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The Mediating and Moderating Effects of Coping Mechanisms Following High School Victimization

Kevin D. Hyatt
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The Mediating and Moderating Effects of Coping Mechanisms Following High School Victimization

A thesis
presented to
the faculty of the Department of Psychology
East Tennessee State University
In partial fulfillment
of the requirement for the degree
Masters of Arts in Psychology with a
concentration in Clinical Psychology

by
Kevin D. Hyatt
August 2014

Dr. Chris Dula, Chair
Dr. Jon Ellis,
Dr. Stacey Williams

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ABSTRACT

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by

Kevin D. Hyatt

Victimization from bullying has become a more serious issue as available avenues for bullying have increased and as the media has been alerted to the devastating effects of the phenomenon. Victimization has been linked to increased externalizing and internalizing disorders including depression, anxiety, stress, and at its worst suicide. Research has been focused on the negative outcomes following victimization, with some authors only recently examining the buffering or exacerbating effects of coping mechanisms. Participants (n=642) from a moderately sized southeastern university completed a survey to examine problem-focused and emotion-focused coping as potential moderators and maladaptive coping as a potential mediator between retrospective reports of victimization and depression, anxiety, and stress, and reasons for living. The hypothesis concerning maladaptive coping as a mediator was supported. Implications and limitations are also discussed. Results suggest that maladaptive coping may be a key mechanism explaining the impact of bullying on outcomes years after victimization.
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CHAPTER 1
INTRODUCTION

Between direct experience with victimization as well as exposure, there are few individuals who make it through childhood without some exposure to bullying or being teased (Gladstone, Parker, & Malhi, 2006). This is due to the nature of social groups that contain power hierarchies relating to might, stature, skill, personality, and/or number. Such hierarchies can foster cultures that promote or facilitate systemic (i.e., deliberate and repeated) abuse of subgroups and individuals referred to as bullying (Smith & Sharp, 1994). Different researchers and different cultures have also called the phenomenon as “mobbing,” “scapegoating,” and “peer aggression,” (Rivers, 2011).

According to Ross (2002) bullying has been a societal problem occurring for hundreds of years, and currently it often manifests in school settings. This phenomenon seems universal as it has been identified in such diverse locations as the United States, Canada, Japan, Australia, New Zealand, Germany, Belgium, Italy, Spain, Portugal, France, Switzerland, England, Ireland, and Finland (Ross, 2002; Smith et al., 1999). Bullying seems to cut cross geography, culture, and politics (Carney & Merrell, 2001; Craig et al., 2009; Griffin & Gross, 2004), and it occurs to a larger extent than most realize (Sullivan, 2011). No studies of bullying prevalence have found a complete absence in any school setting (Aviles & Monjas, 2005; Benitez & Justicin, 2006; Bradshaw, Sawyer, & O’Brennan, 2007; Wong, Lok, Lo, & Ma, 2008).

Overview of Bullying

Historical Overview

In spite of its long history, it was only in the early 1970s that efforts were made to study it (Olweus, 1993). Heinemann’s (1972) work is viewed as the first empirical study of group
aggression among school children, and he described this aggressive behavior as “mobbing.” Olweus (1973) further developed this research, focusing on the nature, frequency, and long-term effects of “mobbing” in a national study in Norway in 1983 (Olweus, 1993; Rivers, 2011). The study was sparked by a newspaper report in late 1982 that three boys committed suicide as a probable result of severe bullying by peers. Considerable attention from the mass media and the public resulted in a nationwide campaign to stop bullying in Norwegian elementary and middle schools (Olweus, 1993). Bullying among school-aged children has recently been considered a more serious issue.

In the late ‘80s and ‘90s, bullying received public attention that sparked empirical investigations in several other countries and results from these studies suggested bullying was a common occurrence in school settings, with up to one in five children reporting recurrent attacks (Olweus, 1991; Smith et al., 1999). The rates from studies from the 1970s are somewhat lower than the percentages obtained in the 1980s, 1990s, 2000s, and 2010s. Frequencies of those reporting being bullied at least once per week range from 8% to 20% (Aviles & Monjas, 2005; Benitez & Justicin, 2006; Bradshaw et al., 2007; Wong et al., 2008).

Many early studies were basic and exploratory, having small sample sizes and no clear operational definitions, and were often conducted with little supervision from experienced researchers. These caveats make it difficult to determine whether the increased frequency reported in recent years is a true rise in the problem or an artifact of methodological differences (Olweus, 1993). However, more recent studies do seem to suggest that bullying in recent decades is not only more frequent but also more vicious than it was in the past (Beale & Scott, 2001; Ma, 2001; Marsh, Parada, Yeung, & Healey, 2001; Olweus & Alaker, 1991).
Definitions of Bullying

Most definitions of school bullying categorize it as targeted aggressive behavior with an intention to harm another (Camodeca, Goossens, Schuengel, & Terwogt, 2003; Olweus, 1978; Rivers & Smith, 1994; Smith & Thompson, 1991). Olweus (e.g., 1986, 1991, 1993) classified bullying victimization as being when a student is exposed repetitively and sequentially to actions aimed at intentional infliction, or attempts of infliction, of injury or discomfort upon another, by one or more other students. These actions can be carried out verbally such as with threats, taunts, teasing, and name-calling, or physically such as hitting, punching, kicking, pinching, or restraining. It is also possible to carry out bullying via gestures, intentionally excluding someone from a group, or refusing to comply with another person’s reasonable wishes (Olweus, 1993). To be considered bullying it is necessary for there to be difference in relative perceived strength, favoring the bully so that the student exposed has difficulty defending against the attacks and feels somewhat helpless in the situation (Olweus, 1993).

