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Religious Coping and Depression Among Blacks and Whites After Sexual Abuse

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Religious Coping and Depression Among Blacks and Whites After Sexual Abuse

by

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Each person whose signature appears below certifies that this dissertation in his/her opinion is adequate, in scope and quality, as a dissertation for the degree of Doctor of Philosophy.

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ABBREVIATIONS

CSA	Child Sexual Abuse
RCOPE	Religious Coping

ABSTRACT OF THE DISSERTATION

Religious Coping and Depression Among Blacks and Whites After Sexual Abuse

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According to the theory of Fundamental Assumptions, childhood sexual abuse survivors have more depressive symptoms as a consequence of disrupted assumptions relating to optimism and mastery (Janoff-Bulman, 1992). This study tested whether positive religious coping preserves the fundamental assumptions to decrease depressive symptoms. In contrast, negative religious coping was posited to challenge assumptions. These hypotheses were tested in 2949 women from the Biopsychosocial Religion and Health study of which 246 reported childhood sexual abuse (CSA) with no childhood physical abuse and no adult sexual assault. Across all participants, positive religious coping (benevolent God reappraisal, collaborative religious coping, and spiritual connection) positively predicted optimism, and collaborative religious coping positively predicted mastery. Negative religious coping (punishing God reappraisal, passive deferral, and anger at God) was inversely associated with both optimism and mastery. Multivariate analyses of variance revealed that CSA participants reported marginally lower levels of mastery, higher punishing God reappraisal and depressive symptoms compared to nonCSA participants. Blacks reported higher benevolent God reappraisal, spiritual connection and punishing God reappraisal. Among Whites, collaborative religious coping decreased risk for depression, while anger at God increased risk for

depression after CSA. Among Blacks, punishing God reappraisal increased risk for depression after CSA. Janoff-Bulman's theory of child sexual abuse disrupting fundamental assumptions was partially supported; religious coping demonstrated a pathway to repair assumptions and improve depression outcomes.

CHAPTER ONE

INTRODUCTION

While the previous focus of coping research has been on strategies that perpetuate psychological distress in response to a negative event; more recent investigations have also examined coping strategies that alleviate distress. Indeed, the positive psychology movement demonstrates many resources that maintain adjustment in the face of adverse circumstances (Seligman & Csikszentmihalyi, 2000). Rather than focus only on the negative outcomes that follow a psychological crises, traits and coping strategies that moderate stress effects and bring about positive outcomes have been identified. As such, coping researchers have directed attention to the strategies that help post-trauma. One such positive resource is religious coping. Religion contributes to positive coping by providing a source of support when dealing with events that threaten one's view of the world as safe and predictable (Carver, Sheier, & Weintraub, 1989; Pargament, 1997). One such threatening experience is childhood sexual abuse; most often sexual abuse perpetrators are primary caregivers responsible for the safety of the child or are individuals known to the child (Kilpatrick, Saunders, & Smith, 2003). As such, the worldview or fundamental assumption of safety is disrupted (Briere & Finkelhor, 1989; Janoff-Bulman, 1992). When safety is disrupted within a trusted relationship in early life, the only remedy is to find a way to repair that worldview of trust and security (Janoff-Bulman, 1992). For some, religious beliefs may provide this balm via collaborating with God to cope (Pargament, Koenig, & Perez, 2000). However, for others the religious beliefs exacerbate the disrupted view of the world as threatening by reappraising the abuse as punishment from God (Kane, Cheston, Greer, 1993; Pargament,

2001; Pritt, 1998). The current investigation will determine how each path relates to the well-being of childhood sexual abuse survivors.

There is some evidence that victims of child sexual abuse do turn to religion to cope with the abuse. In a qualitative study of 22 female child sexual abuse victims, religion provided a sense of meaning and purpose post abuse (Valentine & Feinhauer, 1993). The women identified their belief and faith in God as a source of strength when coping with the aftermath of abuse. In fact, a relationship with God helped abuse victims to reframe the abuse as a personal challenge to overcome rather than a threat to survival. In empirical studies, data has shown that religion can be used as a resource to cope with the child sexual abuse and can in turn enhance psychological adjustment and decrease depression (Kennedy, Davis, & Taylor, 1998; Valentine & Feinhauer, 1993).

However, a sexual abuse survivor does not always turn to religion for solace. In fact, the experience of child sexual abuse may cause individuals to turn away from religion. Some report that individuals with a history of child sexual abuse are likely to view God as distant, wrathful, unloving and unkind (Pritt, 1998; Kane, Cheston, & Greer, 1993) resulting in more anger towards God than a nonabused comparison group (Kane, et al., 1993). Other studies report religious doubt after sexual assault and subsequently increased depression (Kennedy, Davis, & Taylor, 1998).

The purpose of the current research is to explore how religion can moderate the effects of sexual abuse on depression. As such, the following literature will be reviewed to develop an argument for specific hypotheses to be tested in the current investigation: common psychological consequences of child sexual abuse, a theoretical model to explain these outcomes, as well as potential religious moderators of these effects.

Child Sexual Abuse

The definition of child sexual abuse involves: (1) sexual activity forced on the child, (2) by a person who is significantly older than the child (i.e., five years or more) and/or in an authority position or caretaking relationship with the child (Brown & Finkelhor, 1986). Sexual encounters can include sexual contact (fondling, or oral, anal, or vaginal penetration) or noncontact activities (exhibitionism, voyeurism, and involvement of child in making pornography) (Finkelhor, 1996; Lesserman, 2005). Because of the variability in this general definition, studies vary widely on the inclusion criteria used to define the sexually abuse group (e.g., Brown & Finkelhor, 1986; Feiring, Taska, & Lewis, 1992). Thus, prevalence estimates of child sexual abuse vary as a function of the study definition.

Estimates of the prevalence of child sexual abuse in the population also vary as a function of selection bias and inclusion criteria. Interestingly, statistics on the prevalence of child sexual abuse are obtained primarily from retrospective reports by adults (Putnam, 2003). Large community-based studies estimate child sexual abuse prevalence to be 12% to 35% in women and 4% to 9% in men (Johnson, 2004; Putman, 2003). Other prevalence estimates conclude that at least one in five adult women in North America have experienced sexual abuse, contact or noncontact, in childhood (Finkelhor, 1994). Regardless of the definition, the evidence suggests that more women than men have experienced sexual abuse in childhood (Putnam, 2003). The current investigation will focus on adult women who have a history of child sexual abuse.

Child sexual abuse is perpetrated 30-40% of the time by family members (Kilpatrick, Saunders, & Smith, 2003) and 50% of the time by known and trusted

individuals outside the family (Draucker, 1995; Kilpatrick, Saunders, & Smith, 2003). Comparatively few victims (10%) are abused by strangers (Kilpatrick, Saunders, & Smith, 2003). In essence, the experience of child sexual abuse most commonly occurs in the context of a trusting relationship between the victim and the perpetrator. The effects are worse if the abuse occurs within a trusted relationship though long term effects result regardless of the relationship to the perpetrator (Draucker, 1995; Feiring, Taska, & Lewis, 2002; Finkelhor, 1996; Kendall-Tackett, Williams, & Finkelhor, 1993; Paolucci, Genuis, & Violato, 2001). The definition of sexual abuse that will be used in the current study will be sexual contact before the age of 18 with someone who is at least five years older.

Reactions to Sexual Abuse: Short-term Reactions of Negative Emotions

Children's initial reactions to sexual abuse include a range of negative emotions such as guilt, shame, and fear of being harmed (Brown & Finkelhor, 1986). These emotions are still experienced even two years after the abuse. These feelings of shame and self-blame significantly predict the common post-child sexual abuse symptoms of depression and low self-esteem in children and adolescents (Brown & Finkelhor, 1986; Feiring, Taska, & Lewis, 1996; Kendall-Thacket, Williams, & Finkelhor, 1993; Paolucci, Genius, & Violato, 2001). For instance, among children in therapy, abuse victims are four times more likely to receive a diagnosis of major depression than their non-abused peers (Lanktree, Briere, & Zialdi, 1991). Indeed, children are likely to experience negative mood and a range of negative emotions within the first two years of the sexual abuse incident(s).

Long-term reactions: Depression and Health Outcomes

Sadly, these initial reactions remain long after the abuse has ended and continue even into adulthood for many. Indeed, the first generation of research in this area found evidence indicating both mental and physical health effects of child sexual abuse (Merril, Thompson, Sinclair, Gold, & Miller, 2001). For instance, Brown and Finkelhor's review describes that "in the clinical literature, depression is the symptom most commonly reported among adults molested as children" (p. 69; 1986). College samples of young adult women who reported a history of sexual abuse are more likely to report depression and anxiety compared to their non-abused peers (Briere & Runtz, 1988; Neuman, Housekamp, Pollack, & Briere, 1996). These findings have been replicated in community samples of young, middle-aged (ages 18 to 56; Brown & Finkelhor, 1986; Gold, 1986), and elderly women (< 60 years old; Draper, Pfaff, Perkis, et al., 2008) indicating depression continues across the lifespan after child sexual abuse. Among adults, a sexual abuse history has also been linked with suicidal ideations and attempts (Brown & Finkelhor, 1986; Johnson, 2004; Read, Agar, Barker-Collo, & Moskowitz, 2001; Silverman, Reinherz, & Giaconia, 1996).

Other symptoms commonly found in adults with sexual abuse histories are negative self-appraisals. For example, women with sexual abuse histories have lower self-esteem than their non-abused counterparts (Brown & Finkelhor, 1986; Feiring, Taska, & Lewis, 1996; Liem, James, O'Toole, & Boudewyn, 1997). Additionally, women with a history of sexual abuse were more likely to attribute the cause of bad events to internal, stable, and global causes, as well as to their character and behavior

(such as, “This negative event occurred because the world is an inherently bad place.” Pritt, 1998).

Indeed, studies have indicated that individuals who experience child sexual abuse are at higher risk for psychological distress and poorer physical health compared to their nonabused counterparts. However, studies have also indicated that not everyone with a history of child sexual abuse reports negative symptomology such as depression or low self-esteem (Brown & Finkelhor, 1986; Briere & Elliot, 1994; Kendall-Tackett, Williams, & Finkelhor, 1993; Paolucci, Genuis, & Violato, 2001). In fact, Brown and Finkelhor (1986) note that many sexual abuse survivors show little psychological disturbance in childhood or adulthood. Similarly, Kendall-Tackett et al’s (1993) review indicates that some studies report one-third of children with a history of child sexual abuse show no negative symptoms, and that a significant number of children who do show negative symptoms recover relatively quickly. Additionally, other studies have indicated that many adults with a history of child sexual abuse report healthy levels of self-esteem and low levels of depressive symptoms (Liem, James, O’Toole, & Boudewyn, 1997; Valentine & Feinhauer, 1993; Wright, Fopma-Loy, & Fischer, 2005). Interestingly, a meta-analysis of 59 studies on college samples indicates that although individuals with a history of child sexual abuse were less psychologically adjusted than their non-abused peers, the effect sizes were small in magnitude (Rind, Tromovitzch, & Bauserman, 1998). The authors found that although a large majority of women retrospectively reported initial negative reactions to the child sexual abuse, these reactions were temporary rather than long-term (Rind, Tromovitzch, & Bauserman, 1998). These findings have lead researchers to acknowledge that the experience of child sexual abuse does not always

result in long-term negative outcomes (Kendall-Tackett, Williams, & Finkelhor, 1993; Fopma-Loy, & Fischer, 2005; Liem, James, O'Toole, & Boudewyn, 1997; Paolucci, Genuis, & Violato, 2001; Rind, Tromovitzch, & Bauserman, 1998; Wright, Fopma-Loy, & Fischer, 2005). Furthermore, the individuals who show no negative symptomology may have had more psychological resources to cope with the abuse (Kendall-Tackett, Williams, & Finkelhor, 1993; Liem, James, O'Toole, & Boudewyn, 1997; Merril et al., 2001; Rind, Tromovitzch, & Bauserman, 1998; Wright, Fopma-Loy, & Fischer, 2005).

