The protective effects of religiousness and forgiveness for the link between peer victimization and mental health in adolescence

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

Master of Science
In
Psychology

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May 8, 2013
Blacksburg, Virginia

Keywords: Religiousness, Forgiveness, Internalizing Symptomatology, Emotion Regulation, Adolescence

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ABSTRACT

Previous research has shown peer victimization during adolescence to have strong lasting effects on mental health. Religiousness and forgiveness are two factors that are positively related to mental health and the current study proposes that they may have a protective influence against the negative effects of peer victimization. Additionally, religiousness and forgiveness may be related in that forgiveness may be a link in the religiousness/health relationship. The purpose of the current study was to examine the relationships among religiousness, forgiveness and mental health in the context of peer victimization during adolescence. Mental health was measured by internalizing symptomatology and emotion regulation. Analyses were conducted using Structural Equation Modeling. Results indicate that forgiveness may indeed be a link in the religiousness/health relationship but only when examining private religious practices. Results further show that religiousness may not be a strong protective factor in the context of peer victimization and that certain dimensions of forgiveness (specifically benevolence motivations) may actually exacerbate the effects of peer victimization on internalizing symptomatology rather than act as a protective factor.

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1.0 - Introduction

Adolescence marks a time of increased exposure to life stressors that often place adolescents at increased risk for mental health issues and a number of psychiatric disorders, particularly affective and anxiety related disorders (Herts, McLaughlin, & Hatzenbuehler, 2012; Koolschijn, van Ijzendoorn, Bakermans-Kranenburg, & Crone, 2012). Peer victimization is an especially salient stressor during adolescence as most adolescents will experience some form of peer victimization and many will experience chronic victimization throughout their school years (Hanish & Guerra, 2000). Two primary mental health issues that have been shown to be affected by peer victimization are emotion regulation and internalizing symptomatology (Herts et al., 2012; Prinstein, Cheah, & Guyer, 2005). Thus, the identification of protective factors that may aid adolescents in developing healthy emotion regulation and guard against internalizing symptomatology is an important step in understanding positive development in adolescence. Religiousness and forgiveness are two factors that have been shown to promote the development of emotion regulation and protect against the development of internalizing symptomatology (e.g. Ellison & Levin, 1998; Hackney & Sanders, 2003; Hirsch, Webb, & Jeglic, 2011; McCullough, 2000; Van Dyke & Elias, 2007). The current study examined the protective influences of religiousness and forgiveness with regard to peer victimization and also explored the relationship between religiousness and forgiveness as an explanation of how these factors may jointly affect emotion regulation and internalizing symptomatology.

1.1 - Emotion Regulation

Emotion regulation refers to an individual's attempts to control or modify what emotions they are feeling, the intensity of the emotions, as well as the physical expression of the emotions in response to ongoing situational and experiential demands (Cole, Michel, & Teti, 1994).

Therefore, individuals high in emotion regulation would be generally successful at their attempts to control the nature and intensity of their emotions and would thus be less likely to be emotionally reactive and subject to frequent mood swings. Good emotion regulation would also help individuals control the physical expression of their emotions as is contextually appropriate. Control of physical expression relates to both positive and negative affect and the control of anger expression may be considered as important as the control of excitement or happiness expression (Gross & Munoz, 1995). Attributes that are also important to emotion regulation are an awareness of one's own emotions and empathy for the emotional state of others. One must be attuned to how they feel before they can attempt to control those emotions. The ability to have empathy for the feelings of others can provide cues for the appropriate expression of emotion given an ambiguous context (Gross & Munoz, 1995). The term "emotion dysregulation" may be used to describe a state of being low in emotion regulation and is most commonly employed when referring to the link between low emotion regulation and psychopathology (Cole et al., 1994). Several definitions of emotion dysregulation exist but for the purposes of the current proposal emotion dysregulation may be characterized (1) as having little self-awareness of emotional life or empathy for the emotions of others and (2) having little control over emotions or emotional expression (Cole et al., 1994). Thus, emotion dysregulation may be evidenced through frequent mood swings, strong emotional reactivity, and inappropriate expressions of emotion. The terms "emotion dysregulation" and "low in emotion regulation" are often used interchangeably in extant research and thus will similarly be used interchangeably in descriptions of research on emotion regulation in the current proposal.

Emotion regulation begins developing in infancy and continues throughout the lifespan. Almost all developmental tasks require, to some degree, the regulation of emotion. Such tasks

include learning how to engage with others, forming attachments and friendships, learning what is and is not acceptable behavior, and many more (Cole et al., 1994). Infants and young children may be limited to physical strategies for emotion regulation (shifting gaze or turning the head or body) and are very dependent on caregivers intervention (Thompson, 1991). As children grow and develop cognitively they can learn to describe their emotions (self-awareness), learn rules for appropriate expression, and develop strategies for regulating their emotional life. Emotion regulation strategies may be changed and adapted as the child grows into adolescence and experiences new emotions and situations (Gross & Munoz, 1995). Extant research highlights the importance of developing good emotion regulation for positive mental health outcomes in childhood and adolescence.

Emotion regulation as a measure of mental health

Good emotion regulation is critical for adjustment in children (Shields & Cicchetti, 1997) and becomes essential for daily functioning in adulthood. Gross and Munoz (1995) define adult mental health as

> "being able (a) to work creatively and productively,
> (b) to relate to others in a way that is mutually satisfying, and
> (c) to feel comfortable when alone, usually by developing a rich and fulfilling inner life."

Because emotion regulation is critical to each of these areas of mental health it may be considered a measure of emotional health (Gross and Munoz, 1995). As discussed in greater detail in the following sections, this definition of mental health may be extended to adolescents as extant research shows emotion dysregulation in adolescents to have strong associations with deficits in the areas of work (specifically school), relating to others, and having a "fulfilling inner life."

Work/School. Engaging in school activities and succeeding academically entails a great deal of emotion regulation. Children and adolescents must control impulsivity and fight negative feelings such as boredom in order to learn material. Thus, emotion regulation is important for productivity in school (Pekrun & Stephens, 2012). Emotion regulation has been found to predict academic performance and acts as a protective factor among maltreated children in terms of their academic performance. Specifically, maltreated children display deficits in academic performance but only when emotion regulation is poor (Schelble, Franks, & Miller, 2010). In addition, emotion dysregulation is found to be associated with attentional impulsivity (i.e., inability to concentrate attention) and non-planning impulsivity (i.e., lack of future thinking) in adolescents (Schreiber, Grant, & Odlaug, 2012). Being able to concentrate attention and consider the future are both important skills to have in order to succeed academically.

Relating to Others. Children and adolescents with poor emotion regulation tend to have decreased social competence and lack of behavior regulation (Perez, Little, & Henrich, 2009; Shields & Cicchetti, 1997). Children with emotional dysregulation are more likely to be aggressive in social situations and may be more likely to experience peer rejection (Cole, Zahn-Waxler, Fox, Usher, & Welsh, 1996; Hanish et al., 2004). In contrast, high levels of emotion regulation in children are related to higher peer acceptance a year later (Kim & Cicchetti, 2010).

Relating to others does not only apply to functioning in social spheres but also to adhering to the laws and regulations of society. Psychopathology is highly associated with juvenile delinquency (Dixon, Howie, & Starling, 2004). Schreiber et al. (2012) notes that adolescents high in emotion dysregulation tend to view themselves as more impulsive and the combination of emotional dysregulation and belief in their own impulsivity may put adolescents at a greater risk for developing psychopathology. Indeed, Heinzen, Koehler, Smeets, Hoffer, &

Huchzermeier (2011) provided support for the suggested connection between emotional dysregulation and psychopathology. In a sample of incarcerated youth offenders, psychopathic traits were associated with maladaptive emotion regulation strategies.

A Fulfilling Inner Life. Having a fulfilling inner life may be defined as having a sense of purpose or meaning and comfort with oneself. Adolescents who have a strong sense of purpose are less likely to engage in addictive and self destructive behaviors (Van Dyke & Elias, 2007). The inability to regulate intense emotional experiences when alone may undermine an individual's sense of purpose and self-comfort leading to unhealthy or even self destructive behaviors. Thus, emotion regulation may serve as a protective factor against seeking maladaptive ways (such as substance use) of dealing with emotions (Gross & Munoz, 1995). Indeed, there is evidence that low emotion regulation is related to greater substance use in middle and high school students and low emotion regulation had a direct effect on coping motives for engaging in greater substance use (Wills, Walker, Mendoza, & Ainette, 2006). Adrien, Zeman, Erdley, Lisa, & Sim (2011) found that emotional dysregulation in adolescent girls was related to engagement in non-suicidal self-injury, such as cutting. The authors suggested that if adolescent girls have poor emotion regulation, and consequently no resource for dealing with intense emotional experiences, they may turn to non-suicidal self-injury as a type of coping mechanism.

1.2 - Internalizing Symptomatology

Internalizing symptomatology, like emotion regulation, may affect the dimensions of work/school, interpersonal relationships, and inner life. Internalizing symptomatology is associated with academic struggles (Flook, Repetti, & Ullman, 2005) and as symptoms do not only affect the adolescents in question but also their families and friends, difficulties in interpersonal relationships may also arise (Trudeau, Spoth, Randall, Mason, & Shin, 2012).

Adolescents dealing with internalizing symptomatology may also experience symptoms that prevent them from having a fulfilling inner life such as excessive sadness, loss of energy, loss of appetite, insomnia, and guilt or self-blame (Achenbach & Rescorla, 2001).

In addition to internal symptoms, experiencing internalizing symptomatology puts adolescents at risk for many unfavorable outcomes. Similar to poor emotion regulation, internalizing symptomatology in adolescence is also associated with decreased social competence and lack of behavior regulation. Specifically, adolescents with internalizing symptomatology show increased tendencies to engage in risky behavior including substance abuse and risky sexual behavior (Perez et al., 2009; Shields & Cicchetti, 1997). In addition, they often perform poorly in academics, which can affect chances of being accepted to a good college (Birmaher, Ryan, & Williamson, 1996; Perez et al., 2009). With regard to clinical diagnoses, adolescents experiencing internalizing symptomatology are at increased risk for developing Major Depressive Disorder and other psychiatric disorders (Trudeau et al., 2012). Additionally, children with internalizing symptomatology are more likely to develop suicidal tendencies and to attempt suicide (Bettes & Walker, 1986; Sourander, Helstela, Haavisto, & Bergroth, 2001). Non-suicidal self-injury is also pervasive among adolescents with internalizing symptoms (Dougherty et al., 2009).

Given research in the negative effects of internalizing symptomatology and poor emotion regulation on adolescent development, it is important to understand what factors or experiences may influence the development of internalizing symptomatology and emotional dysregulation during adolescence. Peer victimization is one such factor that many adolescents experience and may have long term effects on adolescents' mental health (Hanish & Guerra, 2000).

1.3 - Peer Victimization

Numerous studies have reported significant long term effects of peer victimization on adolescent health outcomes (e.g. Herts, McLaughlin, & Hatzenbuehler, 2012; Rigby, 2003; Reijntjes, Kamphius, Prinzie, & Telch, 2009). Peer victimization is associated with low psychological well-being (internalizing symptomatology and low self-esteem), poor social adjustment (anxiety in social settings and isolation), psychological distress (anxiety, depression, and suicidal thoughts), and even physical unwellness (illness and psychosomatic symptoms; Rigby, 2003). Prinstein et al. (2005) note the cyclical nature of peer victimization and internalizing symptomatology. In a longitudinal study, they found that adolescents are more likely to experience depressive symptoms in response to peer victimization if they have a previous tendency to make critical self-referent attributions from ambiguous or negative social cues. The authors point out that such interpretation of social cues may lead to behaviors such as withdrawal that increase the likelihood of further victimization, which affirms those social cue interpretations and subsequent behaviors, which reinforces a cycle that leads to increases internalizing symptomatology. In a meta-analysis of 18 longitudinal studies of peer victimization, Reijntjes et al. (2009) found further support for the cycle of peer victimization. The authors found that internalizing symptomatology acts as both an antecedent and a consequence of peer victimization. In other words, being victimized by peers is related to higher internalizing symptomatology and that children with internalizing symptoms are more likely to be victimized, resulting a cycle that increases the likelihood of continued victimization.

Peer victimization is also associated with emotion dysregulation and, like internalizing symptomatology, may have a cyclical relationship with peer victimization. Shields & Cicchetti (2001) studied maltreated children's risk for victimization and found that emotion dysregulation

mediated the association between maltreatment and increased risk for victimization. However, it seems that emotion dysregulation is not only a predictor of peer victimization but also a consequence. Herts et al. (2012) studied 1,065 early adolescents over a four month period and found peer victimization to predict subsequent increases in emotion dysregulation. Thus, it appears that peer victimization and emotion dysregulation may have a cyclical relationship. Similar to the study by Prinstein et al. (2005) cited earlier which emphasized the importance of social cue interpretation, Herts et al. (2012) speculated that peer victimization can have a negative effect on emotion regulation because of disruptions in social processing. Indeed, exposure to victimization has been documented as increasing sensitivity to hostile cues to the point of being more likely to interpret neutral cues as hostile. Thus, the authors suggested that such disruptions in social processing could adversely affect emotion regulation because they deprive the adolescent of cues and information necessary to regulate emotional states with regard to the situation.

Extant research clearly supports that peer victimization can have extreme negative and long term effects on adolescents. However, not all adolescents who are exposed to peer victimization experience internalizing symptomatology and emotional dysregulation. This leads to the conclusion that factors must exist that buffer the adverse effects of peer victimization. Research as to what factors may help adolescents who experience peer victimization combat internalizing symptomatology and develop good emotion regulation is imperative in order to promote healthy psychological development in adolescents. Religiousness and forgiveness are two such factors that have both been found to have connections with mental well-being and may serve as protective factors against unfavorable outcomes for adolescents (e.g. Ellison & Levin,

1998; Hackney & Sanders, 2003; Hirsch et al., 2011; McCullough, 2000; Van Dyke & Elias, 2007).

