factors such as parenting style, cohesion, and attachment style, d) feelings of shame, e) cognitive rigidity, f) social support, g) current religiosity, h) community, familial, and peer reactions to disclosure of child sexual abuse, and i) abuse characteristics. It would also be interesting to examine other aspects of religiosity (e.g., experiential aspects), and other aspects of mental health (e.g., sexual or interpersonal functioning).

Third, an examination of these relationships among more heterogeneous, representative samples would improve the applicability and generalizability of any findings regarding the relationships among religiosity, attributions, and mental health among child sexual abuse

survivors. Replication of the current findings among different populations of sexual abuse survivors is necessary before firm interpretations of the results can be made. Future research might also examine these relationships in survivors of other types of trauma, abuse, and maltreatment.

Fourth, treatment-outcome studies will be necessary to determine whether integrating this information into clinical interventions provides benefit above and beyond traditional techniques. If so, training in these techniques should be provided to mental health practitioners and included in graduate and post-graduate education programs. At minimum, education in religious diversity, cultural norms and barriers, and the impact of cultural values on the therapeutic process is implicated.

In sum, the results of this study highlight the potential role of religiosity in the attributional process among adult survivors of child sexual abuse. These results also emphasize the importance of internal, abuse-specific attributions in shaping adult mental health. The theoretical and clinical implications of these findings accentuate the need to pursue further research that refines our measurement of religiosity, examines additional relationships, and explores these relationships in a wide range of clinical and community populations.

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