Potential Moderators of Child Sexual Abuse and Depression

Janoff-Bulman's theory of assumptive worlds explains the variability of outcomes after the experience of child sexual abuse (Janoff-Bulman, 1992; Matthews, & Marwit, 2006). Janoff-Bulman (1992) suggests that individuals have a set of core assumptions about the self and the external world. These assumptions include the belief that the world is benevolent and that the self is worthy. The assumption of benevolence refers to the general belief that positive outcomes will prevail even when negative events occur. The assumption about self-worth refers to an individual's concept of being competent and capable to successfully achieve their goals. These assumptions, which are developed from early experience, provide a framework for individuals to understand their external world and the security of their existence in it. Inherent in the theory is the premise that these assumptions provide a standard against which life experiences, especially negative events, are interpreted. These fundamental assumptions offer individuals a conceptual paradigm which guides the understanding of events (Janoff-Bulman, 1992; Kaufman, 2002; Kuhn, 1962).

When dealing with negative circumstances, our conceptual model for understanding the world may require maintenance or reconstruction as we incorporate the event into our existing assumptions (Kaufman, 2002). When dealing with events in which our security is threatened, our fundamental assumptions of the world can be seriously challenged and our role and understanding of the world disrupted (Janoff-Bulman, 1992; Matthews & Marwit, 2006). This may be the case for those who experienced child sexual abuse. According to Janoff-Bulman, psychological distress ensues when an individual lacks an adequate guide to understand the world. In essence, according to the assumptive world theory, psychological distress occurs because any or all of the fundamental assumptions have been disrupted leading to beliefs that one is not safe in the world, and that one is unworthy of love (Janoff-Bulman, 1992; Matthews & Marwit, 2006).

One way in which the fundamental assumptions may be corrected is through religious beliefs (Matthews & Marwit, 2006; Pargament, Magyar, Benore, & Mahoney, 2005). Religious beliefs may provide a bigger context to understand the world; this may be helpful after a child trauma like sexual abuse (Fallot & Heckman, 2005). In turn, religious beliefs about the world and the self can be converted into specific religious coping strategies that improve outcomes (Matthews & Marwit, 2006; Pargament, 1997). However, few studies have examined the role of positive and negative religious coping in preserving or challenging the fundamental assumptions after child sexual abuse.

Optimism and Religious Coping

The first assumption of the Janoff-Bulman theory is that the world is *benevolent*. This refers to the general belief that people think the world as basically good rather than evil. It is trust in the goodness of others and an optimistic belief that "the best will happen." In general, people assume that others are basically kind, helpful, and caring. People also believe that positive outcomes will prevail even when negative events occur. The assumption of benevolence may correspond with Erickson's (1968) first developmental crisis of trust versus mistrust. The question that is inherent in this crisis is whether the environment and the people in it are trustworthy. This crisis is based on one's early experiences with caregivers. If the needs of the child are met by a responsive caregiver, the child develops a sense of trust in people as well as a sense of security and basic optimism. If the child is mistreated, the child develops a sense of mistrust toward others. According to Erickson (1968), the concept of trust versus mistrust continues to impact personality development across the lifespan by impairing one's ability to engage the world. Thus, the assumption of benevolence is based on early relationship experiences and is achieved by gaining a basic trust in others and in the world at large (Janoff-Bulman, 1992). As the child develops, this worldview will come to include a view of God (Kane, Cheston, & Greer, 1993; Pritt, 1998). This relationship with God may embody positive qualities such as being loving and benevolent or negative qualities such as punishing and judging (Pritt, 1998). These views of God may become of particular relevance when one is suffering (Pargament, 1997; Shaefer & Gorsuch, 1991).

The experience of child sexual abuse can seriously challenge the fundamental assumption of benevolence (Janoff-Bulman, 1992). The event of sexual abuse may occur

early in the development of fundamental assumptions, resulting in distorted perceptions of the world and of the self. Particularly for the child victim, the experience of sexual abuse may represent a betrayal of trust based on the discovery that someone responsible for care and protection has intentionally caused harm (Finkelhor & Brown, 1985). The sense of betrayal by a trusted caregiver or authority figure may provide evidence that those who are meant to provide protection may actually be harmful. This sense of betrayal can in turn shatter the assumptions of trust and safety which may or may not be regained (Janoff-Bulman, 1992). This betrayal may eventually extend to one's sense of God since he allowed the abuse to occur (e.g., God is angry and distant) and for an innocent child to suffer (e.g., God abandons those in need; Kane, Cheston, & Greer, 1993; Pritt, 1998).

Having an optimistic outlook that good events will happen represent the assumption that the world is benevolent. In the case of sexual abuse, optimism may mediate the relationship between sexual trauma (i.e., child sexual abuse, rape, sexual assault) and depressive symptoms in female adult victims (Brodhagen & Wise, 2008). The assumption that the world is benevolent (assessed as optimism) plays an important role in the psychological well-being of sexual abuse victims (Janoff-Bulman, 1992) and these assumptions can generalize to impact religious coping strategies.

Specifically, the benevolence assumption can be maintained by viewing God as a caring collaborator in the coping process (Pargament et al., 1998). Underlying positive religious coping is the perception of God as loving and benevolent (Schaefer, & Gorsuch, 1991). In fact, viewing God as a benevolent collaborator in the coping process positively correlates with optimism in breast cancer patients (Gall, 2000) so this belief may

facilitate reinterpreting negative events (e.g., child sexual abuse, cancer) as a challenge to overcome (i.e., "Tried to see how God might be trying to strengthen me in the situation."). In essence, positive religious coping supports the assumption that God and the world are benevolent.

According to early theorists, one's concept of God may be based on one's concept of adult caregivers (Spilka, Addison, & Rosensohn, 1975). As such, the concept of God would be negative for those who were sexually victimized by adults in childhood. For example, in women who experienced sexual abuse in childhood, God was viewed as more wrathful and distant, less loving, and less kind than nonabused women (Kane, Cheston, & Greer, 1993; Pritt, 1998). The occurrence of the abuse experience at an early age seems to affect the concept of God and then the religious coping pattern. Indeed, women who experienced sexual abuse before the age of 18 reported more negative perceptions of God and higher levels of negative religious coping than those sexually abused for the first time as adults (Pritt, 1998). As such, those who use negative religious coping may have disrupted views of the world and God as benevolent.

Mastery and Religious Coping

While the first assumption refers to the environment (i.e., people and events), the second assumption refers to the self. According to Janoff-Bulman (1992), individuals need to believe that they are competent and capable to successfully achieve their goals. Similarly, others have argued that having a sense of mastery is important for psychological adjustment after child sexual abuse (Bass & David, 1988). Maintaining a

perception of mastery provides a positive resource for the individual facing a traumatic event (Harvey, 1996; Rutter, 1987).

Mastery, the belief that one can cope with varied life demands, promotes active rather than avoidant coping after sexual victimization (Benight & Bandura, 2004; Liem, James, O'Toole, & Boudewyn, 1997; Lightsey, Burke, Ervin, Henderson, & Yee, 2006). Additionally, over time, victimized women who had a sense of personal mastery over negative events was inversely related to psychological distress (Benight & Bandura, 2004; Lightsey, Burke, Ervin, Henderson, & Yee, 2006).

The experience of child sexual abuse can significantly impact the child's self-concept in terms of her perceived potential for achieving goals (Janoff-Bulman, 1992). For instance, the experience of sexual abuse may result in a feeling that one was powerless to stop the abuse (Diehl & Prout, 1992; Feiring, Taska, & Lewis, 1996; Finkelhor & Brown, 1985; Gold, 1986).

Positive religious coping may improve mastery after sexual abuse. A sense of comfort can derive from an intimate relationship with God (Ellison & Levin, 1998; Pargament et al., 2000). For instance, among a sample of men and women who experienced child sexual abuse, a positive relationship with God predicted mastery by partnering with God to solve problems (Gall, Basque, Damesceno-Scott, & Vardy, 2007; Pargament, Kennell, & Hathaway et al., 1988). Sharing the problem with God via collaborative coping has been related to personal control and self-esteem (Gall, Basque, Damesceno-Scott, Vardy, 2007; Pargament et al., 1988).

In contrast, negative religious coping may represent a sense of powerlessness and doubt in one's ability to successfully cope with situations (Diehl & Prout, 1992;

Finkelhor & Brown, 1985). This may translate into passively deferring all responsibility to God in the coping process because one is incapable of successful coping (Pargament et al., 1988).

Religious Coping: Positive and Negative Religious Coping

Religion provides both a framework to understand negative events as well as strategies to cope with negative events (Pargament, 1997). Paragament et al. (1998) distinguished between positive and negative religious coping. Positive coping activities emphasize a collaborative relationship with God, seeking a stronger connection with God, and reframing the situation as an opportunity for self-growth. Underlying positive religious coping is the perception of God as loving and benevolent (Schaefer, & Gorsuch, 1991). Positive religious coping may support the fundamental assumptions of benevolence (the world is just and good) and of mastery (I am able to cope with negative events).

Positive religious coping has been consistently related to more positive mental health outcomes across different samples following a negative life experience including higher levels of stress-related growth among church members after the Oklahoma City bombing; lower psychosomatic symptoms in college students after a serious negative event; levels of stress-related growth in hospital patients (Pargament et al., 1999); and, fewer depressive symptoms and somatic complaints in child sexual abuse survivors (Fallot & Heckman, 2003). Similarly, child sexual abuse survivors who view God as a benevolent collaborator in the coping process have lower levels of anxiety, anger, and depressed mood (Gall, Basque, Damasceno-Scott, Vardy, 2007).

Negative religious coping represents a tenuous relationship with God, a threatening view of the world and a struggle to find meaning (Pargament et al., 1998). These negative coping strategies emphasize passively deferring to God all responsibility to cope with the event, viewing the stressor as a punishment from God, and anger at God for allowing the event to happen. Underlying negative religious coping is the perception of God as distant (Schaefer & Gorsuch, 1991). Negative religious coping may actually exacerbate the outcomes after child abuse by reflecting doubt in the benevolence of God and/or one's sense of self-worth. In essence, negative religious coping may represent a struggle to maintain the fundamental assumptions which may have been threatened during a negative event, such as child sexual abuse.

Negative religious coping has been consistently related to worse mental health. For instance, in female child abuse survivors, negative religious coping was related to greater symptoms of post-traumatic stress disorder and depression (Fallot & Heckman, 2005). Additionally, negative religious coping has been found to be directly related to depression and anxiety (Ano & Vasconcelles, 2005; Pargament, Zinnbauer, & Scott et al., 1998). All in all, these findings provide support for the premise that negative religious coping, which expresses a spiritual struggle, may actually exacerbate the stress associated with a threatening event such as sexual abuse (Bjork & Thurman, 2007; McConnel et al, 2006; Pargament, 2001).