1.4 - Religiousness and Mental Health

Religiousness/spirituality has been found in numerous studies to be inversely related to depression and has been found to be a protective factor against unfavorable outcomes in children and adolescents who have experienced trauma and emotional or physical maltreatment (e.g. Kim, 2008; Perez et al., 2009; Schnittker, 2001; Smith, McCullough, & Poll, 2003; Van Dyke & Elias, 2007). Also, a study of young to middle adults (ages 18 to 46 years) indicate that individuals high in intrinsic religiousness display better psychological adjustment and report greater life satisfaction (Salsman, Brown, Brechting, & Carlson, 2005). It has been concluded that the findings relating religiousness to lower depression are robust and hold across age, gender, and ethnicity (Smith et al., 2003).

Thus, religiousness is consistently associated with positive mental health regardless of age, but it is less clear what features of religiousness mediate its impact on mental health. One suggested pathway is increased social support. Individuals who are higher in religiousness are more likely to be involved with a church or similar religious community which may provide them with more resources for dealing with negative events (e.g. Levin & Chatters, 1998; Salsman et al., 2005). Social support has been found to be negatively related to poor mental health outcomes and it has been thought that organizational religiousness such as church attendance would be highly related to increased social support. However, research on religiousness indicates that social support may not be the most robust explanation for the impact of religiousness on mental health. A meta-analysis of 34 studies on religiousness and mental health showed that institutional religiousness (e.g. service attendance and participation in church

activities) results show the weakest correlations with mental health as compared to ideological religiousness (e.g. beliefs and attitudes) and personal devotion (e.g. prayer, attachment to God; Hackney & Sanders, 2003). Indeed, personal devotion produced correlations of the greatest magnitude with mental health. Similar effects have been found when examining the strength of specific dimensions of religiousness as protective factors. For example, Papafratzeskakou, Longo, Kim, & Farley (2011) studied different dimensions of religiousness as possible protective factors against internalizing symptomatology in emotionally maltreated children. Dimensions include organizational religiousness (pertaining to religious service attendance and activities with a religious community), personal religiousness (personal beliefs about religion and its importance in life), and private practices (e.g., reading religious texts, prayer). Results showed that private practices successfully moderated the relationship between emotional maltreatment and internalizing symptomatology; however, organizational religiousness, which was expected to be closely tied to social support, was not a significant moderator. This research demonstrates another possible pathway through which religiousness might affect mental health: the use of religious practices as coping mechanisms. Practices such as prayer or personal meditation might provide individuals with a way of dealing with negative life events normally associated with poor mental health outcomes (Van Dyke & Elias, 2007).

Finally, religiousness may act as a protective factor because it provides individuals with a sense of purpose or meaning in life that helps buffer the effects of negative life events. Erikson (1968) emphasized that people need to have a sense of purpose in life during youth in order to maintain healthy development. Purpose may serve as a coping mechanism in that it may engender motivation to view stressful events in light of a larger, overarching sense of meaning in life, thus reducing the impact of the event on the individual's inner life (Lazarus & DeLongis,

1983). Individuals who report having a sense of purpose in life also report experiencing more positive affect, less psychological distress, and are less likely to engage in substance use and risky sexual behavior (Van Dyke & Elias, 2007). Religiousness may engender sense of purpose in individuals in several ways. First of all, individuals may experience feelings of self-worth through being engaged in and valued by their religious community, leading to sense of belonging and purpose within that community. Individuals may also find purpose through belief in a God or a higher power that created them, values them, and with whom they can interact and rely on. This is illustrated in prior research demonstrating positive relationships between adolescents' sense of purpose and the private religious practices of reading religious texts (specifically, reading the Bible) and prayer (Francis, 2000; Francis & Burton,1994).

Extant research presents evidence for increased social support, coping mechanisms, and purpose in life as plausible pathways through which religiousness may influence adolescent mental health. However, as it will be reviewed in the next section, it is likely that the relationship between religiousness and mental health can also be explained by many virtues or positive attitudes that religions promote such as forgiveness.

1.5 - Forgiveness and Mental Health

While research on forgiveness and mental health in college students and adults is increasing, literature on the effects of forgiveness in adolescence is still lacking. Despite the fact that adolescents are often in situations of interpersonal conflict (e.g. abuse, neglect, peer victimization) little is known about how they forgive or what effect it has on potential outcomes (Worthington, 2004). However, literature pertaining to college students and adults can be used to demonstrate the importance of forgiveness in facilitating mental health.

Prior research suggests a strong relationship between forgiveness and factors associated with mental health. Desrosiers and Miller (2007) found forgiveness to be inversely related to depression in adolescent girls. Brown (2003) also found forgiveness to be inversely related to depression in college students. Forgiveness in undergraduate and adult samples is associated with not only lower levels of negative affect such as anger and anxiety but also higher levels of positive affect such as happiness, hopefulness, and confidence (Van Dyke & Elias, 2007). Additionally, in a sample of 962 individuals, ages 19 to 84 years, Allemand, Hill, Ghaemmaghami, & Martin, (2012) found that individuals high in forgiveness report greater life satisfaction.

Hirsch et al. (2011) suggest that forgiveness affects mental health because it helps people "cognitively and emotionally progress beyond distressing experiences or persons from his or her past." Thus, forgiveness helps people "let go" of negative emotions and thoughts that may cause emotional distress. Additionally, forgiveness in adolescence may lead to new developmental experiences that aid in dealing with future transgressions or negative life events such as "discovery of a deeper meaning in the transgression, a new sense of compassion for others, an enhanced sense of gratitude for one's interpersonal support systems, and a renewed sense of life purpose (Enright, Freedman, & Rique, 1998; Van Dyke & Elias, 2007)." Taken together, prior studies highlight the protective role of forgiveness across developmental periods from adolescence to older adulthood. Given the lack of understanding regarding how and whether forgiveness plays a protective role in adolescents' coping with stressors particularly germane to adolescence, research on forgiveness and adolescent's mental health is much needed.

1.6 - Relationship of Religiousness and Forgiveness

A substantial volume of research supports religiousness and forgiveness as separate predictors of mental health. However, it is important to consider that religiousness and forgiveness are closely related concepts. Understanding how religiousness and forgiveness are related may aid in furthering understanding as to how religiousness affects mental health.

Forgiveness itself is a concept often deeply rooted in religious traditions and is a central concept in many major religions such as Christianity, Islam, Buddhism, and Hinduism (Van Dyke & Elias, 2007). Christianity is based on the forgiveness of sins by God and believers are not only encouraged but commanded to forgive others: "And when you stand praying, if you hold anything against anyone, forgive them, so that your Father in heaven may forgive you your sins (Mark 11:25 New International Version)." Christ taught his followers to pray not only for forgiveness but for aid in forgiving others: "forgive us our trespasses as we forgive those who trespass against us (Matthew 6:12)," and when asked how many times forgiveness should be offered to those who have sinned against them Jesus replied, "I tell you, not seven times, but seventy times seven (Matthew 18:22)."

Islamic scriptures consistently describe Allah as being "Ever-Forgiving" and "All-Forbearing (e.g. Surat An-Nisa, 25, 43)." Followers are encouraged to "control their rage and pardon other people (Surat Al `Imran, 134) and are told "if someone pardons and puts things right, his reward is with Allah (Surat, Ash-Shura, 40)." In contrast to Christian and Islamic traditions, which teach forgiveness as an attribute of God, Buddhism does not espouse forgiveness as commanded by God but retains forgiveness as a central tenant nevertheless. Forgiveness, in Buddhism, is thought to be necessary to alleviate suffering and aid in letting go of the things that weigh us down (Kornfield, 2009). According to the Dhammpad, a traditional

Buddhist text, Buddhism emphasizes forbearance of trespasses and release of anger and resentment towards others and teaches that letting go of anger and resentment is a path to inner peace.

Hinduism encompasses traditions that embrace the concept of a forgiving deity or deities as well as nontheistic views on forgiveness. However, both traditions, whether emphasizing deities or not, espouse forgiveness as essential to following the path of righteousness or Dharma. Failure to forgive is taught to result in bad karma, or consequences for harboring resentment to be faced in future lives or reincarnations (Rye et al., 2000).

Given the historically religious context of forgiveness, it is not surprising that extant literature provides support for a positive relationship between religiousness and forgiveness (e.g. Bono & McCullough, 2004; Desrosiers & Miller, 2007; Fox & Thomas, 2008). However, findings relating religiousness and forgiveness are not unchallenged. A majority of research findings show that individuals who score high in religiousness also score high in dispositional forgiveness (e.g. Fox & Thomas, 2008). That is, more religious people tend to rate themselves as more forgiving in general circumstances. However, McCullough and Worthington (1999) propose that from this research, it does not necessarily follow that religious people are actually more forgiving than other people in specific instances of transgression. It is suggested that such findings merely demonstrate that religious people either see themselves as more forgiving or that their self-report reflects a religious belief that they *should* be more forgiving and that they would not necessarily be more forgiving of a specific transgressor than the average person. Thus, a distinction is made between *dispositional* forgiveness and *behavioral* forgiveness.

Dispositional Forgiveness

Dispositional forgiveness is an assessment of an individual's *beliefs* about how forgiving they are in general. Dispositional forgiveness measures may present hypothetical scenarios of a transgression and then ask how likely the participant would be to forgive a friend or an acquaintance in such a situation (Allemand, 2008). Other scales, such as the Tendency to Forgive Scale (TTF; Brown, 2003), ask participants to rate statements such as "When people wrong me, my approach is to forgive and forget" (Allemand et al., 2012). When using scales of dispositional forgivingness, the association with religiousness is typically found to be quite strong in adolescents and adults alike (McCullough & Worthington, 1999).

Behavioral Forgiveness

In contrast to the general trend relating religiousness to dispositional forgiveness, McCullough and Worthington (1999) pointed out two studies (Rackley, 1993; Subkoviak et al., 1995) in which individuals behavioral forgiveness was found to be unrelated to religiousness. These studies used the Enright Forgiveness Inventory (EFI), which is a measure of a participant's forgiveness of a specific transgressor in the participant's life or *behavioral* forgiveness. Participants were asked to focus on an experience of someone harming them and respond to statements such as "I think of ways to get even," thus measuring participants' behavioral forgiveness as opposed to the participants' belief about their general disposition to forgive (Rackley, 1993; Subkoviak et al, 1995). However, a recent study by Lawler-Row (2010) found religiousness to be significantly related to both state and trait forgiveness (the study by Lawler-Row will be discussed in more detail in the next section). As such, a discrepancy exists among findings in literature on the relationship between religiousness and forgiveness. Although studies relating dispositional forgiveness and religiousness clearly demonstrate a significant relationship, studies relating behavioral forgiveness and religiousness are not so clear-cut.

One possible reason for the discrepancy among studies relating forgiveness and religiousness lie not only with how forgiveness is measured but also with how religiousness is measured. For example, Subkoviak et al. (1995) concluded that there was no relationship between religiousness and behavioral forgiveness. However, the author generated a 7-item scale to measure religiousness that was comprised into a single religiousness score. Little detail is offered by the author about the content of the scale except that two of the questions asked "how often do you go to a place of worship?" and "how often do you pray or meditate?" Religiousness is an extremely complex construct and its multi-dimensional nature must be taken into account in the attempt of measurement. For example, organizational religiousness (e.g. attending religious activities) and private practices (e.g. prayer), while often co-occurring, are arguably unique constructs and have been found to relate differentially to both physical and mental health (e.g. Cotton, Zebracki, Rosenthal, Tsevat, & Drotar, 2006; Ellison & Levin, 1998; George, Ellison, & Larson, 2002; Hackney & Sanders, 2003; Wong, Rew, & Slaikeu, 2010). Failing to accurately assess each dimension and combining all dimensions into one score may drastically affect research outcomes. Thus, the failure to take into account the multi-dimensional nature of religiousness may also explain conflicting results concerning the relationship of religiousness and forgiveness.

1.7 - Religiousness, Forgiveness, and Mental Health

Despite discrepancies in findings regarding the religiousness-forgiveness relationship, McCullough and Worthington (1999) proposed that forgiveness might be a "missing-link" in the religiousness-health relationship. Given the robust support for the benefits of both religiousness and forgiveness on mental health and the theological relation of religion and forgiveness it follows that forgiveness may be a pathway through which religiousness influences mental health.

This is demonstrated by Lawler-Row (2010) who conducted a series of cross-sectional studies testing the mediation hypothesis of forgiveness on physical health and depression in adults. Two studies focused on adults between the ages of 50 and 90 years of age and the third study tested adults 27 to 60 years of age. In the first study, Lawler-Row (2010) found that *dispositional* forgiveness mediated the relationship between successful aging and depression. The second study revealed that *dispositional* forgiveness fully mediated the relationship between prayer and physical health/successful aging, and intrinsic religiousness (e.g. internal motivations for religiousness such as "I pray mainly to gain relief and protection" as opposed to external motivations such as "I go to church mostly to spend time with my friends"; Gorsuch & McPherson, 1989) and physical health/successful aging. Because a majority of the debate concerning the actual relationship of religiousness to forgiveness revolves around the difference between behavioral and dispositional forgiveness, Lawler-Row (2010) examined the difference between state (behavioral) and trait (dispositional) forgiveness, in a third study. Dispositional forgiveness was measured by the Forgiving Personality Inventory (FP; Kamat, Jones, & Row, 2006). Behavioral forgiveness was measured by the Revenge and Avoidance subscales from the Transgression-Related Interpersonal Motivations Inventory (TRIM; McCullough, Root, & Cohen, 2006) and the Acts of Forgiveness Scale (AF; Drinnon & Jones, 1999). Dispositional forgiveness and behavioral forgiveness as measured by AF and TRIM Revenge subscale all were found to mediate the relationship between religiousness and health that was measured as frequency of physical symptoms, medications used, sleep quality, and depression. TRIM Avoidance subscale, however, was not related to religious factors. As a whole, the studies by Lawler-Row (2010) demonstrate that, at least in older adults, religiousness may indeed be related to behavioral forgiveness as well as dispositional forgiveness. Thus, the findings provide support

that forgiveness can be considered as a possible pathway by which religiousness may affect mental health in adolescents.

1.8 - The Present Study

This study examined the relationships among religiousness, forgiveness, and mental health in adolescents in two ways: one, it assessed the effects of religiousness and forgiveness in the context of peer victimization, and two, it examined whether forgiveness is a link in the religiousness-mental health relationship. The current study addressed gaps in previous literature by conceptualizing religiousness as a multidimensional construct (organizational, personal, and private practices) in relation to forgiveness and mental health among adolescents. The current study focused on behavioral forgiveness because of evidence showing behavioral forgiveness as playing a critical role in mental health, and, to the author's knowledge, the association between behavioral forgiveness and mental health had not yet been studied among adolescents. For the purposes of this study, mental health was conceptualized as low internalizing behavior and good emotion regulation. It was hypothesized that religiousness and forgiveness would moderate the relationship between peer victimization and mental health and that religiousness and behavioral forgiveness would be positively related to adolescents' emotion regulation and negatively related to internalizing symptomatology. It was also hypothesized that behavioral forgiveness would be a significant mediator in the relationship between religiousness and mental health.

Not only does this study increase the relatively small collection of literature on adolescent forgiveness, it also contributes to the literature on religiousness and forgiveness by addressing the nature of the relationship between religiousness and behavioral forgiveness. It is, to the author's knowledge, the first longitudinal study to examine temporal precedence in the relationships among religiousness, behavioral forgiveness, and mental health. Thus, the study

advances the understanding of the mechanisms by which religiousness acts as a protective factor against adolescent internalizing symptomatology and poor emotional regulation.

2.0 - Method

2.1 - Participants

Participants were a part of a longitudinal study on youth's healthy development. Data from all three waves of the longitudinal study will be used for analyses in the current study. Participants in Wave 1 were 357 adolescents between the ages of 10 and 17 years. Wave 2 consists of data from 220 adolescents between 12 and 18 years of age. Adolescents who had attended their first year of college were considered aged out of the study and were not invited to participate in Wave 2. Because the measure for forgiveness was added late in the study at Wave 2, the number of participants that may be used in the current study are 127 adolescents at Wave 2. For Wave 3, all previous participants were invited back and 167 adolescents between the ages of 14 and 22 years participated. The current study will use 127 adolescents between the ages of 14 and 18 years at Wave 2. Across all three waves, there is data from 68 participants that may be used for longitudinal analyses.

2.2 - Procedures

Participants were recruited from towns in Southwestern Virginia. For the first wave of the study, participants were contacted via phone lists purchased from contact companies, snowball sampling (word-of-mouth), by responding to flyers, or by responding to notices placed on the internet. Families who were eligible (i.e. with an adolescent aged between 10 and 17 years) and were interested in the study were asked to call the research office. Research assistants described the nature of the study to the interested individuals over the telephone and invited them to participate. Given this recruitment strategy, it was not possible to know what proportion of people who were exposed to study advertisements responded. Data collection took place at the university's offices. Upon arrival, the parent and the adolescent were escorted to separate

interview rooms. Measures for the study were administered by two trained research assistants, one with each participant. Prior to the interview, parent consent and adolescent assent were obtained. The interviewers read the instructions to the participants and were present while the participants filled out the questionnaires. Parents and adolescents received monetary compensation for participating. All procedures were approved by the university's institutional review board. For the second wave and third wave of this study, participants were contacted via letters in the mail and/or by phone using previous contact information gathered during the first wave of the study. Interview procedures for Wave 2 were identical to those of Wave 1. For Wave 3, participants were either emailed a link to an online survey (n = 163) or mailed a hard copy of the survey (n = 4). All participants received monetary compensation for completing the survey.

2.3 - Measures

Demographics. Basic demographic information of age, gender, and ethnicity were collected. See Appendix A for the complete measure.

Peer Victimization. Peer victimization was measured using a modified version of the Multidimensional Peer Victimization Scale (MPVS; Mynard, & Joseph, 2000). The scale consisted of 8 items designed to measure aspects of victimization through negative physical actions (e.g. punched, kicked) and negative verbal actions (e.g. made fun of me for some reason, swore at me). Each item is rated on a three point Likert scale ranging from 0= Not at all, 1= Once, 2= More than once. Scale reliability (Cronbach's alpha) from Wave 2 of the current sample was .81. See Appendix B for the complete measure.

Religiousness. The religiousness scale is a 13-item scale adapted from Fetzer Institute & National Institute on Aging Working Group (1999) and Jessor and Jessor's (1977) Value on Religion Scale. It was measured at all three waves. The instrument is intended for use both with

religious and nonreligious individuals, as each item gives a “None” option for those who are nonreligious. The instrument contains three subscales: organizational religiousness, private practices religiousness, and personal religiousness. Organizational religiousness consists of two items measuring the respondent’s participation in formal religious activities, such as religious services or youth group attendance. Private practices religiousness consists of four items assessing informal religious practices, such as prayer. Personal religiousness consists of four items assessing the importance of faith. Scale reliability (Cronbach’s Alpha) from Wave 1, Wave 2, and Wave 3 of the current sample are as follows: Organizational religiousness: .70, .78, and .84; Private Practice: .77, .85, and .86; Personal Religiousness: .88, .90, and .95. See Appendix C for the complete measure.

Forgiveness. Transgression specific forgiveness was measured using the Transgression-Related Interpersonal Motivations Inventory (TRIM; McCullough et al., 2006). It was measured at Wave 2 (n = 127) and Wave 3 (n =163). The TRIM is an 18-item measure with the subscales of avoidance, revenge, and benevolence. The avoidance subscale contains items such as “I live as if he/she doesn’t exist,” the revenge subscale includes items such as “I’ll make him/her pay,” and the benevolence subscale includes items such as “Even though his/her actions hurt me, I have goodwill for him/her.” Participants are asked to think about someone who has harmed them in the past and rate the items are on a five-point scale (1 = strongly disagree to 5 = strongly agree). McCullough et al. (2006) conducted a factor analysis with oblique rotation and found that the avoidance and benevolence subscale items both loaded on the same factor (which was named avoidance versus benevolence and explained 53.1% of the total item variance) while the revenge subscale items loaded on a separate factor and explained 12.1% of total item variance. The two factor scores for avoidance versus benevolence and revenge motivations were used as dependent

variables in further analyses (McCullough et al., 2006). A factor analysis with oblique rotation was conducted using Wave 2 of the current sample to see if these results could be replicated. Results showed similar factor loadings to McCullough et al. (2006) with avoidance and benevolence items explaining 44.2% of total item variance and revenge motivation items explaining 12.1% of total item variance. Factors scores for avoidance versus benevolence and revenge motivations will be used as measures of behavioral forgiveness. TRIM reliability from Waves 2 and 3 of the current sample are as follows: Avoidance=.90 and .92, Revenge=.89 and .88, Benevolence =.84 and .86. See Appendix D for the complete measure.

Internalizing symptomatology. Internalizing symptomatology was measured using the Youth Self Report (YSR; Achenbach & Rescorla, 2001) and the Child Behavior Checklist (CBCL; Achenbach & Rescorla, 2001). The YSR is a 102-item questionnaire assessing adolescents' behavior problems and is typically used with children/adolescents between 11 and 18**.** The internalizing scale includes withdrawn, anxious/depressed, and somatic complaints syndrome scales (Achenbach, 1991). Higher score indicates higher behavior problems. The YSR has shown strong psychometric properties on internalizing behaviors (α = .90; Achenbach & Rescorla, 2001). The CBCL is a 118-item questionnaire assessing caregiver perceptions of children's behavior problems. The internalizing scale includes withdrawn, anxious/depressed, and somatic complaints syndrome scales where higher score indicates higher internalizing problems. The CBCL has demonstrated strong psychometric properties on internalizing symptomatology (α = .90; Achenbach & Rescorla, 2001).

Emotion Regulation. Adolescent emotion regulation was measured using the Emotion Regulation subscale of the Emotion Regulation Checklist (ERC; Shields & Cicchetti, 1997). The

ERC is a 24 item scale that is completed by the child or an adult familiar with the child (in the case of the present sample, the parent or guardian). The Emotion Regulation subscale reflects processes central to adaptive regulation such as emotional self-awareness and empathy. For purposes of the current study both parent and child report of the ERC were used. Reliability (Cronbach's alpha) from Waves 2 and 3 are .66 and .70 respectively. See Appendix E for the complete measure.

2.4 - Plan for analysis

Structural Equation Modeling (SEM) analyses was used to test the hypotheses and was conducted using Amos and Mplus Version 6.0 statistical software package (Muthén & Muthén, 2010). Overall model fit indices were examined using the following measures: (1) χ^2 value, (2) degrees of freedom, (3) corresponding p-value, (4) Root Mean Square Error of Approximation (RMSEA), and (5) Confirmatory Fit Index (CFI). An RMSEA value less than .06 and a CFI value equal to or greater than .95 indicated a good fit (Hu & Bentler, 1999). An α level of .05 was used for all statistical tests except in the case of the interactions. We used $\alpha = .10$ for testing interactions, considering the low power that characterizes analyses of moderator effects in quasi-experimental research designs (McClelland & Judd, 1993).

Because the peer-victimization measure was not included in Waves 1 and 3, cross-sectional data from Wave 2 (n=127) was used to test the cross sectional moderation and mediation models. The Delta Method standard errors were used to test for the significance of mediation effects. Additionally, a supplementary longitudinal analysis was performed using 68 adolescents to examine the relationships among religiousness (measured at Wave 1), behavioral forgiveness (measured at Wave 2), and mental health (emotion regulation and internalizing symptomatology measured at Wave 3).

For the moderation analyses using Wave 2 (n = 127), the power of the study for a small effect size $f^2 = .02$ was .231. Power for a medium effect size $f^2 = .15$ was .965 and power for a large effect size $f^2 = .35$ was .999. For the mediation analyses using Wave 2 (n = 127) the power of the study for a small effect size $f^2 = .02$ was .273. Power for a medium effect size $f^2 = .15$ was .979 and power for a large effect size $f^2 = .35$ was .999. For the supplementary longitudinal mediation analyses using Waves 1, 2, and 3 (n = 68), the power of the study for a small effect size $f^2 = .02$ was .160. Power for a medium effect size $f^2 = .15$ was .804 and power for a large effect size $f^2 = .35$ was .993. Power was calculated using G*Power 3 program (Faul, Erdfelder, Buchner, & Lang, 2009; Faul, Erdfelder, Lang, & Buchner, 2007).

3.0 - Results

3.1 - Preliminary Analyses

Data were screened for outliers and multivariate non-normality. Skewness and kurtosis were also examined and fell within acceptable ranges (Skewness < 10; Kurtosis < 3). Descriptive statistics for and correlations among the study variables from Wave 2 are presented in Table 1. Correlations for longitudinal study variables are presented in Table 2. Adolescent age was found to be significantly correlated with physical peer victimization ($r = -.184$, $p < .05$) and emotion regulation ($r = .210$, $p < .05$) and was added as a covariate to analyses including these constructs. The demographic variables of gender and ethnicity were not found to be significantly correlated with the study variables and were not included in further analyses.

3.2 - Measurement Model Testing

Religiousness. The three subscales of religiousness were entered into a Confirmatory Factor Analysis (CFA) using SEM. The model was a fully saturated model ($\chi^2 = 0$, $df = 0$). The factor loadings were strong and significant: Organizational religiousness ($b^* = .817$, $p < .001$), Private Practices ($b^* = .898$, $p < .001$), Personal religiousness ($b^* = .821$, $p < .001$).

Forgiveness. McCullough, Root, and Cohen (2006) conducted a CFA on the 18-item TRIM forgiveness scale and found that it is best represented as a two factor model with items measuring revenge motivations loading strongly on one factor and items measuring avoidance motivations vs. benevolence motivations loading strongly on the other. Their findings were confirmed in the current sample (Wave 2, n = 127). Similar to the findings by McCullough and his colleagues (2006), five items loaded strongly on one factor which was labeled “Revenge Motivations” and 11 items loaded strongly on another factor which was labeled “Avoidance versus Benevolence Motivations.” Two items (items 3 and 14) did not load strongly on either

factor and were dropped from the analyses. A composite score for each factor (Revenge Motivations and Avoidance versus Benevolence Motivations) was calculated using the mean across the items. These composite scores were used as variables in the main analyses. See Table 3 for factor loadings of TRIM items from the current sample.

Emotion Regulation and Internalizing Symptomatology. The latent factors of emotion regulation and internalizing symptomatology were constructed using both adolescent and parent reports. Specifically, the two correlated factors in the CFA were comprised of adolescent report (ERC_C) and parent report (ERC_P) of adolescent's emotion regulation and adolescent report (YSR) and parent report (CBCL) of adolescent's internalizing symptomatology. The model was a fully saturated model ($\chi^2 = 0$, $df = 0$). The factor loadings were strong and significant: Emotion Regulation: ERC_C ($b* = .437$, $p < .01$), ERC_P ($b* = .727$, $p < .05$) Internalizing: YSR ($b* = .876$, $p < .01$), CBCL ($b* = .519$, $p < .01$).

3.3 - Hypothesis testing

Structural equation modeling analyses were conducted using AMOS. Mediation significance was tested using the Delta method standard errors using Mplus statistical software (Muthen & Muthen, 2010). Wave 2 data (n = 127) were used for the following analyses.

Peer victimization and mental health: Moderation effects of religiousness and forgiveness

The first set of analyses tested the association between peer victimization (physical and verbal) on adolescent emotion regulation and internalizing symptomatology as moderated by religiousness and forgiveness (revenge and avoidance vs. benevolence motivations). Physical and verbal victimization were tested in separate models with each moderator separately, thus, six separate models were tested.