Ethnicity and Religious Coping

Past research has shown that Black congregants have higher levels of religious involvement (i.e., higher worship frequency) compared to Whites (Ellison, 1995; Krause,

2008; Krause & Chatters, 2005; Taylor, Chatters, & Jackson, 2007). Among a sample of older adults, Blacks reported greater participation in organizational religious activities (i.e., worship attendance) and non-organizational religious activities (reading religious books or other materials, watching religious television programs, or listening to religious radio programs) than Whites (Taylor, Chatters, & Jackson, 2007). The literature also suggests that Black congregants derive more emotional support from church members and report higher subjective religiosity (i.e., importance of religion growing up, importance of parents taking children to religious services, and overall importance of religion in the respondent's life) than White counterparts (Krause, 2008; Taylor, el. al., 2007). These findings have been found to be independent of religious affiliation and demographic variables such as socioeconomic status and geographic region (Taylor, Chatters, & Jackson, 2007).

Not only do Blacks report higher participation in religious activities and higher subjective religiosity, they also are more likely to engage in positive religious coping such as collaborative coping than Whites (El-Khoury, Dutton, Goodman, Engel, Belamaric, & Murphy, 2004; Fallot & Heckman, 2005; Krause & Chatters, 2005; Taylor et al., 2007). In one study which sampled Black and White women from community mental health centers who experienced interpersonal violence, Blacks were more likely to use positive religious coping than Whites after controlling for age, education, poverty, and geographical region (Fallot & Heckman, 2005). Further analyses showed that among the Black but not White women, positive religious coping was significantly related to fewer mental health symptoms (depression, anxiety, and somatization). Therefore, not only do Blacks tend to use religious coping more frequently; they may also be more

likely to benefit from the effects of religious coping on mental health outcomes than Whites.

Summary

Individuals with a history of child sexual abuse are more likely to show negative symptomology in adulthood than those without a history of child sexual abuse. These symptoms include depression and related symptoms such as anxiety, low self-esteem, and somatic complaints (Briere & Runtz, 1988; Brown & Finkelhor, 1986; Draper, Pfaff, Perkis, et al., 2008; Neuman, Housekamp, Pollack, & Briere, 1996). According to the Fundamental Assumptions theory, childhood sexual abuse survivors have more depressive symptoms as a consequence of disrupted sense of optimism and mastery (Janoff-Bulman, 1992). A potential contributor to the fundamental assumptions of optimism and mastery is positive and negative religious coping. Specifically, positive religious coping may contribute to higher optimism by reframing the event as an opportunity for spiritual growth (Pargament et al., 2000). Positive religious coping may also help to preserve a sense of mastery by providing a sense of control through partnering with God in the coping process (Ellison & Levin, 1998; Pargament et al., 2000). In contrast, negative religious coping may challenge the fundamental assumptions of optimism and mastery. Specifically, the individual who engages in negative religious coping may see negative life events as punishment from God (Pargament et al., 2000). The individual may have difficulty maintaining a sense of mastery and may passively defer all coping to God (passive religious deferral) or become angry at God for allowing the negative event to happen. In sum, by maintaining or challenging the fundamental

assumptions of benevolence and self-worth, religious coping can either be helpful or harmful following childhood sexual abuse.

Purpose of Study

The purpose of the current study is to determine whether religious coping buffered the effects of CSA on depression. Another purpose of the study was to examine whether religious coping buffered the effects of CSA more strongly in Blacks than Whites because it is hypothesized that Blacks use religious coping more frequently than Whites. The following research questions will be examined in the current study: Is religious coping a buffer to prevent depression after CSA or not? Does religious coping work more in Blacks since they use it more? Or does religious coping buffer depression for everyone whether or not they experienced CSA? Given these research questions, the following hypotheses will be tested:

1. Analysis of variance will examine CSA and ethnicity differences on possible covariates (i.e., age, education, childhood poverty, current poverty, and worship frequency). Black participants will report higher worship frequency and more childhood poverty than White participants.
2. Bivariate analyses will examine relationships between covariates. Age will be positively related to education and worship frequency. Education will be inversely related to childhood and current poverty. Childhood poverty and current poverty will be positively related.
3. Bivariate analyses will examine relationships between covariates, religious coping, and fundamental assumptions of optimism and mastery. Education will be inversely

related to negative religious coping (punishing God reappraisal, passive religious deferral, and anger at God) and positively related to mastery. Childhood and current poverty will be inversely related to optimism and mastery. Worship frequency will be positively related to positive religious coping (benevolent God reappraisal, collaborative religious coping, and spiritual connection) and to optimism and mastery.

4. Bivariate analyses will examine relationships among religious coping subscales, and among the fundamental assumptions of optimism and mastery.
    a. Positive religious coping subscales (benevolent God reappraisal, collaborative religious coping, and spiritual connection) will correlate positively with each other. Negative religious coping subscales (punishing God reappraisal, passive religious deferral, and anger at God) will correlate positively with each other.
    b. Positive religious coping (benevolent God reappraisal, collaborative religious coping, and spiritual connection) will be inversely related or unrelated to negative religious coping (punishing God reappraisal, passive religious deferral, and anger at God).
    c. Fundamental assumptions of optimism and mastery will correlate positively with each other.
5. Bivariate analyses will examine relationships between religious coping and fundamental assumptions of optimism and mastery. Positive religious coping (benevolent God reappraisal, collaborative religious coping, and spiritual connection) will be positively related to the fundamental assumptions of optimism and mastery. Negative religious (punishing God reappraisal, anger at God, and passive deferral)

coping will be inversely related to the fundamental assumptions of optimism and mastery.

6. Multivariate analyses of variance will be used to examine differences in religious coping, fundamental assumptions, and depressive symptoms between CSA and nonCSA participants after controlling for the covariates (i.e., age, education, childhood poverty, current poverty, and worship frequency).
    a. CSA participants will report higher levels of negative religious coping (punishing God reappraisal, passive deferral, and anger at God) than nonCSA participants.
    b. CSA participants will report lower levels of optimism and mastery than nonCSA participants.
    c. CSA participants will report higher levels of depressive symptoms than nonCSA participants.
7. Multivariate analyses of variance will be used to examine differences between Black and White participants after controlling for the covariates (i.e., age, education, childhood poverty, current poverty, and worship frequency).
    a. Black participants will report higher levels of levels of positive religious coping (benevolent God reappraisal, collaborative religious coping, and spiritual connection) than White participants.
    b. Black participants will report higher levels of negative religious coping (punishing God reappraisal, passive deferral, and anger at God) than White participants.

c. Black participants will report lower levels of depressive symptoms than White participants.

8. Hierarchical multiple regression models will be created to control for covariates (age, education, childhood and current poverty, and worship frequency) to determine the effects of CSA, ethnicity, and positive and negative religious coping on the fundamental assumptions of optimism and mastery.
    a. Positive religious coping (benevolent God reappraisal, collaborative religious coping, and spiritual connection) will positively predict the fundamental assumptions of optimism and mastery. Negative religious (punishing God reappraisal, anger at God, and passive deferral) coping will negatively predict the fundamental assumptions of optimism and mastery.
9. A hierarchical multiple regression model will be created to control for the covariates (age, education, childhood and current poverty, and worship frequency) to determine the effects of ethnicity, religious coping, and fundamental assumptions of optimism and mastery on depressive symptoms among CSA participants.
    a. The fundamental assumptions of optimism and mastery and positive religious coping (benevolent God reappraisal, collaborative religious coping, and spiritual connection) will negatively predict depressive symptoms.
    b. Negative religious coping (punishing God reappraisal, anger at God, and passive deferral) will be positively predict depressive symptoms.
10. Logistic regression models will be created to control for covariates (age, education, childhood and current poverty, and worship frequency) to examine the risk and

protective effects of CSA, religious coping, and fundamental assumptions of optimism and mastery on depression for Blacks and Whites.

11. Logistic regression models will be created to control for covariates (age, education, childhood and current poverty, and worship frequency) to examine the protective effects of religious coping, and fundamental assumptions of optimism and mastery on depression in the CSA sample for Blacks and Whites.

CHAPTER TWO

METHOD

Participants

Participants for the current study were selected from the Biopsychosocial Religion and Health Study (BRHS; Lee et al., 2008), which randomly sampled participants from the Adventist Health Study-2 (AHS-2), a cohort study of approximately 96,000 Seventh-day Adventists investigating cancer, diet, and lifestyle (Butler et al., 2007). Recruitment for the AHS-2 was conducted in 1,000 predominantly Black and 3,500 predominantly non-Black Adventist congregations in North America. Of these, BRHS randomly selected 20,000 U.S. AHS-2 participants to receive a 20-page religion and health questionnaire followed by up to three reminders (Lee et al., 2009). The main objective of the study was to compare Black and White respondents on stress, religion, and health. Data collection occurred between September, 2006 and August, 2007, and resulted in the return of 10,988 completed questionnaires.

For the current study, females with a history of child sexual abuse were selected from those who responded "yes" to the following question: "Did you ever have sexual contact with anyone who was at least 5 years older than you before you reached the age of 13?" Participants with no history of child sexual abuse were females who did not report childhood sexual contact and unwanted sexual contact as an adult. Participants were included only if they also reported no childhood physical abuse (i.e., pushed, slapped, kicked, bitten, or hit by an object) by caregivers and no adult rape. Because women are more likely to experience child sexual abuse than men (Johnson, 2004;

Putman, 2003); the current investigation focuses only on adult women with or without a history of child sexual abuse for a total of 2949 participants for the current investigation.

Missing Data

Inclusion criteria for the study involved female participants who answered the items concerning childhood sexual abuse, who reported no childhood physical abuse by caregivers, and who had valid scores on the variables of interest. Missing items on scale scores were addressed separately for each scale by accounting for the number of scale items and the internal consistency of the scale. Specifically, if the scale Cronbach's alpha was ≥ 0.80, the mean of available items was calculated if only one item was missing on a 3-5 item scale, if two or fewer items were missing on a 6-10 item scale, and if three or fewer items were missing on an 11 item scale. Therefore, the mean scale score was not calculated, and the individual was deleted list wise from analyses if too few scale items were answered.

Measures

Covariates examined in the current study included age and education. Education was coded according to the following: 1 – *Grade School,* 2 – *Some High School,* 3 – *High School Diploma,* 4 – *Trade School Diploma,* 5 – *Some College*, 6 – *Associate's Degree*, 7 – *Bachelor's Degree*, 8 – *Master's Degree*, 9 – *Doctoral Degree*. Additionally, to obtain information about economic hardship in childhood and in the past year, a subjective rating of childhood poverty and current poverty was measured with the following items, "On average how difficult was it for your family to meet expenses for basic needs like

food, clothing, and housing *when you were under 18 years old* (childhood poverty) and *in the past year* (current poverty)*?"* using a 5-point Likert scale (1 – *Not at all difficult*; 5 – *Very difficult*; Pudrovska, Schieman, Pearlin, & Nguyen, 2005). A rating of worship frequency was assessed with "How often do you attend church or other religious meetings?" on a 6-point scale (1 – *More than once a week,* 2 – *Once a week,* 3 – *A few times a month,* 4 – *A few times a year*, 5 – *Once a year or less,* 6 – *Never*). Worship frequency was reverse-coded so that higher values indicated more frequent church attendance.