First, physical victimization, religiousness, and the interaction between physical victimization and religiousness were entered in to an SEM model predicting adolescent emotion regulation and internalizing symptomatology (Figure 1). The model fit was excellent ($\chi^2 = 7.181$, $df = 10$, $p = .708$; CFI = 1.0; RMSEA = .000). No path coefficients were found to be significant. Similarly, verbal victimization, religiousness, and an interaction term between verbal victimization and religiousness were entered into an SEM model predicting adolescent emotion regulation and internalizing symptomatology (Figure 2). The model fit was excellent ($\chi^2 = 8.103$, $df = 10$, $p = .619$; CFI = 1.0; RMSEA = .000). Verbal victimization was found to be significantly related to internalizing symptomatology ($b* = .599$, $p < .001$). No other path coefficients were found to be significant. In sum, only verbal victimization was found to be related to internalizing symptomatology, and religiousness was not shown to be a significant moderator between physical or verbal victimization and adolescent adjustment.

Next, physical victimization, revenge motivations, and the interaction term between physical victimization and revenge motivations predicting emotion regulation and internalizing symptomatology were examined (Figure 1). Model fit was excellent ($\chi^2 = 9.118$, $df = 10$, $p =.521$; CFI = 1.0; RMSEA = .000) and revenge motivations were shown to be negatively related to adolescent emotion regulation ($b* = -.388$, $p < .001$) and positively related to internalizing symptomatology ($b* = .297$, $p < .05$). No other path coefficients were significant. Similarly, verbal victimization, revenge motivations, and the interaction term between verbal victimization and revenge motivations predicting emotion regulation and internalizing symptomatology (Figure 2) showed excellent model fit ($\chi^2 = 8.879$, $df = 10$, $p = .544$; CFI = 1.0; RMSEA = .000). Verbal victimization was positively related to internalizing symptomatology ($b* = .576$, $p < .001$) and revenge motivations were shown to be negatively related to adolescent emotion

regulation ($b^* = -.385$, $p < .001$) and positively related to internalizing symptomatology ($b^* = .228$, $p < .05$). No other path coefficients were significant. In sum, verbal victimization was shown to be positively related to internalizing symptomatology and revenge motivations were shown to be negatively related to adolescent emotion regulation and positively related to internalizing symptomatology. Verbal victimization was not related to emotion regulation nor was physical victimization related to emotion regulation or internalizing symptomatology. Finally, revenge motivations were not a significant moderator between peer victimization and adolescent mental health.

Completing the first set of analyses, physical victimization, avoidance vs. benevolence motivations and the interaction term were entered into a model predicting emotion regulation and internalizing symptomatology (see Figure 2; $\chi^2 = 4.307$, $df = 10$, $p = .932$; CFI = 1.0; RMSEA = .000). The same model was run again (see Figure 2) looking verbal victimization ($\chi^2 = 8.731$ $df = 10$, $p = .558$; CFI = 1.0; RMSEA = .000). Physical victimization showed a negative relationship with emotion regulation that approached significance ($b^* = -.201$, $p < .05$). Verbal victimization was positively related to internalizing symptomatology ($b^* = .637$, $p < .001$). No other path coefficients were significant. In sum, avoidance versus benevolence motivations were not shown to be a significant moderator in the relationship between peer victimization and mental health.

<u>Post hoc moderation analyses</u>

Although the avoidance motivations and benevolence motivations items of the TRIM load together in CFA, they may function differentially as a buffering effect against peer victimization experiences. Forgiveness is conceptualized by the TRIM (McCullough, Root, & Cohen, 2006) as low revenge motivations, low avoidance motivations, and high benevolence

motivations. When considering transgressors with whom one is in a close relationship (e.g. parent, spouse), this may capture the construct of forgiveness quite well. However, when looking at peer victimization, forgiveness may be conceptualized slightly differently. For example, if an adolescent is being bullied (verbally or physically), he or she may forgive the bully and not harbor revenge motivations and even feel benevolence for the bully despite their behavior. However, having lower avoidance motivations in this situation may not necessarily reflect greater forgiveness given that not avoiding the particular transgressor may be dangerous for the adolescent. Thus, it was determined that there was sufficient conceptual reason to examine avoidance and benevolence motivations separately as a possible moderator of the relationship between peer victimization and the outcomes of emotion regulation and internalizing symptomatology.

Four models were tested. The first two models tested avoidance motivations as a moderator in the relationship between physical victimization and emotion regulation and internalizing symptomatology (see Figure 3; $\chi^2 = 5.483$ $df = 10$, $p = .857$; CFI = 1.0; RMSEA = .000) as well as verbal victimization and emotion regulation and internalizing symptomatology (see Figure 4; $\chi^2 = 7.787$ $df = 10$, $p = .650$; CFI = 1.0; RMSEA = .000). Only verbal victimization was shown to be significantly related to internalizing symptomatology ($b^* = .633$, $p < .001$). No other path coefficients were significant. In sum, avoidance motivations were not found to be a significant moderator in the relationship between peer victimization and adolescent mental health.

The next two models tested benevolence motivations as a moderator in the relationship between physical victimization and emotion regulation and internalizing symptomatology (see Figure 3; $\chi^2 = 7.697$ $df = 10$, $p = .658$; CFI = 1.0; RMSEA = .000) as well as verbal victimization

and emotion regulation and internalizing symptomatology (see Figure 4; $\chi^2 = 11.731$ $df = 10$, $p = .384$; CFI = .993; RMSEA = .023). Benevolence motivations were found to be a significant moderator in the relationship between verbal victimization and emotion regulation ($b^* = -.171$, $p = .082$) and internalizing symptomatology ($b^* = .220$, $p < .05$). Note that for interaction terms, significance values of $p = .10$ were considered acceptable (McClelland & Judd, 1993). No effects of benevolence motivations were found for physical victimization. A two group SEM model was used to probe the interaction between verbal victimization and benevolence motivations. A mean split was used to separate high and low benevolence groups. First, the path between verbal victimization and emotion regulation was constrained to be equal across groups. Significance testing for model fit difference suggested no significant difference between the high and low benevolence groups ($p = .129$). Thus, benevolence motivations were not shown to moderate the relationship between verbal victimization and emotion regulation. Second, the path between verbal victimization and internalizing symptomatology was constrained to be equal across groups. Significance testing showed that the groups were significantly different ($p < .05$). For the low benevolence group verbal victimization showed a positive relationship with internalizing symptomatology ($b^* = .554$, $p < .01$). For the high benevolence group verbal victimization showed an even stronger positive relationship with internalizing symptomatology ($b^* = .645$, $p < .001$). Thus, in contrast to the hypothesized direction of the relationship, higher benevolence motivations seems to exacerbate rather than buffer the effects of verbal victimization on adolescent internalizing symptomatology.

Religiousness and mental health: Mediation effects of forgiveness

The second set of analyses tested the proposed mediation effects of forgiveness on the effects of religiousness on emotion regulation and internalizing symptomatology both cross-

sectionally and longitudinally, as a supplementary analysis given the limits of sample size. As shown in Figure 5, the mediation model tested whether religiousness is associated with emotion regulation and internalizing symptomatology mediated through the two variables of forgiveness (revenge motivations and avoidance vs. benevolence). The model fit was reasonable (χ^2 = 35.633 *df* = 26, *p* = .099; CFI = .968; RMSEA = .054). The path coefficient for religiousness on revenge motivations approached significance (*b** = -.174, *p* = .058) and the paths from revenge motivations to emotion regulation (*b** = -.434, *p* = .001) and internalizing were significant (*b** = .309, $p < .05$). None of the pathways through avoidance vs. benevolence motivations were significant, nor was religiousness directly related to either outcome. Mediation effects of revenge motivations on the relationship between religiousness and the mental health outcomes were tested with the Delta Method standard errors. The mediated effects of religiousness on emotion regulation and internalizing symptomatology through revenge motivations were not statistically significant (*Z* = 1.413, *p* = .158, 95% CI [-.004, .025] for emotion regulation and *Z* = -1.35, *p* = .177, 95% CI [-.110, .020] for internalizing symptomatology).

In order to test the model longitudinally, religiousness variables from wave 1, forgiveness from wave 2 and the outcomes of emotion regulation and internalizing symptomatology from wave 3 were entered into an identical model as was tested above (Figure 6). As parent reports were not collected for wave 3 data only adolescent report of emotion regulation and internalizing symptomatology was used. Model fit was acceptable (χ^2 = 18.140 *df* = 15, *p* = .255; CFI = .970; RMSEA = .056); however, no path coefficients were significant. Although no path coefficients were significant, it should be noted that all signs of the path coefficients were opposite of what was found in the cross-sectional analyses with the exception of the path from religiousness to internalizing symptomatology and from avoidance vs.

benevolence motivations to internalizing symptomatology. Effect sizes for most of these paths were extremely small (see Figure 6); however, effect sizes for the paths from religiousness to avoidance vs. benevolence (b^* = -.176) and revenge motivations to emotion regulation (b^* = .200), are notable. The signs of these two relationships are the same as in the bivariate correlations; however, the correlations are quite small and non-significant (see Table 1). Presently, we do not have an explanation as to why the signs of the effects are different than those in the cross sectional analyses.

Post hoc mediation analyses

Given the marginal significance of the path coefficient from the latent factor of religiousness to revenge motivations, we further investigated whether different aspects of religiousness (i.e. organizational religiousness, personal religiousness, and private practices) might be differentially related to revenge motivations. Bivariate correlations of the study variables indicated that private practices were the only religiousness variable that was significantly correlated to adolescent revenge motivations. Thus, private practices might be a stronger predictor of revenge motivations than religiousness as a whole. Thus, we ran the model using a manifest variable of private religious practices as a predictor. Model fit was good (χ^2 = 32.005 df = 27, p = .2319; CFI = .984; RMSEA = .038). Private practices were significantly and inversely related to revenge motivations (b^* = -.183, p = .031). Revenge motivations were negatively related to emotion regulation (b^* = -.447, $p < .001$) and positively related to internalizing symptomatology (b^* = .308, p = .008). The mediation approached significance (Z = 1.823, p = .068, 95% CI [-.001, .025]).

4.0 - Discussion

The purpose of the current study was to examine the relationship of religiousness, forgiveness, and mental health among adolescents. It was examined whether religiousness and forgiveness would moderate the adverse effects of peer victimization on the adolescent mental health outcomes of emotion regulation and internalizing symptomatology. Additionally, the relationship between religiousness and forgiveness was examined in relation to adolescent's mental health outcomes. Specifically, it was hypothesized that forgiveness would mediate the relationship between religiousness and adolescent mental health. This relationship was examined both cross-sectionally and longitudinally. Implications of the findings and suggestions for future research are discussed in the following section.

Peer victimization and mental health: Moderation effects of religiousness and forgiveness

In general, the hypothesis that religiousness and forgiveness would buffer the adverse effects of peer victimization on the adolescent mental health outcomes of emotion regulation and internalizing symptomatology were not directly supported. Benevolence motivations were found to moderate the relationship between verbal victimization (but not physical victimization) and internalizing symptomatology, but the direction of the relationship was not as predicted. Instead of buffering the effects of verbal victimization on internalizing symptomatology, having high benevolence motivations appears to exacerbate the detrimental effects of verbal victimization among adolescents. In addition, very few main effects of peer victimization, religiousness, and forgiveness on the outcomes were found. Verbal, but not physical, peer victimization was significantly related to internalizing symptomatology but not emotion regulation. Specifically, high verbal victimization was associated with high internalizing. The only other main effect

found in the original analyses was of revenge motivations on emotion regulation and internalizing. High revenge motivations were associated with poor emotion regulation and high internalizing symptomatology.

The results regarding main effects is surprising given the plethora of literature supporting the effects of peer victimization on emotion regulation and internalizing symptomatology (e.g. Herts, McLaughlin, & Hatzenbuehler, 2012; Rigby, 2003; Reijntjes, Kamphius, Prinzie, & Telch, 2009). Two possible explanations for these results are the limitations of the peer victimization scale that was used and also the relatively low prevalence of peer victimization reported within the sample. As detailed in the methods section of this paper, the MPVS is an 8-time scale that asks how often in the past year has another pupil: “hit you”, “called you names”, “kicked you”, “made fun of me for some reason”, etc. The scale for these items only three points ranging from 0 = Not at all, 1 = Once, 2 = More than once. This scale only provides a vague picture of how much victimization an adolescent has actually experienced and does not measure intensity or chronicity of victimization. Thus, the lack of findings relating peer victimization to the mental health outcomes in the current study may be due to the restricted range of the scale.

Additionally, the current sample shows very low rates of peer victimization in general. The MPVS is scored by calculating the mean of the indicated values across questions for each subscale. The highest score possible for either subscale is four. None of the participants achieved the highest score possible. Fifty percent of participants scored a two or lower on the verbal victimization subscale and 99 percent of participants scored a two or lower on the physical victimization scale. The low prevalence of peer victimization in the current sample in combination with the relatively small sample size may explain the scarcity of main effect findings relating peer victimization and the mental health outcomes.

Limitations in the peer victimization scale and the low prevalence of victimization in the sample may also provide an explanation for the lack of moderation by religiousness or forgiveness on the effects of peer victimization on adolescent mental health. However, in the post hoc moderation analyses which separated the benevolence and avoidance TRIM subscales, benevolence was shown to moderate the relationship between both physical and verbal victimization and mental health outcomes. Not only were benevolence motivations a significant moderator, the direction of influence was almost the opposite of what was predicted. High benevolence motivations appear to exacerbate the effects of verbal victimization on internalizing symptomatology. Given this surprising finding, reasons behind the lack of moderation effects by religiousness, revenge motivations, and avoidance vs. benevolence motivations and reasons for the apparent adverse effects of benevolence motivations merit further examination.

Religiousness

Religiousness was not shown to be a protective factor against peer victimization. Given that religiousness is usually shown to be a protective factor against poor mental health outcomes among adolescents, this finding is noteworthy and exploration as to why religiousness was not shown to moderate the relationship between peer victimization and adolescent mental health is important. First, interaction effects are difficult to detect and, the restricted range of the victimization scale along with the low prevalence of victimization among the sample may have influenced they findings (McClelland & Judd, 1993). However, to the author's knowledge, no research to date has examined religiousness as a possible protective factor against the adverse effects of peer victimization so further discussion of the findings is merited.

Research on factors that protect against adverse effects of peer victimization usually focus on the positive effects of relational factors such as support of family and friends. Most

research on the protective effects of religiousness reveal it to be a protective factor in the face of maltreatment (usually by a caregiver or family member, e.g. Kim, 2008). Family conflict and divorce are also stressors in which adolescent religiousness is shown to be a protective factor (for a review see Paloutzian & Park, 2005). In sum, extant research shows that religiousness as a protective factor against stressors of a close relational nature. Particularly, when family and friend support levels are low, religiousness may act as a substitute for lack of relational support and therefore become more salient to the adolescent as a protective factor. When the stressor is not family or relational in nature (i.e. peer victimization), it is possible, then, that social support of family and friends are the main resource of protection for adolescents experiencing victimization. Thus, religiousness, in the context of also having good support from family and friends, may not be as salient in dealing with victimization experiences. A direction for future research might be to examine religiousness as a protective factor among adolescents experiencing peer victimization who do not have strong support from family or friends. Indeed, stressful situations characterized by low family support (i.e. maltreatment, conflict) often lead to difficulties in forming secure and positive friendships (Bolger, Patterson, & Kupersmidt, 1998; Dodge, Pettit, & Bates, 1994). Thus, it is possible that some adolescents who experience victimization have neither strong family nor friend support. Given evidence that relational support is an essential protective factor among adolescents victimized by peers, religiousness may be a particularly prominent protective factor among victimized adolescents who do not have strong social support.

Forgiveness

With regard to the moderation effects of forgiveness on the relationship between peer victimization and mental health, the questions that arise are why revenge and avoidance

motivations appear to not have an effect on the relationship and why benevolence motivations appear to have an adverse effect even though extant research consistently shows forgiveness to be beneficial to mental health. Wade, Worthington, and Meyer (2005) suggest that the manifestation and effects of certain components of forgiveness may not be consistent across all relationships. For example, they note that feelings of positive regard (i.e. benevolence motivations) for the forgiven transgressor may only occur - and indeed only be necessary - in close, continuing relationships. The findings of the current study support the idea that not all components of forgiveness manifest given certain contexts and also provide evidence for the idea that certain components of forgiveness may actually be detrimental to mental health. The following sections further address why in the context of peer victimization having low avoidance and revenge motivations does not appear to buffer the adverse effects of peer victimization on mental health and also addresses why benevolence motivations appear to exacerbate these effects.

According to McCullough (2001), forgiveness may be conceptualized as a transformation in emotional, cognitive, and behavioral motivations towards a transgressor from negative to positive. These motivations can be captured in the three domains of revenge, avoidance, and benevolence. A person who has gone through the process of forgiving a transgressor should have given up revenge motivations, not have motivation to avoid the transgressor, and also, feel benevolence towards the transgressor despite past harm. However, as discussed previously, not all these specific domains of forgiveness may manifest given the context of the relationship. Indeed, not all domains may be necessary to conceptualize forgiveness given the relationship context. For example, if the person who needs forgiveness is a family member, close friend, or colleague with whom a continued relationship may be a positive thing then having low

avoidance motivations is an important part of forgiveness and indeed, an important part of mending that relationship. However, DiBlasio, Worthington, and Jennings (2013) make the distinction that forgiveness leaves room the setting of appropriate boundaries. They use the example of a child forgiving an abusive parent; the mending of that relationship may require certain boundaries such as having supervision when visiting together. Similarly, in the realm of peer victimization, the transgressor is likely someone who will continue the abuse whether forgiveness is given or not. In this case, there is no relationship to be mended as long as the victimization continues. Thus, it may not be beneficial - indeed it could actually be dangerous - for the forgiver to give up avoidance motivations. In the realm of peer victimization then, it could be argued that forgiveness may be given but avoidance motivations still maintained.

With regard to revenge motivations, the failure to find a moderation effect does not indicate that revenge motivations are not important as they were found to be a significant predictor of mental health. The current study supports extant literature in showing that high revenge motivations are associated with higher internalizing and poor emotion regulation. The lack of buffering effects may be explained by the nature of the construct. Having revenge motivations indicates the harboring of negative feelings and resentment that manifests in the desire to "get back" at the transgressor. However, not having revenge motivations says little about the harboring of negative feelings. One can harbor hurt and resentment but not feel the need to exact revenge. Mullet, Neto, and Rivére (2005) define revenge as "the infliction of harm to an offender in return for perceived wrong" and resentment as "a cold, emotional complex consisting of bitterness, hostility, residual fear, and residual anger in response to perceived harm from an offender." While revenge and resentment may often co-occur they are not the same thing. Mullet and colleagues (2005) further conclude that "the absence of revenge does not

necessarily mean forgiveness." Thus, revenge motivations, assessed independently from other domains of forgiveness, may not account for enough of the process of forgiveness to be a significant protective factor.

The findings regarding the effects of benevolence on the relationship between peer victimization and mental health are more difficult to explain given that extant research consistently supports positive benefits of forgiveness on mental health. That said, as mentioned before, little is known about forgiveness among adolescents and how forgiveness might be related to overcoming stressors like peer victimization that are especially salient to adolescents. Understanding of these relationships is especially important in developing interventions and helping adolescents deal with peer victimizations. Egan and Todorov (2009) published a conceptual paper arguing for the need of forgiveness interventions in schools to help adolescents in dealing with bullying. However, the results of the current study show that this approach must be viewed with caution until more is known about forgiveness among adolescents.

The question as to why higher benevolence motivations may have detrimental effects must be addressed in context. The results of this study by no means indicate that benevolence motivations are universally detrimental nor do the results allow for the conclusion that forgiveness in general can be detrimental. They merely suggest that in the specific context of verbal victimization, high benevolence motivations are related to higher internalizing symptomatology. One reason that benevolence motivations among adolescents who are victimized by their peers may contribute to higher internalizing symptomatology is that adolescents may be excusing or condoning the victimization rather than actually forgiving the transgressor. Forgiveness is specifically conceptualized as different than excusing or condoning a transgression. Excusing and condoning relate to making excuses or justifying the behavior of the

transgressor and not holding them accountable for their misdeeds. If the transgression is excused or condoned then the transgressor is absolved of blame. Forgiveness, in contrast, specifically allows for the change in motivations towards a transgressor and overcoming emotional hurt while acknowledging that the transgressor has wronged them (Van Dyke & Elias, 2007). If adolescents excuse or condone those that are victimizing them, and therefore absolve the transgressor of blame, they may be placing the blame for the victimization on themselves. This self-blame may then contribute to higher internalizing symptomatology.

This phenomenon is observed in women who stay in abusive relationships. They often make excuses for the behavior of their abusive partner, have positive feelings towards the transgressor, and often have negative feelings towards themselves (Cardi, Milich, Harris, & Kearns, 2007; Katz, Street, & Arias, 1997). A factor that might influence this kind of reaction to transgressors is self-esteem. Katz, Street, and Arias (1997) found that women who had lower self-esteem reported that they would be more likely to forgive a partner who abused them. However, research on women who stay in abusive relationships show that they are not actually "forgiving" their partner but "excusing" or "condoning" often by placing the blame on themselves and calling it forgiveness. Likewise, in the case of peer victimization, if adolescents have low self-esteem then they may report high benevolence motivations for transgressors because they take the blame upon themselves which in turn puts them at greater risk for internalizing symptomatology. Indeed, Graham and Juvonen (1998) and Raskauskas (2010) found that victimized middle school students reported high self-blame attributions of their victimization and low self-worth. This tendency for low self-esteem and self-blame may present a caution in promoting forgiveness as an intervention; it is important that an individual understand what forgiveness means before they are encouraged to engage in the process. A

direction for future research would be to examine adolescent conceptualizations of forgiveness as related to self-esteem. Adolescents who are lower in self-esteem may not understand that forgiveness may be given without absolving blame.

Katz, Street, and Arias (1997) also note that women may stay in abusive relationships because their self-identification may be tied up in their relationships with others which makes them more reluctant to sever relational ties and more likely to excuse or condone abuse within a relationship. Likewise, some adolescents may tie their self-identification to a particular group of peers and be reluctant to think badly of said group even if those same peers victimize them. They may have a need to have their self-identification affirmed by approval from a specific group and therefore be more willing to excuse and condone abusive actions. The combination of continued victimization and lack of affirmation of identity may in turn contribute to higher internalizing symptomatology.

In sum, the findings of the current study that show benevolence motivations to exacerbate the effects of verbal victimization adolescent internalizing symptomatology provide evidence that individual differences in response to peer victimization may influence how it affects adolescent mental health. How adolescents perceive victimization by their peers may be an essential component of understanding how victimization affects mental health and has important implications for interventions with victimized adolescents. A forgiveness intervention as suggested by Egan and Todorov (2009) may be helpful to many adolescents dealing with peer victimization, but researchers developing forgiveness interventions for victimized adolescents should be cautious of simply advocating forgiveness without clearly defining what is meant by forgiveness. Additionally, research on forgiveness should strive to understand how lay-person

conceptualizations of forgiveness may affect results when studying the effects of forgiveness on mental health.

Religiousness and mental health: Mediation effects of forgiveness

The cross-sectional analyses examining mediation effects of forgiveness on the religiousness/mental health relationship showed that forgiveness did not significantly mediate the relationship between religiousness and emotion regulation or internalizing symptomatology. However, the inverse relationship between religiousness and revenge motivations approached significance and, as in the moderation analyses, revenge motivations were negatively related to emotion regulation and positively related to internalizing symptomatology. It could be argued that the relatively small sample size may explain the marginally significant findings as well as the lack of significant mediation. However, other explanations are possible. The justification for the post hoc mediation analyses was that, within the current sample, private practices was the only religiousness variable significantly correlated with revenge motivations. Given that previous research on religiousness demonstrates the differential effects of individual dimensions of religiousness it may be that certain dimensions are more relevant to the process of forgiveness. Specifically, private practices may influence reduction in revenge motivations which, in turn, may influence good emotion regulation and less internalizing symptomatology. Results of the post hoc analyses provide some support for this idea as the mediation test approached significance suggesting that revenge motivations may indeed mediate the relationship between private religious practices and mental health.

One reason why private practices may be a more relevant domain of religiousness to low revenge motivations may be because it includes activities that may also be used as coping skills. Prayer, meditation, and scripture reading are just a few examples of private religious practices

that may also be effective coping mechanisms (McCullough & Willoughby, 2009). Forgiveness, though espoused in most religious traditions, is not something that most people can give automatically whether they want to or not - forgiveness is a process. The transformation of cognitive and emotional motivations takes time and effort. Organizational religiousness may solidify teachings and beliefs about forgiveness but simply understanding that one should forgive is not necessarily helpful in the actual process of forgiving someone. Likewise, personal importance of your beliefs may not be helpful in the actual process of forgiving. Believing that forgiveness is important and/or commanded by God may encourage people to decide that they should forgive someone but may not be sufficient to help people through the actual process of forgiving. Private practices, in contrast, may provide tools with which the person may cope with negative emotions and cognitions towards a transgressor and aid in a transformation of motivations.

A goal of the study was to examine the possible mediation effects of forgiveness on the relationship between religiousness and mental health longitudinally in order to examine temporal precedence. This analysis was considered supplementary due to the very small sample size ($n = 68$) that was available for longitudinal analyses. No significant path coefficients were found so mediation effects were not tested. Additionally, the path coefficient signs of all but two paths (religiousness to internalizing symptomatology and from avoidance vs. benevolence motivations to internalizing symptomatology) were the opposite of what was found in the cross-sectional analyses and the reason why is not clear. The non-significant findings may be, in part, due to the small sample size. The cross-sectional mediation analyses do provide evidence that religiousness and behavioral forgiveness are indeed related; however, all of the supporting studies (e.g. Lawler-Row, 2010) are also cross-sectional and quasi-experimental, therefore, assumptions

about causality cannot be made. It is possible that people who are more likely to forgive self-select into religious affiliation because it "fits" and supports an already established self-tendency.

As discussed earlier, emotion regulation may be considered a measure of mental health (Gross & Munoz, 1995). However, it may be important to consider emotion regulation as an outcome as well as a predictor. Most studies on emotion regulation focus on the construct as a predictor (e.g. Adrien, et al., 2011; Wills, et al., 2006). Indeed, both religiousness and forgiveness require emotion regulation; therefore, it may be that people with good emotion regulation self-select into religious affiliation and that people with good emotion regulation are more likely to forgive because of their ability to regulate their emotions. However, given the research detailed in the introduction of this paper that supports evidence for emotion regulation as both an antecedent and consequence of victimization (e.g. Herts et al., 2012; Shields & Cicchetti, 2001), it is possible that the cyclical nature of emotion regulation extends to other contexts besides victimization. That is, forgiveness may require a certain amount of emotion regulation but the process of forgiveness may provide "practice" at regulating emotions and freedom from excessive negative emotions that might hinder future emotion regulation. Future research should focus on longitudinal studies to examine temporal precedence of the relationship religiousness and forgiveness and also take into account the possible cyclical nature of mental health variables. Specifically, a more dynamic approach that does not restrict the understanding of a construct to either an antecedent or a consequence within a hypothesized model is needed.

Strengths and Limitations

A strength of the current study was the use of multiple indicators for the outcomes. Both parent and child report of emotion regulation and internalizing symptomatology was taken into account in order to assess child mental health. Though it may be a limitation that all the data was

questionnaire based, the inclusion of both parent and child report aided in dealing with bias that might exist in self-report measures alone. As mentioned before, the restricted range of the peer victimization scale and the low prevalence of victimization with in the sample are limitations of the study. Another limitation as the generalizability of the study findings regards lack of diversity among sample characteristics. The sample was predominantly Caucasian and identified religious affiliation as predominantly Christian. Finally, the small sample size is a limitation of the study, which may explain why some of the hypothesized paths were only approaching significance or non-significant.