Religious Coping

Religious Coping was measured by the Religious Coping Scale (RCOPE; Pargament, Koenig, and Perez, 2000; see Appendix A). Participants are asked to think about how they have coped with major life problems and to rank how often they used each religious coping strategy on a 5 point Likert scale (0 = *Never*, 4 = *Very often*). The following subscales were employed to assess relevant constructs in the present study: *Benevolent God reappraisal* (α = .84; 3 items); *Collaborative religious coping* (α = .82; 3 items); *Spiritual Connection* (one item); *Punishing God reappraisal* (α = .84; 3 items); *Passive religious deferral* (α = .87; 3 items); and *Anger at God* (one item). All alphas were calculated on the participants included in the current investigation.

Optimism

Optimism was measured by the Life Orientation Test – Revised (LOT-R; Scheier, Carver, & Bridges, 1994; see Appendix B). The 10-item LOT-R evaluates generalized

positive and negative expectations and demonstrates good internal consistency in the current sample (α = .77; 6 items). Because four of the original 10 filler items were dropped, participants rated six items on a 7-point Likert scale (0 – *Not True*; 6 - *Very True*).

Mastery

Mastery was measured with four items rated on a 7-point Likert scale (0 – *Not True*; 6 - *Very True;* Pearlin & Schooler, 1978; see Appendix C) and has good internal consistency in the current sample (α = .74; 4 items).

Depressive Symptoms and Depression

Depressive symptoms were measured by the Center for Epidemiological Studies Depression Scale 11-item short form (CES-D short form; Kohout, Berkman, Evans, & Coroni-Huntley, 1993; see Appendix D). Participants were asked to rate each item on a 4-point scale (0 = "*Rarely or none of the time*," 4 = "*Most or all of the time*") based on how they felt within the past week. The items of the CES-D were multiplied by Kohout et al., (1993) weighted formula to approximate the 20-item measure scores. This formula, which was a generalized T-score transformation, involved standardizing the CES-D scores (z-score transformation), then multiplying each z-score with the standard deviation of the CES-D distribution, and adding the mean of the CES-D distribution by gender. . This calculation resulted in a cut score of 16 for depression for both males and females (Kohout et al, 1993). The CES-D has demonstrated good internal consistency in a sample of female undergraduates (α = .84; Carpenter, Andrykovski, Wilson, Hall,

Rayens, & Sachs et al., 1998). The CES-D short form demonstrates relatively fair internal consistency in the current sample ($\alpha = .52$; 11 items). It suspected that the lower internal consistency in the current sample is secondary to the diversity of physical (e.g., feeling restless, reduced appetite) and emotional symptoms (i.e., I felt sad, I felt lonely) included in the CES-D short form.

CHAPTER THREE

RESULTS

A total of 10,988 cases were available for analysis. Because relatively large samples of White and Black participants were surveyed, participants of other ethnicities which were fewer in number were excluded, leaving a total of 10,288. Of these, 6777 (65.9% of the sample) were female. Of these, 1150 (17.0% of females) reported CSA defined as sexual contact before the age of 13 years by someone who was five years older. A total of 5433 (80.1%) females reported no CSA experiences. Of the 6777 females, 194 (2.9%) did not respond to the item on sexual contact before the age of 13 and were excluded.

To control for physical abuse that co-occurred with the sexual abuse, 606 (52.7%) of CSA participants reported physical abuse (i.e., push, slap, throw objects at you, kick, bite, or strike you with an object) by caregivers between ages 5 and 15 years and were excluded. Thus the remaining 544 (47.3%) CSA participants who experienced CSA and no physical abuse were retained for analysis. Of those in the non-CSA group, 2065 (38.0% of non-CSA group) reported physical abuse by caregivers and were excluded. A total of 3368 (62.0% of non-CSA group) participants remained in the non-CSA group (they reported no sexual or physical abuse as a child).

To control for juvenile rape (pressure or threats to have sexual contact between age 13 and 18), 298 (54.8% of CSA group) participants were excluded. The remaining 246 (45.2% of CSA group) female participants who experienced CSA but no physical abuse and no juvenile rape were retained for analyses. Of those in the non-CSA group, 313 (9.3% of non-CSA group) reported pressure or threats from another person to have

sexual contact before age 18 and were excluded. A total of 3055 (90.7% of non-CSA group) participants remained in the non-CSA group (they reported no sexual or physical abuse as a child or juvenile rape).

To control for forced sexual contact that may have occurred in adulthood among the non-CSA group, 352 (11.5% of the non-CSA group) female participants who reported forced sexual contact were excluded. A total of 2703 (88.55% of non-CSA group) female participants remained in the non-CSA group (they reported no sexual or physical abuse as a child, and no lifetime rape). As such, the total study sample included 2949 participants; 2703 in the non-CSA group and 246 in the CSA group. Of the final sample, 96.0% considered themselves as active members of the SDA church; 2.8% considered themselves inactive members; and 1.2% considered themselves as members of other Christian denominations. This final sample was used in all analyses in the current investigation.

Participant Characteristics

The total numbers of participants available for analysis included 246 CSA, 2703 nonCSA, 2070 Whites, and 879 Blacks. The p-value was set at .01 for significance on all analyses.

Age, education, childhood poverty, current poverty, and worship frequency by CSA and Ethnicity (2 CSA/nonCSA groups x 2 Black/White groups) were examined. A 2 x 2 MANOVA with post hoc ANOVAs indicated significant differences between CSA groups on age, education, and childhood poverty. Participants in the CSA group were younger, had higher education (i.e., an associate's degree or higher), and reported more

childhood poverty than those in the non-CSA group (see Table 1). There were no CSA group differences on current poverty or worship attendance. The average participant in both CSA and non-CSA groups had little difficulty meeting current expenses for basic needs and attended church once a week.

A 2 x 2 ANOVA indicated significant differences in age and education by ethnic group. The Black females were younger and had more education (i.e., an associate's degree or higher) than the White females. No significant differences were observed in childhood poverty or current poverty by ethnic group. Marginal significance was observed in worship frequency by ethnic group, with Blacks reporting higher frequency of worship attendance than Whites. No interaction effects were observed between CSA and ethnicity.

Bivariate Analyses

Bivariate correlations will be presented in the following order: a) demographics, b) fundamental assumptions and religious coping subscales, and c) variables of interest with depression.

Table 1

CSA and ethnicity group differences on covariates

		CSA Group (n= 246)		Non-CSA Group (n=2703)		Total Means (Ethnic Groups) Whites n= 2070 Blacks n=879		
	Ethnicity	*M*	*SD*	*M*	*SD*	*M*	*SD*	*P*
Age	White	63.07	12.38	64.79	13.98	*64.64*	*13.60*	.001
	Black	54.78	9.93	58.82	13.67	*58.48*	*13.45*	
Total Means for CSA groups		*60.63*	*12.28*	*63.01*	*14.16*			
	p	.005						
Education	White	5.65	1.75	5.66	1.86	5.66	1.85	.001
	Black	5.68	1.72	5.88	1.91	*5.94*	*1.91*	
Total Means for CSA groups		*5.95*	*1.80*	*5.72*	*1.88*			
	p	.004						
Childhood Poverty[1]	White	2.76	1.39	2.54	1.33	2.56	1.34	.331
	Black	2.72	1.46	2.38	1.35	*2.41*	*1.36*	
Total Means for CSA groups		*2.75*	*1.41*	*2.49*	*1.34*			
	p	.006						
Current Poverty[1]	White	1.53	1.02	1.43	.88	1.43	.90	.411
	Black	1.50	1.09	1.57	1.06	*1.57*	*1.06*	
Total Means for CSA groups		*1.52*	*1.04*	*1.47*	*.94*			
	p	.828						
Worship Frequency[2]	White	5.29	.73	5.18	.83	5.19	.82	.013
	Black	5.34	.66	5.42	.63	*5.42*	*.63*	
Total Means for CSA groups		*5.31*	*.71*	*5.25*	*.78*			
	p	.832						

[1] Higher scores indicate more childhood and current poverty
[2] Higher scores indicate more frequent worship attendance

Demographics

Bivariate correlations between demographic characteristics are presented in Table 2. Age was negatively correlated with education and current poverty, and positively correlated with childhood poverty. Education was negatively correlated with childhood poverty and current poverty. Childhood poverty was positively correlated with current poverty.

Bivariate correlations between demographic characteristics and the independent variables (optimism, mastery, and religious coping subscales) were examined (see Table 3). Age was negatively correlated with mastery, punishing God reappraisal, and anger at God. Education was negatively correlated with punishing God reappraisal and passive deferral and positively correlated with optimism and mastery. Childhood poverty and

Table 2

Demographic intracorrelations

	Age	Education	Childhood poverty	Current poverty	Worship frequency
Age	--				
Education	-.25*	--			
Childhood poverty	.19*	-.13*	--		
Current poverty	-.11*	-.11*	.15*	--	
Worship frequency	.05	-.03	.04	-.03	--

*$p \leq .01$

Table 3

Intercorrelations between covariates, fundamental assumptions, and religious coping

		Age	Education	Childhood Poverty	Current poverty	Worship Frequency
Positive RCOPE	Benevolent Reappraisal	-.02	.01	.01	-.01	.11*
	Collaborative Religious Coping	.06	.03	-.01	-.04	.15*
	Spiritual Connection	.06	.01	.02	-.03	.08*
Negative RCOPE	Punishing God	-.09*	-.07*	.03	.14*	-.04
	Passive Religious Deferral	.04	-.14*	.05	.08*	-.02
	Anger at God	-.16*	.06	-.03	.05	-.08*
Assumptions	Optimism	.05	.16*	-.07*	-.17*	.06
	Mastery	-.11*	.13*	-.13*	-.18*	.05

*$p \leq .01$

current poverty were both negatively correlated with optimism and mastery. Current poverty was also positively correlated with punishing God reappraisal and passive deferral. Worship frequency was positively correlated with positive religious coping (collaborative, benevolent God reappraisal, spiritual connection), and negatively correlated with anger at God.

Fundamental Assumptions and Religious Coping

After examining the relationships between the demographics and the independent variables, correlations among the independent variables were examined. The

Table 4

Religious coping intracorrelations

		Benevolent Reappraisal	Collaborative Coping	Spiritual Connection	Punishing God	Passive Religious Deferral	Anger at God
Positive RCOPE	Benevolent Reappraisal	--					
	Collaborative Coping	.48*	--				
	Spiritual Connection	.47*	.36*	--			
Negative RCOPE	Punishing God	-.11*	-.17*	-.12*	--		
	Passive Religious Deferral	-.07*	-.10*	-.08*	.20*	--	
	Anger at God	-.10	-.11*	-.08*	.31*	.06	--

*$p \leq .01$

fundamental assumptions of optimism and mastery were positively correlated with each other ($r = .50$, $p \leq .01$).

Religious coping variables demonstrated expected correlational patterns (see Table 4). All positive religious coping subscales (i.e., benevolent reappraisal, collaborative religious coping, and spiritual connection) were positively correlated, while all negative religious coping subscales (i.e., punishing God reappraisal, passive deferral, and anger at God) were positively correlated. Finally, the positive and negative religious coping subscales were negatively correlated or uncorrelated. Of note, there was no correlation between anger at God and passive deferral; a moderate, negative correlation was observed between punishing God and collaborative religious coping. A scatter plot

between punishing God reappraisal and collaborative religious coping indicated a slight curvilinear relationship. After examining intracorrelations among the fundamental assumptions and religious coping subscales, the bivariate intercorrelations between the fundamental assumptions and religious coping were examined (see Table 5).

The hypothesized correlations between the fundamental assumptions and religious coping variables were generally supported. Positive religious coping subscales correlated positively with the fundamental assumptions; negative religious coping subscales correlated negatively with the fundamental assumptions.

Table 5

Correlations between fundamental assumptions and religious coping

		Fundamental Assumptions	
		Optimism	Mastery
Positive RCOPE	Benevolent Reappraisal[1]	.24*	.12*
	Collaborative Religious Coping[2]	.26*	.16*
	Spiritual Connection[3]	.22*	.10*
Negative RCOPE	Punishing God[1]	-.30*	-.27*
	Passive Religious Deferral[2]	-.18*	-.20*
	Anger at God[3]	-.20*	-.16*

*p<.01

[1]Varibles predicted to correlate significantly with Optimism; [2]Variables predicted to correlate significantly with Mastery; [3]

Depressive Symptoms

Bivariate correlations between the demographics, fundamental assumptions, and the religious coping subscales and depressive symptoms were also examined (see Table 6).

Bivariate correlations indicated that education and worship frequency negatively correlated with depressive symptoms. Thus, worship frequency was used as a covariate in the current study to examine the effect of coping and to remove variance with outcome variables like depressive symptoms. As mentioned, worship frequency was positively

Table 6

Correlations of covariates, assumptions, and religious coping with depressive symptoms

		Depressive symptoms
Demographics	Age	.01
	Education	-.13*
	Childhood poverty	.09*
	Current poverty	.19*
	Worship frequency	-.10*
Positive RCOPE	Benevolent Reappraisal	-.13*
	Collaborative Coping	-.20*
	Spiritual Connection	-.11*
Negative RCOPE	Punishing God	.30*
	Passive Deferral	.13*
	Anger at God	.18*
Assumptions	Optimism	-.49*
	Mastery	-.49*

*p<.01

correlated with positive religious coping (collaborative, benevolent God reappraisal, spiritual connection), and negatively correlated with anger at God. Conversely, covariates childhood poverty and current poverty positively correlated with depressive symptoms.

As predicted, the positive religious coping subscales (benevolent God reappraisal, collaborative religious coping, and spiritual connection) and fundamental assumptions (optimism and mastery) correlated negatively with depressive symptoms. Also as predicted, the negative religious coping subscales (punishing God reappraisal, passive deferral, and anger at God) correlated positively with depressive symptoms. Of note, the strongest correlations were found between the optimism, mastery, and depressive symptoms.

Multivariate Analyses: Group Differences in Black/White and CSA Subgroups

A MANCOVA was performed to determine the ethnic and CSA group differences on depressive symptoms, optimism, mastery, and religious coping subscales after controlling for age, education, childhood poverty, current poverty, and worship frequency. Multivariate statistics indicated significant CSA-group differences (Pillai's Trace = .010, $F(10,2464)=2.62$, $p=.004$) and significant ethnic group differences (Pillai's Trace = .026, $F(10,2464)=6.64$, $p\leq.001$); therefore, univariate post hoc analyses were conducted. Univariate ANCOVA results indicated that the CSA group had significantly more depressive symptoms than the non-CSA group. The CSA group reported lower levels of mastery and higher levels of punishing God reappraisal than the non-CSA

group. Blacks reported significantly higher benevolent God reappraisal, spiritual connection, and punishing God reappraisal than Whites (see Table 7).

Table 7

Mean comparisons between CSA and ethnicity on depression, fundamental assumptions, and religious coping

		CSA Group (n= 246)		Non-CSA Group (n=2703)		Total Means (Ethnic Groups) Whites n= 2070 Blacks n=879		
	Ethnicity	*M*	*SD*	*M*	*SD*	*M*	*SD*	*p*
Depression	White	9.83	8.33	8.46	8.11	*8.58*	*8.14*	.079
	Black	11.68	11.91	8.42	8.06	*8.70*	*8.51*	
Total Means for CSA groups		*10.37*	*9.52*	*8.45*	*8.10*			
	p	.001						
Optimism	White	5.60	1.94	5.65	1.06	*5.64*	*1.06*	.848
	Black	5.57	1.26	5.71	1.03	5.70	*1.06*	
Total Means for CSA groups		*5.59*	*1.10*	*5.67*	*1.05*			
	p	.213						
Mastery	White	5.30	1.32	5.51	1.29	*5.49*	*1.30*	.103
	Black	5.53	1.29	5.79	1.28	*5.76*	*1.28*	
Total Means for CSA groups		*5.37*	*1.31*	*5.59*	*1.30*			
	p	.013						
Benevolent God Reappraisal	White	3.61	1.04	3.73	.97	*3.72*	*.98*	.001
	Black	4.07	.88	3.89	.97	*3.90*	*.96*	
Total Means for CSA groups		*3.74*	*1.02*	*3.77*	*.97*			
	p	.752						
Collaborative Coping	White	4.14	.09	4.24	.78	*4.23*	*.79*	.562
	Black	4.18	.78	4.27	.80	*4.27*	*.80*	
Total Means for CSA groups		*4.15*	*.87*	*4.25*	*.79*			
	p	.112						

Table 7 *continued*

Spiritual Connection	White	3.22	1.40	3.44	1.30	*3.43*	*1.31*	.001
	Black	3.68	1.31	3.62	1.37	*3.63*	*1.36*	
Total Means for CSA groups		*3.35*	*1.39*	*3.50*	*1.33*			
	p	.416						
Punishing God Reappraisal	White	1.29	.55	1.20	.49	*1.21*	*.50*	.001
	Black	1.55	1.00	1.38	.72	*1.40*	*.74*	
Total Means for CSA groups		*1.36*	*.71*	*1.25*	*.57*			
	p	.007						
Passive Deferral	White	1.75	.98	1.57	.79	*1.59*	*.81*	.238
	Black	1.62	.98	1.74	1.06	*1.73*	*1.05*	
Total Means for CSA groups		*1.71*	*.98*	*1.62*	*.88*			
	p	.457						
Anger at God	White	1.31	.66	1.33	.72	*1.32*	*.72*	.255
	Black	1.35	.72	1.28	.74	*1.28*	*.73*	
Total Means for CSA groups		*1.32*	*.68*	*1.31*	*.73*			
	p	.899						

*Covariates were age, education, childhood poverty, current poverty, and worship.

Predicting the Fundamental Assumptions with Religious Coping

Hierarchical multiple regression models were tested to examine the prediction of the fundamental assumptions (optimism and mastery) with covariates, CSA status, ethnicity and facets of religious coping (see Tables 8 and 9). In each model, moderator variables were entered to examine possible interactions between the religious coping subscales, CSA, and ethnicity to determine whether religious coping buffered the effects of CSA and whether religious coping buffered the effects of CSA more strongly in Blacks than Whites because Blacks used religious coping more frequently than Whites. The regression models were created with the following blocks of variables: (a)

demographic controls, (b) CSA status (0 – *No CSA*; 1 – *CSA*), (c) ethnicity (0 – *White*, 1 - *Black)*, (d) positive and negative religious coping subscales, and (e) 2-way and 3-way interactions after centering the scores (e.g., religious coping x CSA, religious coping x ethnicity, religious coping x CSA x ethnicity).

Table 8

Optimism model

PREDICTORS	Optimism Standardized β	Standard. Error	*p*	R	R^2	R^2 Change	Model *p*
Demographics				.24	.06	.06	.00
Age	.08	.00	.00				
Education	.16	.01	.00				
Childhood poverty	-.03	.02	.14				
Current poverty	-.13	.02	.00				
Worship	.06	.03	.00				
CSA				.24	.06	.00	.27
CSA vs nonCSA	-.03	.07	.17				
Ethnicity				.24	.06	.00	.14
Black vs Whites	.03	.05	.15				
Religious Coping				.46	.21	.15	.00
Benevolent God reappraisal	.12	.02	.00				
Collaborative RCOPE	.11	.03	.00				
Spiritual connection	.07	.02	.00				
Punishing God Reappraisal	-.21	.04	.00				
Passive deferral	-.08	.02	.00				
Anger at God	-.10	.03	.00				

Table 8 *continued*

Moderators				.48	.22	.02	.00
Benevolent God reappraisal X CSA	-.05	.08	.46				
Collaborative RCOPE X CSA	-.07	.08	.32				
Spiritual connection X CSA	.03	.08	.61				
Punishing God reappraisal X CSA	.18	.09	.01				
Passive deferral X CSA	-.01	.07	.83				
Anger at God X CSA	-.06	.09	.36				
Benevolent God reappraisal X ethnicity	.01	.02	.80				
Collaborative RCOPE X ethnicity	.05	.02	.03				
Spiritual connection X ethnicity	-.01	.02	.59				
Punishing God Reappraisal X ethnicity	.05	.02	.03				
Passive deferral X ethnicity	.00	.02	.94				
Anger at God X ethnicity	-.02	.02	.28				
Benevolent God X CSA X ethnicity	.02	.06	.77				
Collaborative RCOPE X CSA X ethnicity	.09	.06	.18				
Spiritual connection X CSA X ethnicity	-.05	.06	.48				
Punishing God X CSA X ethnicity	-.16	.06	.02				
Passive deferral X CSA X ethnicity	.05	.05	.35				
Anger at God X CSA X ethnicity	.09	.07	.16				

*p<.01

After controlling for covariates, neither CSA status nor ethnicity predicted optimism. As expected, all religious coping facets predicted significant variance in optimism, with punishing God reappraisal as the strongest predictor. One moderator variable significantly predicted optimism -- punishing God reappraisal x CSA status. A graph examining the punishing God reappraisal x CSA moderator indicated that CSA survivors who reported higher punishing God reappraisal also reported lower levels of optimism though the effect was even stronger in the nonCSA group (see Figure 1). Overall, the complete model accounted for 22% of the variance in optimism.

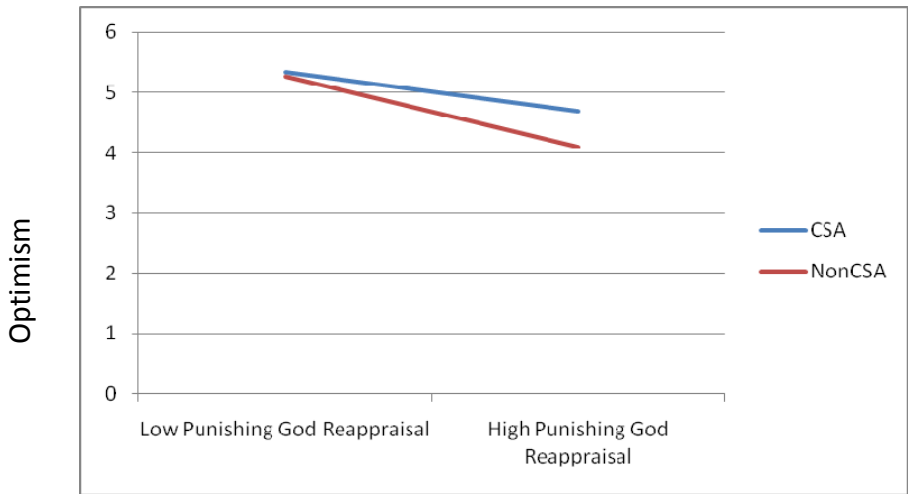

Figure 1: Punishing God reappraisal X CSA in predicting optimism

Table 9

Mastery model

PREDICTORS	Mastery (Standardized β)	Standard. Error	*p*	R	R^2	R^2 Change	Model *p*
Demographics				.26	.06	.06*	.00
Age	.11	.00	.00				
Education	.08	.01	.00				
Childhood poverty	.'-07	.02	.00				
Current poverty	-.18	.03	.00				
Worship	.05	.03	.01				
CSA				.26	.06	.00	.01
CSA vs nonCSA	-.05	.09	.01				
Ethnicity				.27	.07	.01	.00
Black vs Whites	.07	.06	.00				
Religious Coping				.41	.16	.09*	.00
Benevolent God reappraisal	.03	.03	.16				
Collaborative RCOPE	.06	.04	.00				
Spiritual connection	.01	.02	.72				
Punishing God Reappraisal	-.19	.05	.00				
Passive deferral	-.12	.03	.00				
Anger at God	-.18	.04	.00				
Moderators				.41	.16	.00	.12
Benevolent God reappraisal X CSA	-.02	.11	.76				
Collaborative RCOPE X CSA	-.03	.10	.63				
Spiritual connection X CSA	.05	.10	.43				
Punishing God reappraisal X CSA	.15	.11	.03				