Conclusion

Given the marginal significance of mediation effects found, this study adds to the studies (i.e. Lawler-Row, 2010) that provide support for forgiveness as a possible “missing-link” in the religion-health relationship (McCullough and Worthington, 1999). Findings also provide evidence against the argument that studies relating religion and forgiveness relate only to dispositional forgiveness and do not translate to actual forgiving behavior. The supplementary analyses examining only private religious practices as a predictor of forgiveness also highlight the argument proposed previously that the reason for disparate findings on the relationship between religion and behavioral forgiveness may be due to a failure to take the multi-dimensional nature of religiousness into account.

Another contribution of the study is that it demonstrates that the components generally thought necessary to forgiveness may not all operate in the same way depending on the relationship of the forgiver to the transgressor and whether or not the transgression will continue (i.e. situations of victimization or abuse). Findings also emphasize that lay-person conceptualizations of forgiveness may influence how their forgiveness of transgressors affects

their mental health. Very little is known about forgiveness in adolescence and exploring this distinction may be important in understanding how forgiveness may aid adolescents experiencing different relational stressors. Both the consideration of relational factors in forgiveness as well as the influence of religion may have implications for possible interventions for the improvement of mental health among adolescents experiencing victimization or other relational stressors.

One example of a forgiveness intervention is Worthington's (2006) REACH program which seeks to teach people how to go about the process of forgiving through a series of five steps (for overview and comparisons of multiple forgiveness interventions see Wade, Worthington, & Meyer, 2005). DiBlasio, Worthington, and Jennings (2013) note that forgiveness interventions may be made more salient to the individual and, therefore, more effective, if a connection can be made to the person's religious or spiritual beliefs. As was demonstrated in the current study, simple religious beliefs, despite religious emphasis on forgiveness, do not facilitate behavioral forgiveness. Thus, when considering religion as a possible component of a forgiveness intervention it is important to understand how religion may affect forgiveness. An implication of this study for forgiveness interventions is that forgiveness interventions that include components of the individuals own private religious practices may help the person connect those practices with the process of forgiving and enhance the effectiveness of the intervention for that person. Finally, given the finding that only private practices was related to behavioral forgiveness, further investigation of how religious beliefs or activities may aid in the process of forgiveness during adolescence is needed.

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Table 1
Bivariate Correlations and Descriptive Statistics.

Variable	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1.PhyVic															
2.VerVic	.432**														
3.OrgRel	.058	-.074													
4.PrvPrc	.098	-.015	.733**												
5.PerRel	.095	-.035	.671**	.737**											
6.RelCo	.092	-.047	.897**	.911**	.891**										
7.AvBen	-.150	-.239**	.025	.102	.049	.064									
8.Reven	.119	.135	-.110	-.183*	-.023	-.116	-.354**								
9.Avoid	.145	.255**	.024	-.067	.005	-.013	-.955**	.371**							
10.Ben	-.116	-.158	.137	.178*	.162	.176*	.822**	-.330**	-.640**						
11.CER	-.196	-.147	.137	.041	.028	.078	-.001	-.295**	.018	.095					
12.PER	-.062	-.065	.039	-.040	-.008	-.002	.056	-.221*	-.089	.028	.318**				
13.YSR	.071	.440**	-.020	-.030	.063	.005	-.065	.195*	.110	.002	-.346**	-.101			
14.CBCL	.092	.370**	-.051	-.028	-.015	-.036	-.044	.212*	.092	.027	-.205*	-.340**	.454**		
15.Age	-.184*	-.033	-.134	-.120	-.090	-.128	-.022	-.188*	.062	.117	.210*	.137	.037	-.121	
M	1.11	1.57	4.64	3.68	5.72	4.68	2.10	2.01	3.06	3.18	3.32	3.30	51.02	50.22	15.28
SD	0.28	0.61	2.13	1.91	1.10	1.81	0.91	0.89	0.99	0.86	0.41	0.41	9.80	10.10	1.65
N	127	127	127	127	127	127	127	127	127	127	127	127	127	127	127

Note: PhyV = Physical Victimization, VerVic = Verbal Victimization, OrgRel = Organizational Religiousness, PrvPrc = Private Practices, PerRel = Personal Religiousness, RelCo = Religiousness Composite, AvBen = Avoidance vs. Benevolence, Reven = Revenge, Avoid = Avoidance, Ben = Benevolence, CER = Child Emotion Regulation, PER = Parent Emotion Regulation Report, YSR = Internalizing Symptomatology, CBCL = Internalizing Symptomatology Parent Report, Age = Child age.
$^{*}p < .05$ $^{**}p < .01$

Table 2

Bivariate Correlations of Longitudinal Data

	OrgT1	PrvT1	PerT1	Av/BenT2	RevT2	ERT3	IntT3	AgeT3
OrgT1								
PrvT1	.695**							
PerT1	.616**	.663**						
Av/BenT2	-.100	-.155	-.179					
RevT2	.054	.042	.294*	-.450**				
ERT3	.012	-.110	-.084	.125	.097			
IntT3	.091	.139	.095	.094	-.151	-.359**		
AgeT3	-.059	-.004	-.118	-.017	-.021	.182	.033	

Note: OrgT1= Organizational Religiousness Time 1, PrvT1= Private Practices Time 1, PerT1= Personal Religiousness Time 1, Avoidance Versus Benevolence Time 2, Revenge Time 2, Emotion Regulation Time 3, Internalizing Symptomatology Time 3, Adolescent Age Time 3

Table 3

Transgression-Related Interpersonal Motivations Inventory – 18 Item Version, with factor loadings

Item Correlations	Factor 1	Factor 2
1. I'll make him/her pay.	-.005	.754
2. I am trying to keep as much distance between us as possible	.744	-.049
3. Even though his/her actions hurt me, I have goodwill for him/her.	-.374	-.360
4. I wish that something bad would happen to him/her.	.165	.671
5. I am living as if he/she doesn't exist, isn't around.	.761	-.005
6. I want us to bury that hatchet and move forward with our relationship .	-.771	.086
7. I don't trust him/her.	.719	.003
8. Despite what he/she did, I want us to have a positive relationship again.	-.900	.059
9. I want him/her to get what he/she deserves.	-.059	.812
10. I am finding it difficult to act warmly toward him/her.	.635	.153
11. I am avoiding him/her.	.848	-.077
12. Although he/she hurt me, I am putting the hurts aside so we can resume our relationship.	-.891	.050
13. I'm going to get even.	-.098	.749
14. I have given up my hurt and resentment	-.276	-.147
15. I cut off the relationship with him/her.	.838	-.040
16. I have released my anger so I can work on restoring our relationship to health	-.617	-.152
17. I want to see him/her hurt and miserable.	.106	.758
18. I withdraw from him/her	.736	.076

Note. Coefficients are loadings from the structure matrix resulting from confirmatory factor analysis. Factor 1 accounted for 46.607 percent of total item variance and Factor 2 accounted for an additional 13.932 percent of item variance.

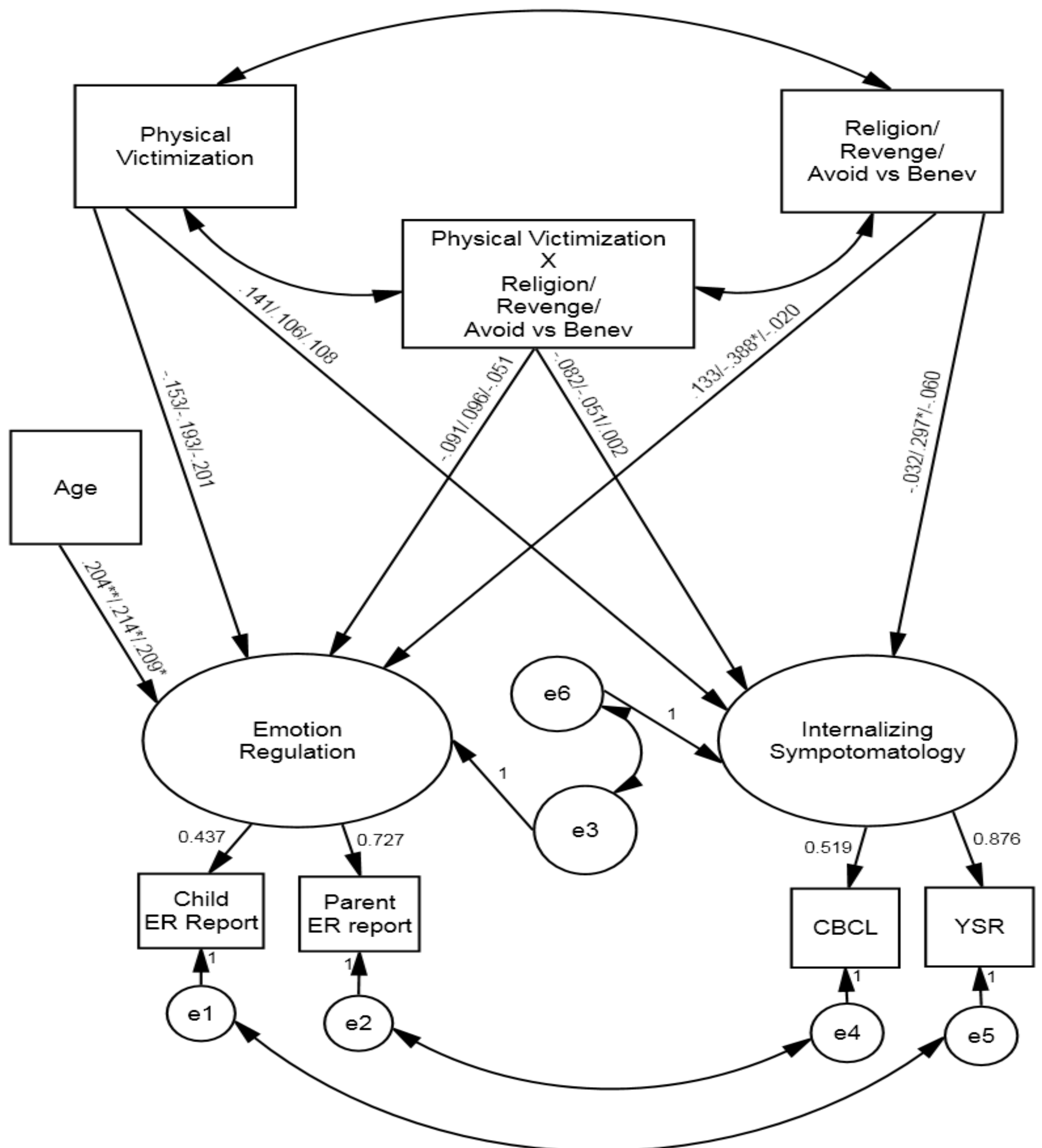

Figure 1. Moderation effects of Religiousness, Revenge, and Avoidance vs. Benevolence on Physical victimization and mental health outcomes. Standardized coefficients are presented in the format Religiousness/Revenge/Avoidance vs. Benevolence.

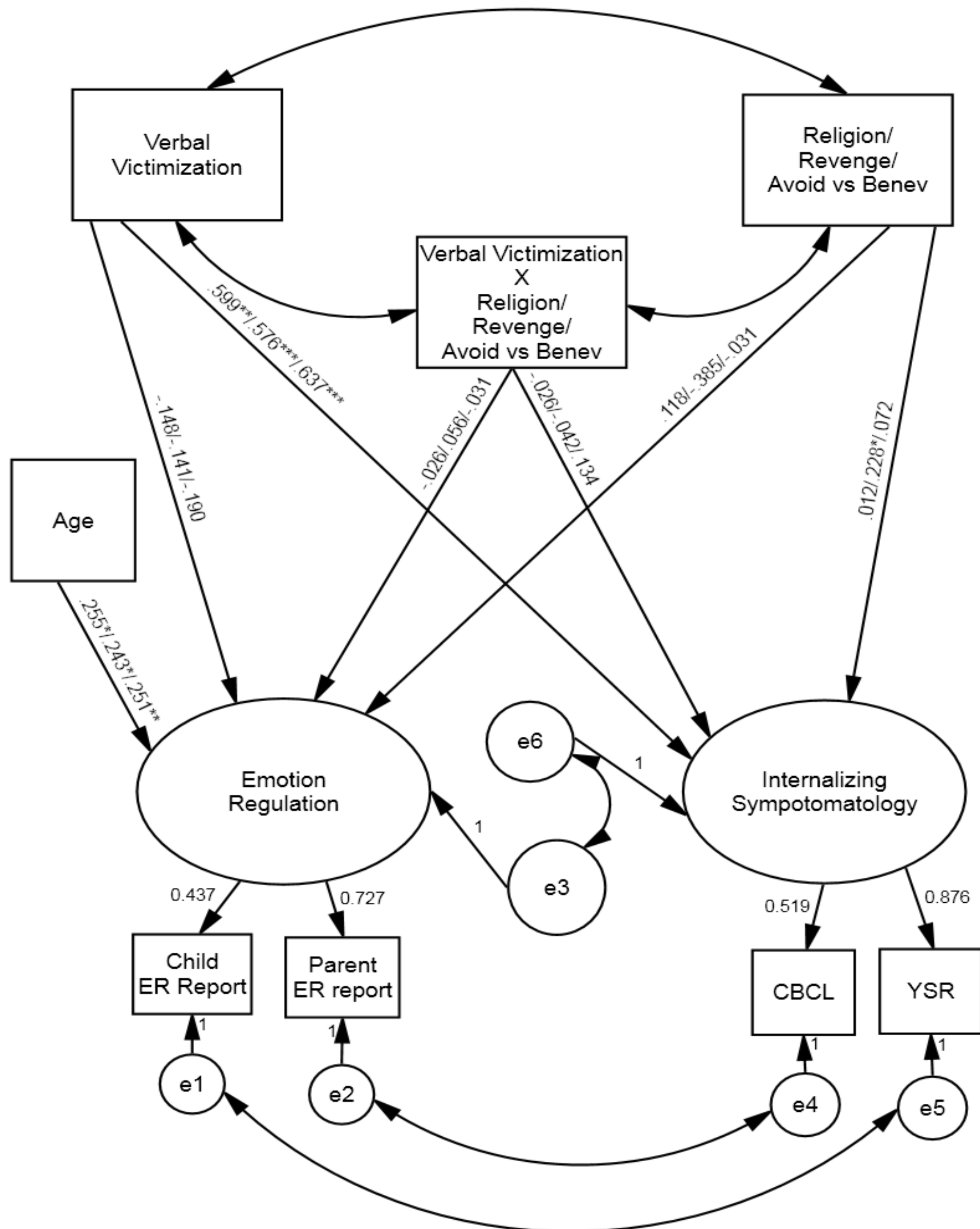

Figure 2. Moderation effects of Religiousness, Revenge, and Avoidance vs. Benevolence on Verbal Victimization and mental health outcomes. Standardized coefficients are presented in the format Religiousness/Revenge/Avoidance vs. Benevolence.