Table 9 *continued*

Passive deferral X CSA	-.05	0.09	.37
Anger at God X CSA	-.05	.11	.48
Benevolent God reappraisal X ethnicity	-.02	.03	.33
Collaborative RCOPE X ethnicity	.05	.03	.04
Spiritual connection X ethnicity	-.01	.03	.75
Punishing God Reappraisal X ethnicity	.01	.03	.65
Passive deferral X ethnicity	.03	.03	.19
Anger at God X ethnicity	.02	.03	.28
Benevolent God X CSA X ethnicity	.02	.08	.77
Collaborative RCOPE X CSA X ethnicity	.03	.08	.68
Spiritual connection X CSA X ethnicity	-.07	.08	.68
Punishing God X CSA X ethnicity	-.12	.07	.12
Passive deferral X CSA X ethnicity	.05	.07	.37
Anger at God X CSA X ethnicity	.07	.09	.33

*p<.01

After controlling for covariates, CSA status was inversely related to mastery; Blacks had higher mastery than Whites. As expected, religious coping predicted significant variance in mastery, specifically, collaborative religious coping was positively related and all negative religious coping scales (punishing God reappraisal, passive deferral, and anger at God) were negatively related to mastery. No moderators were significant. Overall, the complete model accounted for 38% of the variance in mastery.

Predicting Depression by Religious Coping and Fundamental Assumptions

After examining whether religious coping predicted the fundamental assumptions of optimism and mastery, depression was examined. First, the continuous score indicating depressive symptoms was predicted. Second, clinical depression was examined by using CES-D > 16 cut- score to create depressed and non-depressed group assignments (see Table 10; Kohout et al, 1993).

To examine the net effects of religious coping and fundamental assumptions on depressive symptoms with a hierarchical regression model the following blocks were entered: (a) demographic controls, (b) CSA status (0 – *No CSA*; 1 – *CSA*), (c) ethnicity (0 – *White*, 1 - *Black)*, (d) positive and negative religious coping subscales, (e) optimism and mastery, and (f) 2-way and 3-way interactions after centering the scores (e.g., religious coping x CSA, fundamental assumptions x CSA, religious coping x CSA x ethnicity, and fundamental assumptions x CSA x ethnicity; see Table 10).

Table 10

Depressive symptoms predicted by religious coping and fundamental assumptions

PREDICTORS	Depressive symptoms (Standard. β)	Standard Error	*p*	R	R^2	R^2 Change	Model *p*
Demographics				.24	.05	.05	.00
Age	-.02	.01	.24				
Education	-.09	.09	.00				
Childhood poverty	.05	.12	.01				
Current poverty	.18	.18	.00				
Worship	-.08	.21	.00				
CSA				.25	.06	.01	.00
CSA vs nonCSA	-.06	.57	.00				
Ethnicity				.25	.06	.00	.51
Black vs Whites	.01	.37	.51				
Religious Coping				.40	.16	.10	.00
Benevolent God reappraisal	-.04	.19	.12				
Collaborative RCOPE	-.10	.23	.00				
Spiritual connection	-.01	.13	.67				
Punishing God reappraisal	.19	.29	.00				
Passive deferral	.05	.18	.01				
Anger at God	.13	.23	.00				
Fundamental Assumptions				.59	.35	.19	.00
Optimism	-.28	.16	.00				
Mastery	-.29	.12	.00				
Moderators				.61	.38	.02	.00
Benevolent God reappraisal X CSA	-.03	.60	.68				
Collaborative RCOPE X CSA	.00	.58	.97				
Spiritual connection X CSA	.00	.57	.95				
Punishing God reappraisal X CSA	-.15	.61	.02				
Passive deferral X CSA	-.07	.51	.20				

Table 10 *continued*

Anger at God X CSA	.11	.63	.06
Optimism X CSA	.05	.20	.01
Mastery X CSA	-.02	.20	.31
Benevolent God reappraisal X Ethnicity	-.02	.17	.43
Collaborative RCOPE X ethnicity	-.03	.16	.18
Spiritual connection X ethnicity	-.01	.16	.48
Punishing God Reappraisal X ethnicity	.03	.17	.11
Passive deferral X ethnicity	.02	.14	.21
Anger at God X ethnicity	-.03	.16	.13
Optimism X ethnicity	-.01	.18	.82
Mastery X ethnicity	.04	.17	.04
Benevolent God X CSA X ethnicity	.05	.46	.46
Collaborative RCOPE X CSA X ethnicity	-.08	.44	.19
Spiritual connection X CSA X ethnicity	.02	.42	.68
Punishing God X CSA X ethnicity	.20	.40	.00
Passive deferral X CSA X ethnicity	.09	.37	.09
Anger at God X CSA X ethnicity	-.13	.48	.04
Benevolent God reappraisal X Optimism	.07	.20	.01
Collaborative RCOPE X Optimism	.00	.18	.93
Spiritual connection X Optimism	-.04	.19	.11

Table 10 *continued*

Punishing God reappraisal X Optimism	-.01	.19	.79
Passive deferral X Optimism	-.03	.17	.09
Anger at God X Optimism	.01	.15	.81
Benevolent God reappraisal X Mastery	.00	.20	.99
Collaborative RCOPE X Mastery	.04	.18	.09
Spiritual connection X Mastery	.02	.19	.48
Punishing God reappraisal X Mastery	.00	.18	.88
Passive deferral X Mastery	.01	.16	.74
Anger at God X Mastery	-.04	.16	.05

*p<.01

Among covariates, childhood and current poverty were positively related and education and worship were negatively related to depressive symptoms. As hypothesized, CSA status positively predicted depressive symptoms. Among religious coping subscales, collaborative religious coping was negatively related to depressive symptoms, while all negative religious coping subscales (punishing God reappraisal, passive deferral, and anger at God) were positively related to depressive symptoms. As expected, both optimism and mastery were negatively related to depressive symptoms after controlling for all other variables. Three moderator variables significantly predicted depressive symptoms: optimism x CSA, punishing God reappraisal x CSA x ethnicity, and benevolent God reappraisal x optimism. The graph of optimism x CSA moderator

indicated that optimism was inversely related to depression among both CSA and nonCSA groups though the nonCSA group has less depressive symptoms. A graph of punishing God reappraisal x CSA status x ethnicity moderator indicated that punishing God reappraisal had more of an effect on depression in Blacks than Whites after CSA (see Figures 3 and 4). To examine the benevolent God x optimism interaction, a median split of optimism created high and low optimism groups (low optimism $\leq$ 5.83; high optimism > 5.83). A graph of benevolent God x optimism (see Figure 4) showed that low optimism and low benevolent God were related to more depressive symptoms. Overall, the complete model accounted for 38% of the variance in depressive symptoms.

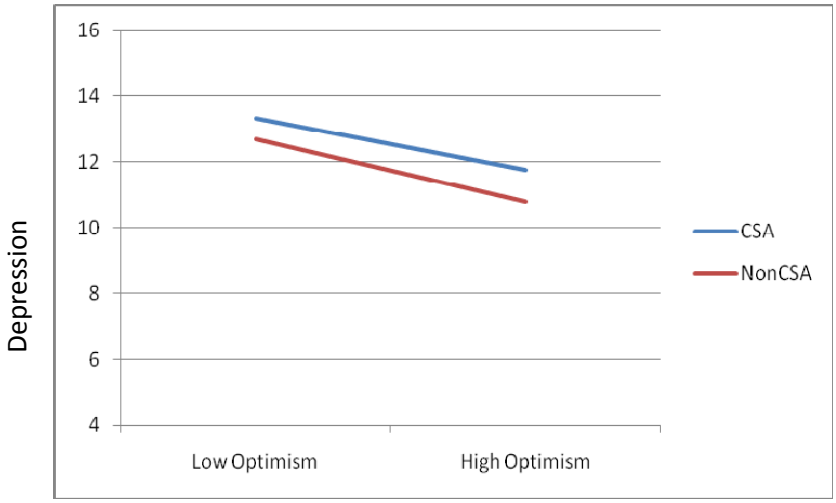

Figure 2. Optimism x CSA in predicting depression

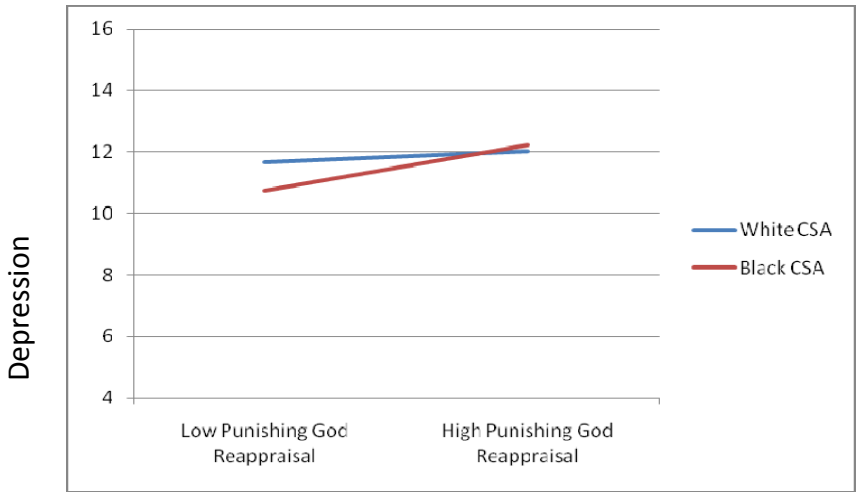

Figure 3. Punishing God x CSA status (CSA group) x ethnicity in predicting depression

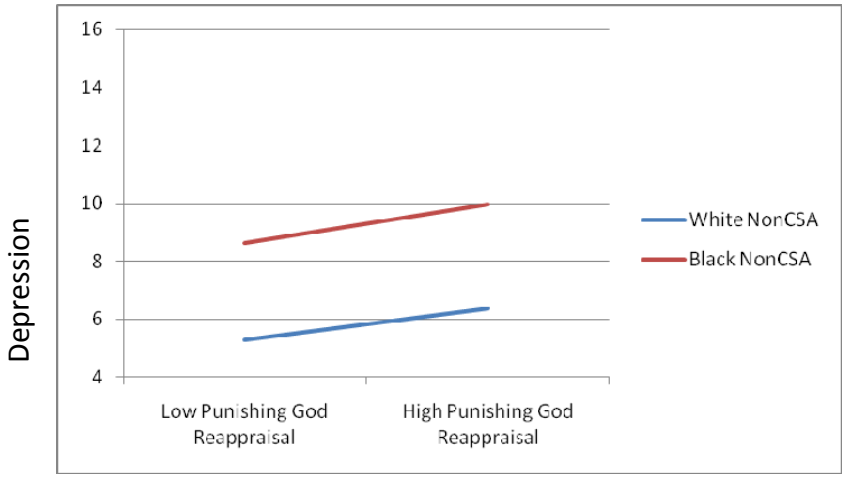

Figure 4. Punishing God x CSA status (non CSA group) x ethnicity in predicting depression

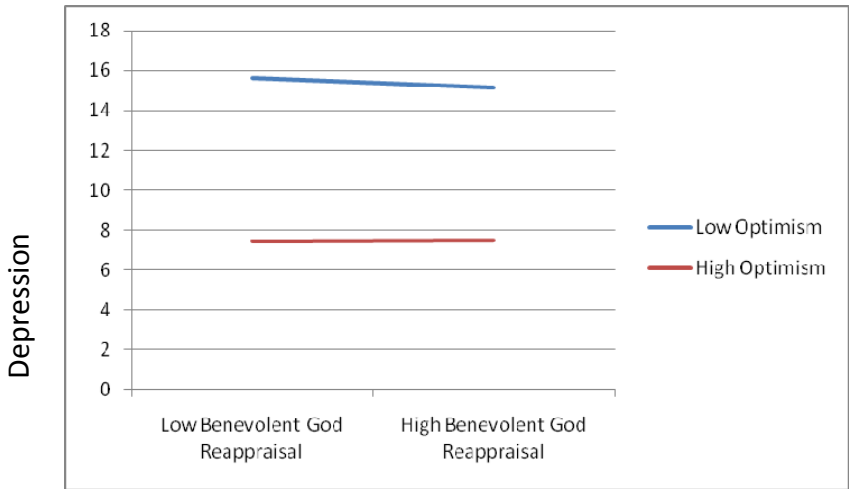

Figure 5. Optimism x benevolent God reappraisal in predicting depression

Logistic regression models were created to identify the independent variables that increased the risk of clinically significant depression (i.e., CES-D score ≥ 16). Religious coping subscales that were significant in predicted depressive symptoms were retained in these analyses. The following blocks of variables were entered: (a) demographics, (b) CSA status (0 – *No CSA*; 1 – *CSA*), (c) collaborative religious coping, punishing God reappraisal, anger at God, and (d) optimism and mastery for Whites and then Blacks (see Table 11).

Table 11

Logistic regression to predict depressed groups in Blacks and Whites

	White subsample (N=2070)				Black subsample (N=879)			
	Model 1	Model 2	Model 3	Model 4	Model 1	Model 2	Model 3	Model 4
	Exp (B)				Exp (B)			
Covariates								
Age	1.01 (1.00-1.02)	1.01 (1.00-1.02)	1.01 (1.00-1.02)	1.01 (.98-1.05)	.98 (.97-1.00)	.98 (.97-.1.00)	.99 (.97-1.01)	.99 (.97-1.00)
Education	.92 (.86-.99)	.92 (.85-.99)	.93 (.86-.1.00)	.98 (.81-1.19)	.85 (.76-.95)	.84 (.75-.94)	.87 (.77-.98)	.90 (.81-1.02)
Childhood Poverty	1.06 (.96-1.18)	1.06 (.96-1.17)	1.04 (.94-1.15)	.99 (.90-1.11)	1.05 (.90-1.22)	1.04 (.89-1.20)	1.04 (.89-1.22)	1.01 (.85-1.20)
Current Poverty	1.43 (1.26-1.61)	1.43 (1.26-1.61)	1.41 (1.26-1.59)	1.24 (1.10-1.42)	1.30 (1.10-1.53)	1.30 (1.10-1.53)	1.21 (1.01-1.44)	1.12 (.93-1.36)
Worship Frequency	.76 (.66-.88)	.76 (.66-.87)	.81 (.70-.94)	.83 (.71-.98)	1.01 (.74-1.39)	1.02 (.74-1.40)	1.14 (1.06-1.45)	1.14 (.80-1.63)
CSA								
CSA Status		1.56 (1.03-2.27)	.1.43 (.93-2.19)	1.85 (1.31-2.63)		1.93 (1.02-3.62)	1.72 (.82-3.35)	1.57 (.77-3.19)
Religious Coping								
Collaborative Coping			.76 (.65-.90)	.91 (.76-1.10)			.64 (.50-.82)	.81 (.61-1.08)

Table 11 *continued*

Punishing God			1.93 (1.52-2.43)	1.23 (.94-1.61)			1.88 (1.44-2.44)	1.61 (1.21-2.13)
Anger at God			1.43 (1.16-1.62)	1.20 (1.00-1 .45)			1.02 (.77-1.35)	.86 (.62-1.19)
Fundamental Assumptions								
Optimism				.58 (.51-.67)				.68 (.56-.81)
Mastery				.53 (.47-.60)				.62 (.52-.73)
Model Chi-square	61.98	66.11	150.65	416.43	27.49	31.32	71.69	134.17
Model degrees of freedom	5	6	8	11	5	6	9	11
p-value	0	0	0	0	0	0	0	0
Percent Correct	83.4	83.4	83.7	86.9	82.4	82.3	82.9	83.3

In the White subsample, current poverty increased the risk of depression, and worship frequency decreased the risk of depression. As expected, child sexual abuse (CSA) increased the risk of depression in the White and Black subsamples. Punishing God reappraisal increased the risk of depression in Blacks. Anger at God increased the risk of depression in the White subsample. Finally, optimism and mastery decreased the risk of depression in both the White and Black subsamples. The full model correctly classified 86.9% cases in the White subsample, and 83.3% cases in the Black subsample.

Predicting Depression in the CSA Sample

To examine the effects of religious coping and fundamental assumptions on depression among CSA participants, two logistic regression models were created to compare differences between the White and Black CSA subgroups (see Table 12). These regression models were created by entering the following blocks of variables: (a) demographic controls, (b) ethnicity (0 – *White*, 1 - *Black)*, (c) positive and negative religious coping, and (d) optimism and mastery.

Table 12

Logistic regression to predict depressed groups after CSA

	White subsample (n=354)			Black subsample (n=190)		
	Model 1	Model 2 Exp (B)	Model 3	Model 1	Model 2 Exp (B)	Model 3
Covariates						
Age	1.01 (.98-1.05)	1.01 (.98-1.05)	.99 (.98-1.05)	.94 (.87-1.01)	.92 (.85-1.00)	.87 (.78-98)
Education	1.02 (.81-1.28)	1.04 (.82-1.31)	1.15 (.88-1.50)	.68 (.45-1.02)	.77 (.47-1.24)	.71 (.40-1.26)
Childhood Poverty	.95 (.70-1.28)	.97 (.71-1.33)	.74 (.44-1.23)	1.01 (.66-1.53)	.89 (.53-1.50)	.98 (.53-1.82)
Current Poverty	.94 (.63-1.41)	.92 (.50-1.41)	1.03 (.72-1.48)	1.25 (.75-2.09)	.90 (.46-1.74)	.69 (.27-1.73)
Worship Frequency	.94 (.55-1.61)	1.19 (.63-2.22)	1.04 (.49-2.21)	.54 (.20-1.46)	.84 (.24-2.60)	1.16 (.31-4.36)
Religious Coping						
Collaborative Coping		.59 (.37-.92)	.55 (.32-.94)		.30 (.10-.92)	.36 (.10-1.39)
Punishing God		1.17 (.57-2.40)	1.32 (.61-2.86)		4.72 (1.07-20.79)	4.36 (.65-29.06)
Anger at God		1.10 (.59-2.03)	.94 (.47-1.88)		.22 (.03-1.49)	.23 (.03-1.89)
Fundamental Assumptions						
Optimism			.89 (.60-1.34)			.39 (.14-1.04)
Mastery			.41 (.27-.62)			.73 (.32-1.67)
Model Chi-square	.47	6.81	35.73	9.46	21.55	31.1
Model degrees of freedom	5	3	2	5	3	10
p-value	.99	.56	.000	.09	.006	.001
Percent Correct	77.6	78.9	79.6	73.8	78.7	88.5

The odds ratios indicated that in the Black subsample, age decreased the risk of depression. Collaborative religious coping decreased the risk of depression in the White subsample. Conversely, punishing God reappraisal increased the risk of depression in Blacks. Finally, mastery decreased the risk of depression in the White subsample. The full model correctly classified 79.6% cases in the White subsample, and 88.5% cases in the Black subsample.

CHAPTER FOUR

DISCUSSION

The purpose of the current study was to examine how well the fundamental assumptions (benevolence and self-worth) and religious coping predict depressive symptoms and depression in adult women with a history of child sexual abuse. The first objective was to test the Janoff-Bulman model of fundamental assumptions after child sexual abuse and to determine how religious coping affects these fundamental assumptions. The second objective was to examine whether religious coping helps to increase or decrease risk for depression among participants with a CSA history, and how this might differ in Blacks and Whites.

Fundamental Assumptions and Religious Coping after CSA

Participants with an abuse history reported marginally lower levels of mastery than those without an abuse history though similar levels of optimism. Thus, our understanding of Janoff-Bulman's theory of child sexual abuse shattering fundamental assumptions was only partially supported in this sample of middle aged and older adults. It is possible that among those with a religious orientation, religious coping represents one way to define disrupted worldviews after abuse, in addition to general disruptions in optimism and mastery. In this case, religious coping had some relationship to these generalized assumptions decades post CSA. Specifically, positive religious coping was positively related to optimism and mastery while negative religious coping was inversely related to optimism and mastery with a few exceptions.

Hypotheses were partially supported regarding religious coping and fundamental assumption relationships. Specifically, positive religious coping (benevolent God reappraisal, collaborative religious coping, and spiritual connection) was positively related to optimism. However, only collaborative religious coping positively related to mastery. These patterns were replicated in hierarchical regressions of religious coping predicting optimism and mastery. Positive religious coping includes both emotion- and problem-focused engagement (Morton & Veluz, 2007). It is reasonable that only the problem focused religious coping strategy of collaborating with God relates to mastery. In addition, it is reasonable that both emotion focused (spiritual connection, benevolent God reappraisal) and problem focused strategies (collaborative) related to optimism as either type of coping can improve hope about the future. Conversely, negative religious coping (punishing God reappraisal, passive deferral, and anger at God) was inversely related to both optimism and mastery as expected in all analyses. These findings support Pargament et al.'s (1998) position that negative religious coping reflects a view of the world that is threatening and less hopeful (less optimistic), and a view of the self as helpless (lower sense of mastery) (Pargament et al., 1998). Negative religious coping includes avoidance of the negative event by blaming God (punishing God reappraisal, anger at God) or ignoring the problem passively (passive deferral). Punishing God reappraisal and anger at God represent emotion-focused disengagement by blaming God for allowing the negative event to occur. Conversely, passive deferral represents problem-focused disengagement and helpless waiting for God to manage the problem (Morton & Veluz, 2007). None of the negative religious coping strategies promoted

healing of the fundamental assumptions while some of the positive religious coping strategies did.

In essence, religious coping did predict the fundamental assumptions of optimism and mastery. Indeed, one's perception of God as kind and loving, or as authoritarian, is related to one's overall view of the self and of the world. Because the theory of fundamental assumptions suggests that psychological distress occurs after a traumatic event when fundamental assumptions of the world and the self are disrupted (Janoff-Bulman, 1992), it is meaningful that religious coping strategies could counteract or exacerbate these world views.