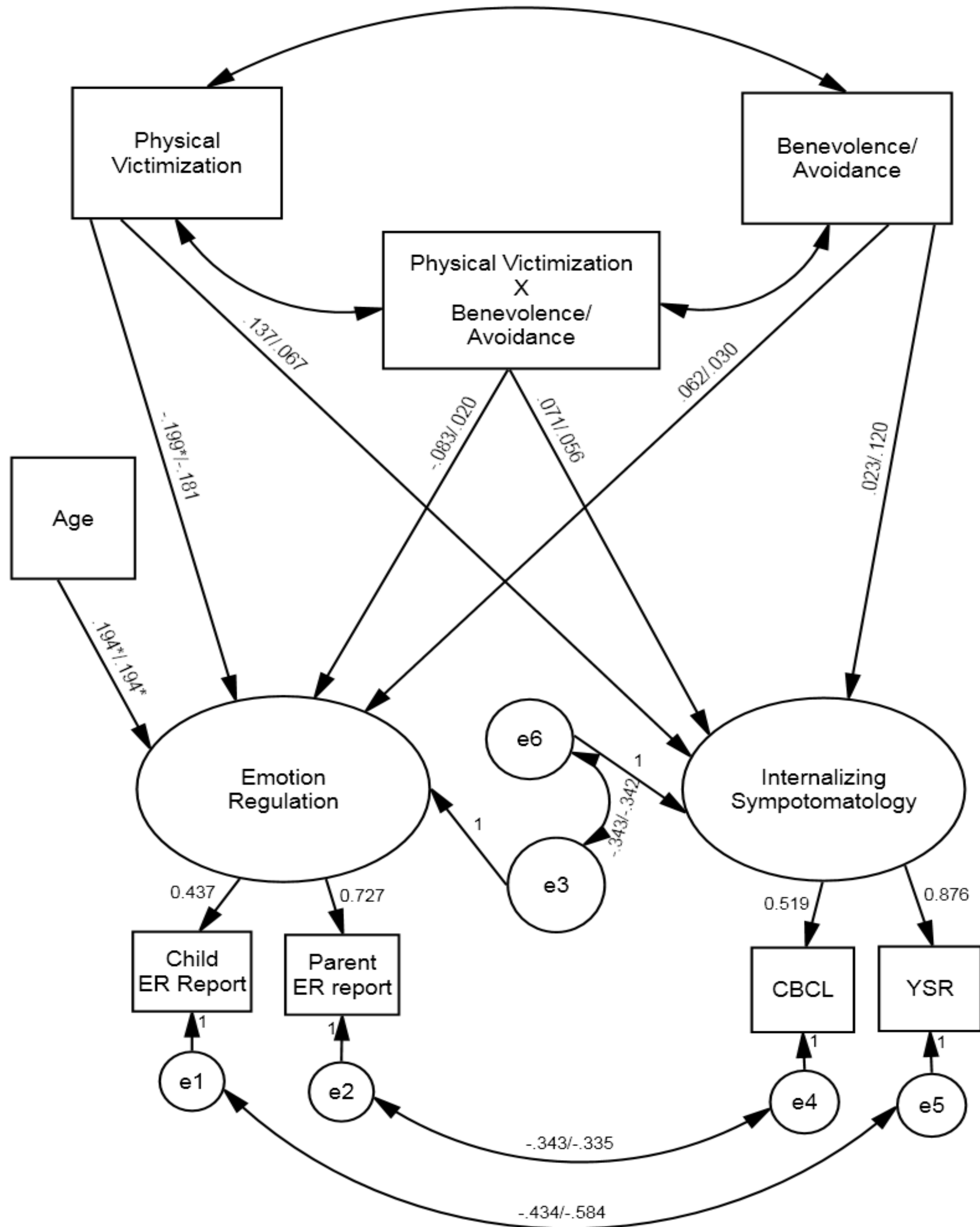

Figure 3. Moderation effects of Avoidance and Benevolence on Physical Victimization and mental health outcomes. Standardized coefficients are presented in the format Avoidance/Benevolence.

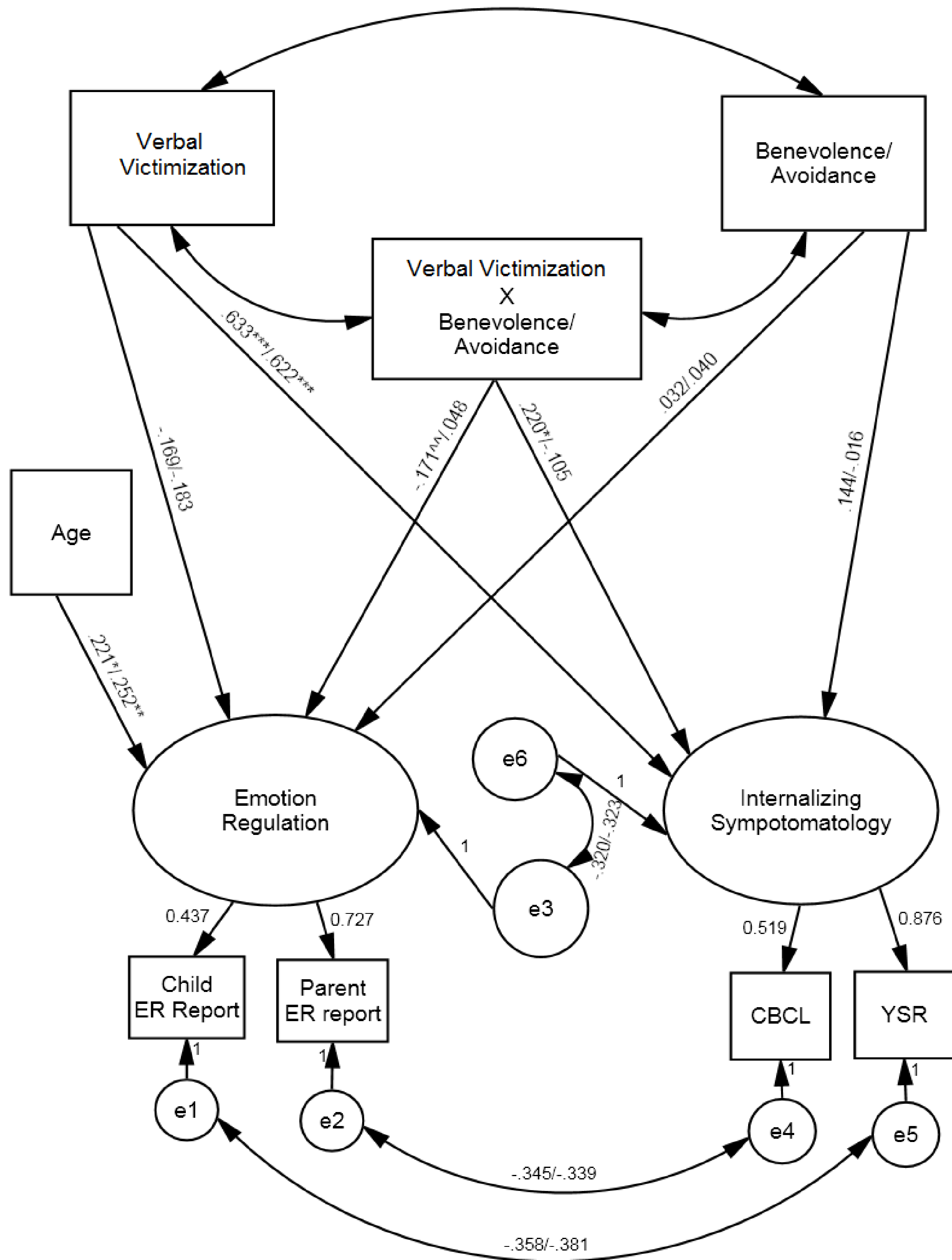

Figure 4. Moderation effects of Avoidance and Benevolence on Verbal Victimization and mental health outcomes. Standardized coefficients are presented in the format Benevolence/Avoidance.

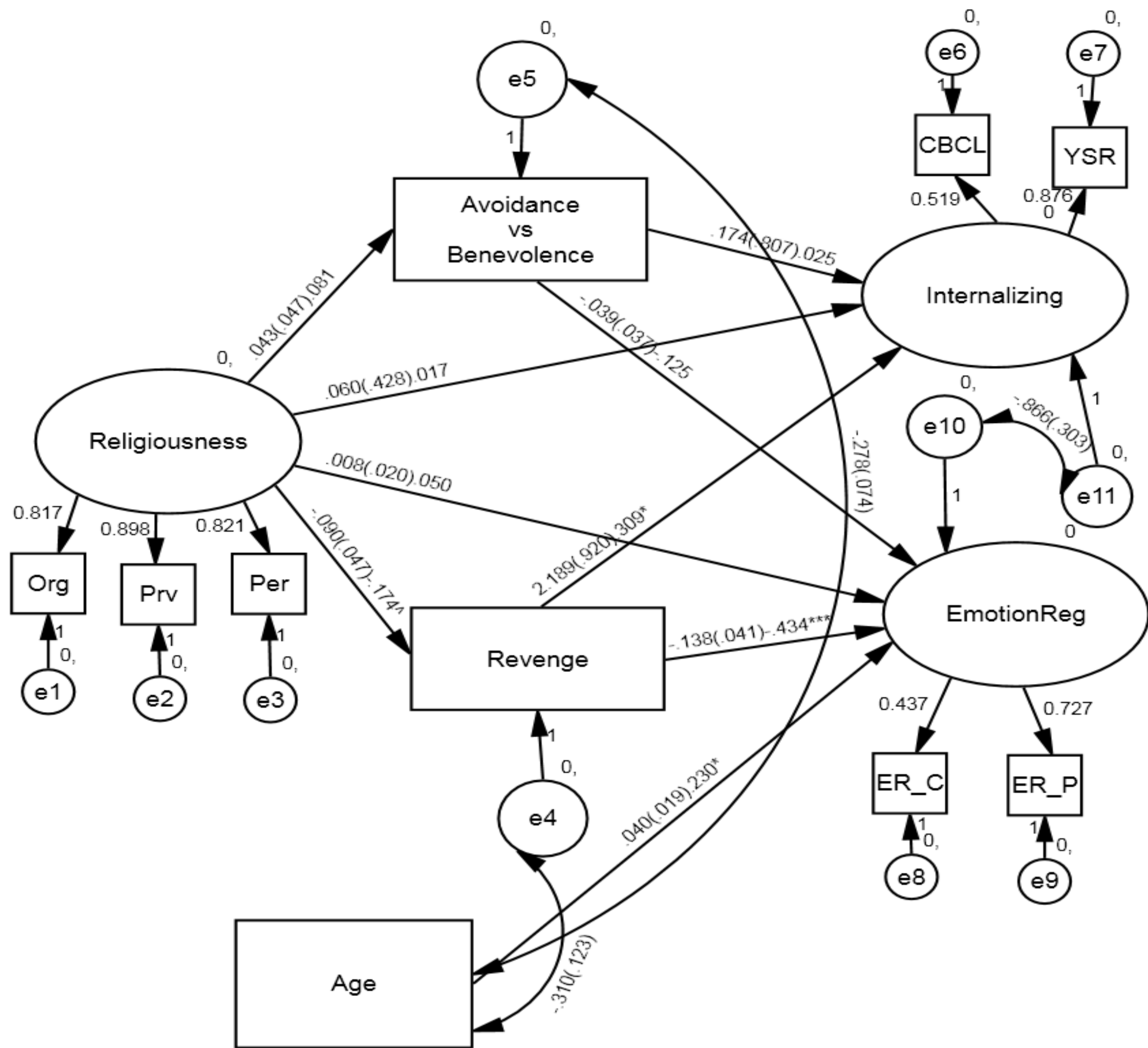

Figure 5. Mediation effects of Forgiveness on Religiousness and mental health outcomes. Coefficients are presented in the format: Unstandardized coefficient (Standard Error) Standardized coefficient.

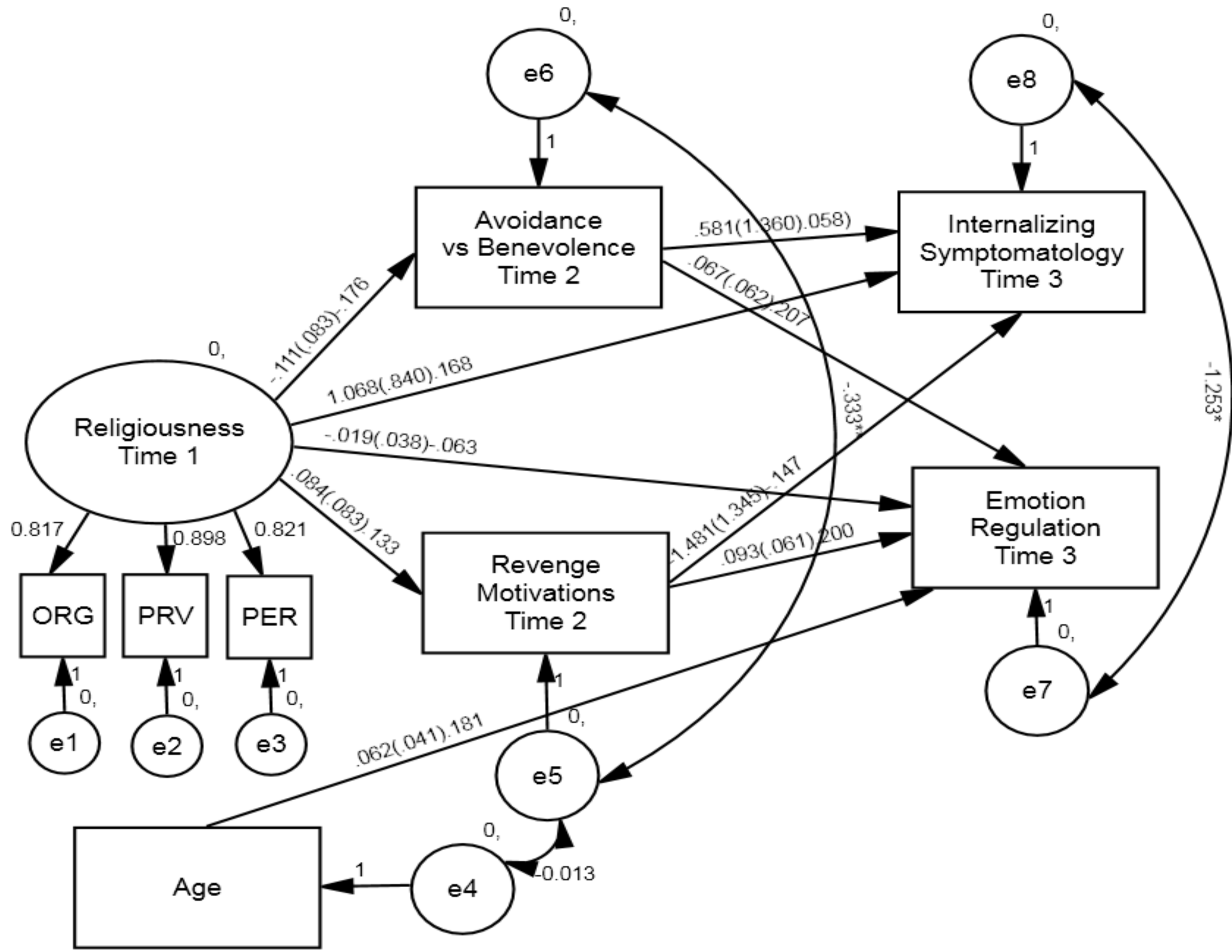

Figure 6. Longitudinal mediation effects of Forgiveness on Religiousness and mental health outcomes. Coefficients are presented in the format: Unstandardized coefficient (Standard Error) Standardized coefficient.

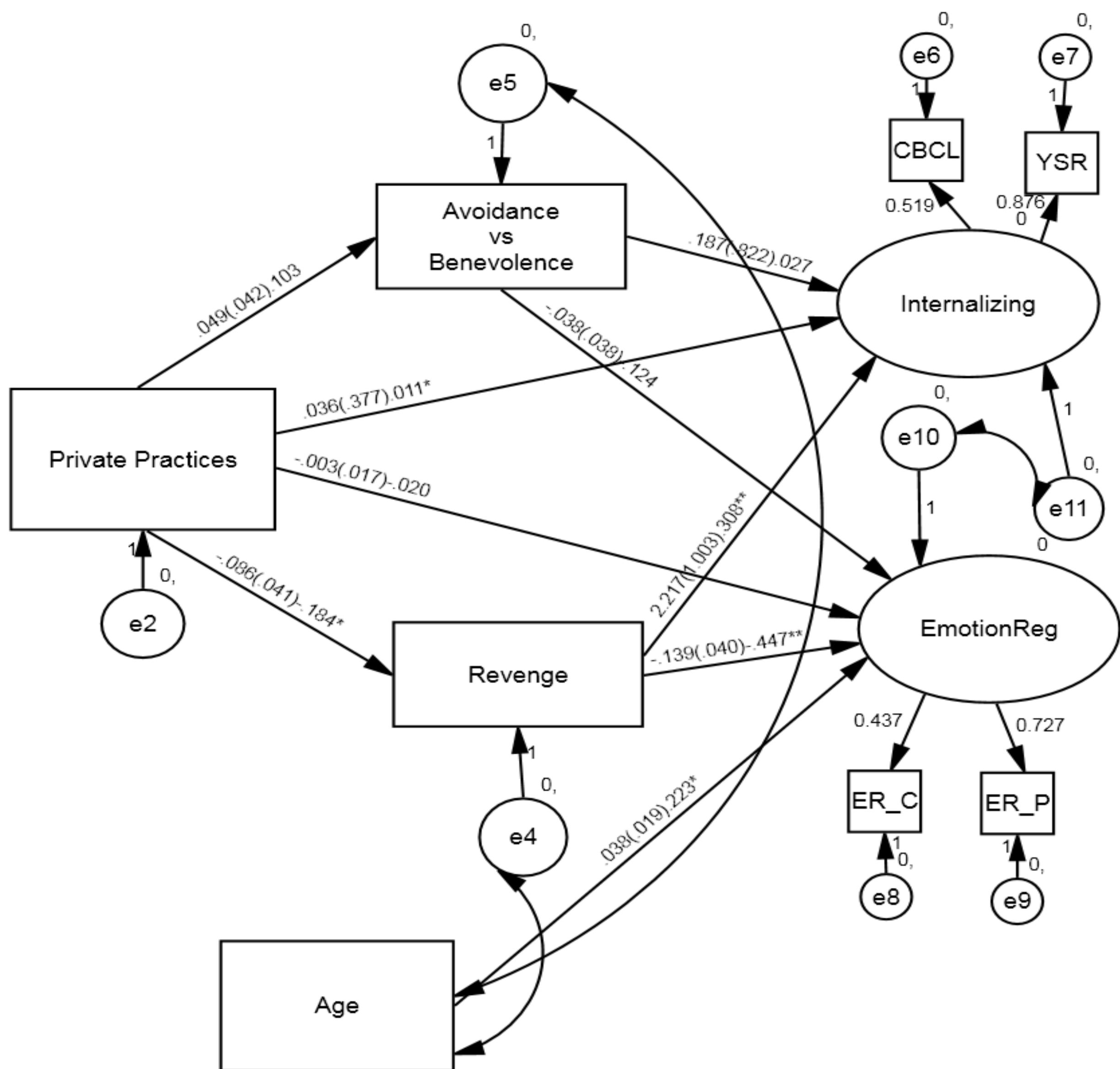

Figure 7. Post hoc analyses. Mediation effects of Forgiveness on Private Practices and mental health outcomes. Coefficients are presented in the format: Unstandardized coefficient (Standard Error) Standardized coefficient.

Appendix A

Demographic Interview

1. How old are you? (Record age in years) AGE_____

2. What is your gender? Male ___ Female ____

3. How would you describe your own race?

    1 = Black
    2 = White
    3 = Latino or Hispanic
    4 = Biracial or Multiracial
    5 = Asian or Asian-America
    6 = American Indian
    7 = Other (Alaskan Native, Middle Eastern, Pacific Islander, or other)
    Other (please specify) ____________________

Appendix B

MPVS

INSTRUCTIONS: Below is a list of things that some children do to other children. **How often during the past year has another pupil done these things to you?** Please answer by putting a check in one of the three columns for each of the 8 questions.

	Not at all	Once	More than once
1. Punched me			
2. Called me names			
3. Kicked me			
4. Made fun of me because of my appearance			
5. Hurt me physically in some way			
6. Made fun of me for some reason			
7. Beat me up			
8. Swore at me			

Appendix C

Religiousness

Here are some statements that describe religious attitudes and practices. Please answer all questions as honestly as possible. For each question indicate the number that best describes your feelings and behaviors regarding religious experience.

1. What is your religion, if any?
1) Protestant (e.g. Baptist, Methodist, Presbyterian, Lutheran)
2) Roman Catholic
3) Jewish
4) Muslim
5) None
6) Other (Specify): ______________________________

2. To what extent do you consider yourself a religious person?
1) Very religious
2) Moderately religious
3) Slightly religious
4) Not religious at all

3. How often do you go to religious services?
1) More than once a week
2) Every week or more often
3) Once or twice a month
4) Every month or so
5) Once or twice a year
6) Never

4. Besides religious services, how often do you take part in other activities at a place of worship?
1) More than once a week
2) Every week or more often
3) Once or twice a month
4) Every month or so
5) Once or twice a year
6) Never

5. How often do you pray privately in places other than at church or synagogue?
1) More than once a day
2) Once a day
3) A few times a week
4) Once a week
5) A few times a month
6) Once a month
7) Less than once a month
8) Never

6. How often do you watch or listen to religious programs on TV or radio?
1) More than once a day
2) Once a day
3) A few times a week
4) Once a week
5) A few times a month
6) Once a month
7) Less than once a month
8) Never

7. How often do you read the Bible or other religious literature?
1) More than once a day
2) Once a day
3) A few times a week
4) Once a week
5) A few times a month
6) Once a month
7) Less than once a month
8) Never

8. How often do you pray or say grace before or after meals?
1) At all meals
2) Once a day
3) At least once a week
4) Only on special occasions
5) Never

9. How important is religious faith in your life?
1) Very important
2) Important
3) Somewhat important
4) Not too important
5) Not at all important

10. How important is it to believe in God
1) Not at all important
2) A little important
3) Pretty important
4) Very important

11. How important is it to be able to rely on religious teachings when you have a problem.
1) Not at all important
2) A little important
3) Pretty important
4) Very important

12. How important is it to be able to turn to prayer when you're facing a personal problem.

1) Not at all important
2) A little important
3) Pretty important
4) Very important

13. How important is it to rely on religious beliefs as a guide for day to day living.
1) Not at all important
2) A little important
3) Pretty important
4) Very important

14. How important is it to look to God for strength, support, and guidance when you deal with major problems in your life.
1) Not at all important
2) A little important
3) Pretty important
4) Very important

The following questions deal with the relationships you've had with the people in your congregation.

15. How often do the people in your congregation make you feel loved or cared for?
1) Very often
2) Fairly often
3) Once in a while
4) Never
5) Not applicable

16. How often do the people in your congregation listen to you talk about your private problems and concerns?
1) Very often
2) Fairly often
3) Once in a while
4) Never
5) Not applicable

17. How often do the people in your congregation express interest and concerns in your well-being?
1) Very often
2) Fairly often
3) Once in a while
4) Never
5) Not applicable

Appendix D

TRIM

We ask you to think of one person who you experienced as treating you unfairly and hurting you at some point in the past. For the following questions, please indicate your current thoughts and feelings about this person who hurt you, that is, we want to know how you feel about that person right now. Select an answer choice for each item that best describes your current thoughts and feelings.

1. I'll make him/her pay.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
2. I am trying to keep as much distance between us as possible.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
3. Even though his/her actions hurt me, I have goodwill for him/her.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
4. I wish that something bad would happen to him/her.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
5. I am living as if he/she doesn't exist, isn't around.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree

6. I want us to bury that hatchet and move forward with our relationship.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
7. I don't trust him/her.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
8. Despite what he/she did, I want us to have a positive relationship again.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
9. I want him/her to get what he/she deserves.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
10. I am finding it difficult to act warmly toward him/her.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
11. I am avoiding him/her.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
12. Although he/she hurt me, I am putting the hurts aside so we can resume our relationship.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral

- 4. Agree
- 5. Strongly Agree

13. I'm going to get even.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
14. I have given up my hurt and resentment.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
15. I cut off the relationship with him/her.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
16. I have released my anger so I can work on restoring our relationship to health.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
17. I want to see him/her hurt and miserable.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree
18. I withdraw from him/her.
    - 1. Strongly Disagree
    - 2. Disagree
    - 3. Neutral
    - 4. Agree
    - 5. Strongly Agree

Appendix E

ERC

The following statements describe how people respond to different situations. Please select the number that best describes you. Be sure you give an answer for all the statements.

1. I am a cheerful person.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

2. I move quickly from a good mood to a bad mood.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

3. I respond well (positively) to adults when they act friendly or neutral to me.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

4. I don't get angry, worried, distressed, upset, or worked up when changing from one thing to another. I shift well from one activity to another.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

5. When I am emotionally upset or frustrated by something that happens, I start to feel better pretty quickly (I don't stay sad or worried for a long time).
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

6. I am easily frustrated.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

7. I respond well (positively) when friends act friendly or neutral to me.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

8. It is easy for me to have an angry outburst or temper tantrums when I get angry.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

9. I can wait to get something I really want.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

10. I like it when other people are upset (for example, I like teasing others or I laugh when another person gets hurt or punished).
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

11. I don't get carried away during exciting situations or too excited at the wrong time or place.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

12. I am whiny or clingy with adults.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

13. I often bother other people because I am too active or too excited about something.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

14. I get angry when adults set limits (tell me that I cannot do something).
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

15. I can say when I am feeling sad, angry or mad, fearful or afraid.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

16. I feel sad or I have no energy.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

17. I get too excited when trying to get other people to play or do things with me.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

18. I show very little feeling. People think I don't have feelings.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

19. I act negatively (I get scared or speak to friends in an angry tone of voice) when my friends are acting neutral or trying to be friendly.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

20. I do things without first thinking them through.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

21. I show concern and understanding when others are upset or distressed.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

22. My excitement bothers other people.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

23. When friends are mean to me or treat me badly, I have normal negative feelings such as anger, fear or frustration.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always

24. I show negative feelings (anger, fear, or frustration) when I try to get someone to play or do something with me.
    - 1. Rarely/Never
    - 2. Sometimes
    - 3. Often
    - 4. Almost Always