Depressive Symptoms after CSA

As predicted, and consistent with other literature, women with a history of child sexual abuse reported more depressive symptoms than those without a history of child sexual abuse (Briere & Runtz, 1988; Brown & Finkelhor, 1986; Draper, Pfaff, Perkis, et al., 2008; Neuman, Housekamp, Pollack, & Briere, 1996). Participants who experienced child sexual abuse reported marginally higher levels of punishing God reappraisal, supporting prior findings that previous abuse history was related to perceptions of God as authoritarian and punitive (Pritt, 1998).

An examination of moderators confirmed Black and White differences on religious coping effects on depressive symptoms after CSA. Specifically, punishing God reappraisal had stronger adverse effects on depressive symptoms for Blacks after CSA than for Blacks who did not experience CSA. Punishing God reappraisal also had stronger effects on depression for Blacks after CSA than for Whites. This suggests that after the experience of child sexual abuse, Blacks are more likely to view negative events

as a punishment from God which leads to depressive symptoms. Possible reasons for this finding may include abuse by a father-figure or chronicity of abuse that affected the concept of God as punishing (Bierman, 2005; Dickie, Eshleman, Merasco, Shepard, Vander Wilt, & Johnson, 1997; Pritt, 1998). In essence, these abuse characteristics may help explain differences in religious coping between Blacks and Whites though these variables were not investigated in the current study.

Clinical Depression among Blacks and Whites after CSA

Logistic regressions among those who experienced CSA demonstrated differences between Blacks and Whites in religious coping and risk for depression. Specifically, collaborative religious coping decreased and anger at God increased risk for clinically significant depression in Whites who experienced CSA. Among Blacks, CSA and punishing God increased and optimism/mastery decreased risk for depression. Similarly, punishing God reappraisal increased risk of clinically significant depression in Blacks who had experienced CSA. Thus, after CSA, punishing God had a stronger effect on depression in Blacks than Whites, suggesting religious coping effects are not necessarily the same across cultural groups potentially reflecting different religious belief systems. For Blacks, who adhere to collectivistic values (Taylor, Chatters, & Jackson, 2007), an all-powerful God who punishes deviant behavior may encourage prosocial behavior that may give religious groups some adaptive advantages over secular groups (Sasaki & Kim, 2010). However, after child sexual abuse this negative religious coping strategy relates to higher risk for depression because the deviant behavior was out of the woman's control. On the other hand, Whites adhere to more individualistic values, therefore

maintaining a collaborative relationship with God may be a way to gain a sense of control via shared problem solving with God (Sasaki & Kim, 2010). However, if God is seen as neglectful of these duties anger may lead to depressive symptoms and depression. These findings are consistent with other studies reporting similar patterns of positive and negative religious coping with clinically significant depression after recent negative life events (Pargament et al., 1999). However, these data add to the religious coping literature by examining religious coping effects in adulthood after childhood exposure to trauma and emphasize the importance of considering ethnic group differences regarding how the cultural context of religious beliefs may influence the effect of religious coping on mental health outcomes.

Summary

The first objective was to test the Janoff-Bulman model of fundamental assumptions after child sexual abuse and to determine how religious coping affects these fundamental assumptions. The findings in the current study partially support Janoff-Buman's theory that depressive symptoms after child sexual abuse in part are accounted for by poor self evaluations via mastery. However, mastery can be improved with collaborative religious coping in Whites and worsened by punishing God reappraisals in Blacks. As such, even in middle to late adulthood women continue to demonstrate symptoms from early child sexual abuse. However, one vehicle to counteract these effects is positive religious coping (e.g., collaborative) in Whites. Unfortunately, if these early experiences lead to negative religious coping as they did in Blacks, the depressive symptoms are exacerbated. There have been a number of studies examining the role of

sexual trauma or domestic violence and religious coping. For instance, although Fallot and Heckman (2005) examined religious coping in Black and White women with a history sexual abuse, these women also had histories of interpersonal violence. The current study focused on only child sexual abuse and controlled for possible confounding variables, including child physical abuse by caregiver, juvenile rape, and lifetime experience of physical attack with or without a weapon to demonstrate lasting effects of CSA even if no other violence was experienced.

The second objective was to examine whether religious coping helps to increase or decrease risk for depression among participants with a CSA history, and how this might differ in Black and White subsamples. These findings suggest that the patterns of religious coping and mental health outcomes are not necessarily the same across cultural groups. The observed differences in the current study may reflect different uses of religion by cultural groups. For instance, after child sexual abuse, individuals from collectivistic cultures (i.e., Blacks) may be more likely to perceive God as punitive and authoritarian, while individuals from individualistic cultures (i.e., Whites) either may view God as a collaborator in the coping process or may feel angry at God for not doing his part in the coping process. In essence, the findings of the current study emphasize the importance of considering ethnic group differences when examining religious coping.

Study Limitations

Several limitations should be considered in interpreting these results. First, the generalizability of these findings is unclear since these data came from a single religious denomination of Seventh-day Adventists, a protestant evangelical denomination with specific lifestyle doctrine. While Seventh-day Adventists are a unique sample, we

suspect these ethnic difference models may be replicated in other denominations and the findings are consistent with other similar studies. However, additional research is needed to determine whether these results generalize to other denominations.

Second, due to the nature of the cross-sectional design, cause and effect relationships cannot be described. No longitudinal analyses were conducted and only quasi-experimental comparisons of child sexual abuse and ethnic groups were undertaken. Due to the cross-sectional design, the direction of causality between religious coping and depressive symptomology cannot be concluded in the current study. Longitudinal data in this study group will be available in the coming year to further our understanding of the causal relationship between religious coping and depressive symptomology as well as changes in optimism and mastery.

Third, in the current study we obtained no information regarding the perpetrator's relationship to the individual. However, the literature suggests that the source of sexual abuse has important implications for religious orientation (Bierman, 2005). Specifically, individuals who were perpetrated by a father have shown decreased religiosity, while individuals who were perpetrated by someone outside the family have increased ratings of religiosity (Bierman, 2005). Possible implications for this difference may be related to the image of God as father (Dickie, Eshleman, Merasco, Shepard, Vander Wilt, & Johnson, 1997), which may result in distancing oneself from God if one was abused by one's father. Other information, such as the frequency and duration of the abuse, was also not obtained in the current study. This information might be important as some studies have found that frequency of abuse has been positively correlated with more negative perceptions of God (Pritt, 1998). In essence, such information regarding the

abuse may help to increase our understanding of the abuse experience and subsequent religious orientation.

Fourth, our general measures of world view may not sufficiently capture the fundamental assumptions Janoff-Bulman envisioned. Specifically, Janoff-Buman's World Assumptions Scale (1989) details the fundamental assumptions of benevolence (e.g., benevolence of the world; benevolence of people) and self-worth (e.g., self-worth, self-control). Conversely, the current measures were more generalized orientations of the world (i.e., optimism) and of the self (i.e., mastery). Though these should be similar constructs the specific correspondence between the Janoff-Bulman measures and these measures has not been made. Additionally, Janoff-Bulman's theory may only apply directly after the traumatic event rather than having a lasting impact on an individual throughout the lifetime. Many strategies and contexts could be used to repair fundamental assumptions. In this case, religious coping had some relationship to these generalized assumptions many decades after child sexual abuse.

Fifth, the ethnic differences found in religious coping and risk for clinically significant depression revealed that collaborative religious coping did not reduce risk for depression among Blacks. Further analyses in the current study, which were not presented in this manuscript, revealed that benevolent God reappraisal and spiritual connection also did not reduce risk for clinically significant depression among Blacks. However, it is possible that other forms of positive religious coping which were not examined in the current study (e.g., seeking spiritual support or seeking support from clergy and other members) may be relevant in decreasing risk for clinically significant depression in Blacks after CSA. According to Pargament (2000), seeking spiritual

support represents a religious method of coping to gain comfort and closeness to God, while seeking support from clergy and other members refers to a method of religious coping aimed to gain intimacy with others. If Blacks are a collectivistic and interdependent culture (Taylor, Chatters, & Jackson, 2007), religious coping methods which emphasize intimacy with God and other church members are important in decreasing risk for clinically significant depression for individuals in the Black religious community. Thus, further research may include examination of which positive religious coping subscale decreases clinically significant depression in Blacks.

Future Directions

Future directions include examining whether child sexual abuse causes changes in positive and negative religious coping. As mentioned, it could be that particular abuse characteristics influence one's orientation to religion later in adulthood (Bierman, 2005; Finkelhor, Hotaling, Lewis, & Smith, 1989). Such findings would contribute to our understanding of whether child sexual abuse history influences religious orientation, what characteristics of the abuse may contribute to one's religious orientation, and whether differences in abuse characteristics relates to differences in coping for Blacks and Whites.

Another future direction may include continuing to examine ethnicity differences in studies of religious coping, particularly further examination of Black and White differences in religious coping. As mentioned above, punishing God reappraisal was significant in predicting clinically significant depression in Blacks but not for Whites. Variables that may contribute to this finding should be further examined, such as the severity of child sexual abuse which may contribute to views that one has of God.

Additionally, the role of cultural values, such as collectivistic versus individualistic values, should also be explored to see if these values contribute to one's approach to religious coping. Such studies would be important in providing a clearer understanding of the complexities of religious coping. This is of particular interest since punishing God reappraisal did not relate to worship frequency and likely to religious orientation. If this is the case, a negative religious orientation could have dire consequences for mental health and be maintained by some religious activities.

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APPENDIX A

RELIGIOUS COPING

Benevolent God Reappraisal

1. Saw my situation as part of God's plan.
2. Tried to find a lesson from God in the event.
3. Tried to see how God might be trying to strengthen me in this situation.

Punishing God Reappraisal

1. Felt punished by God for my lack of devotion.
2. Decided that God was punishing me for my sins.
3. Wondered what I did for God to punish me.

Collaborative Religious Coping

1. Worked together with God as partners.
2. Tried to make sense of the situation with God.
3. Tried to put my plans into action together with God.

Self-Directing Coping

1. Made decisions about what to do without God's help.
2. Tried to make sense of the situation without relying on God.
3. Tried to deal with my feelings without God's help.

Passive Deferral Coping

1. Didn't do much, just expected God to solve my problems for me.
2. Didn't try much of anything; simply expected God to take control.
3. Didn't try to cope; only expected God to take my worries away.

Spiritual Connection

1. Thought about how my life is part of a larger spiritual force.

Anger at God

1. Expressed anger at God for allowing the event to happen.

APPENDIX B

LIFE ORIENTATION TEST-REVISED

1. In uncertain times, I usually expect the best.
2. If something can go wrong for me, it will.
3. I'm always optimistic about my future.
4. I hardly ever expect things to go my way.
5. I rarely count on good things to happen to me.
6. Overall, I expect more good things to happen to me than bad.

APPENDIX C

MASTERY SCALE

1. I have little control over the things that happen to me.
2. There is really no way I can solve some of the problems I have.
3. I often feel helpless in dealing with the problems in life.
4. Sometimes I feel that I am being pushed around in life.

APPENDIX D

CENTER FOR EPIDEMIOLOGICAL STUDIES DEPRESSION

SCALE 11-ITEM SHORT FORM

1. I did not feel like eating; my appetite was poor.
2. I felt depressed.
3. I felt that everything I did was an effort.
4. My sleep was restless.
5. I was happy.
6. I felt lonely.
7. People were unfriendly.
8. I enjoyed life.
9. I felt sad.
10. I felt that people disliked me.
11. I could not get “going.”