Bullying has been defined in several ways but usually with more consistency than inconsistency in the components. Sullivan, Cleary, and Sullivan (2004) stated that bullying consists of “…a negative and often aggressive or manipulative act or series of acts by one or more people against another person or people usually over a period of time. It is abusive and is based on an imbalance of power…” (p. 2). Sullivan (2011) added that it is a conscious, willful and repetitive act, and noted this could include forms of manipulation and exclusion. Focusing on the fact that bullying is often an unprovoked attack with the intention to inflict harm, Ross (2002) went so far as to label it as a form of terrorism.

Such negative intentional acts can also be manifested either overtly or subtly (Sanders & Phye, 2004). Olweus (1993) described physical bullying as direct bullying, or open attacks on
the victim. Rivers and Smith (1994) used the term ‘direct physical aggression’ and defined it as tangible behaviors such as hitting, pushing, and kicking. Sullivan (2011) expanded on this by saying direct aggression can include any form of physical attack, intimidation, and damaging a person’s property, noting it often causes visible hurt that is tangible and easy to identify (Sullivan, 2011).

In regards to subtle or elusive forms of bullying, also termed indirect bullying, this can take the form of social isolation and intentional exclusion from a group (Olweus, 1993). It has also been termed psychological bullying, and is often described as acts of humiliation, name-calling, spreading false rumors, teasing, extortion of money, and theft of possessions. Psychological bullying is an attack ‘inside’ the targeted person. Nonphysical bullying is sometimes more difficult to detect and identify because the damage is harder to see (Sullivan, 2011). As there is no tangible damage, it is often assumed to be less harmful (Sullivan, 2011). However, Goldstein, Collins, and Hader (2007) argue that psychological bullying can be just as damaging as physical bullying.

As noted above, psychological bullying can be both verbal and nonverbal. Verbal bullying may include cruel phone calls, blackmail, sexually suggestive or abusive language, rude remarks, name-calling, sending hurtful notes or messages, teasing, and spreading of malicious rumors (Sullivan, 2011). Nonverbal bullying can be either direct or indirect. Direct nonverbal bullying often takes the forms of making faces and rude gestures. These behaviors may also serve to reinforce bullying that is ongoing (Sullivan, 2011). Indirect nonverbal bullying involves controlling relationships and friendships to purposely and systematically exclude, ignore, and isolate an individual. This latter type is sometimes called relational bullying (Sullivan, 2011).
Prevalence of Bullying

Sanders and Phye (2004) noted that bullying is the most predominant form of aggression found in schools and impacts more students in comparison to other forms of violence. According to Olweus in 1993 an estimated 16% of the students in Norwegian elementary and middle schools were involved in bullying as either bullies or victims. While 7% bullied others regularly, 9% were victims and 1.6% were classified as both bullies and victims. All such estimated percentages may be low as they are based primarily on self-report and some victims may have hesitated to disclose their experiences out of shame, fear, or uncertainty about potential consequences (Hunter, Boyle, & Warden, 2004; Kristensen & Smith, 2003; Kanetsuna, Smith, & Morita, 2006; Meyer-Adams & Conner, 2008; Olweus, 1993).

DeVoe, Kaffenberger, and Chandler (2005) as representatives of The U.S. Department of Education School Crime Supplement to the National Crime Victimization Survey reported that in 2001, an average of 8% of middle and high school students were bullied, with numbers of victims decreasing as grade level increased; specifically, 14% of 6th graders, 9% of 9th graders, and 2% of 12th graders reported bullying incidents. In another study Nansel et al. (2001) indicated almost one third of children in grades 6 through 10 were involved in some way with bullying, either as bullies (10%), victims (13%), or as both a bully and a victim (6%). Again finding decreased involvement as grade level increased.

Other researchers found that between 8% and 17% of all students from 1st through 12th grade reported victimization (Kristensen & Smith, 2003; Olweus 1991; Sapouna, 2008; Smith & Gross, 2006; von Marees & Petermann, 2010), with between 3% to 10% reporting chronic bullying (Nansel et al., 2001; Olweus, 1991, 1994). Yet, other studies have found that as many as a third of U.S. children in elementary schools report frequent victimization (Bradshaw et al.,
2007, Swearer, Espelage, & Napolitano, 2009). And, as implied above, some variation in results likely depends upon how bullying was operationally defined in each study.

In one study of 4,197 youths age 9 to 15, 23% of victims reported experiencing physical victimization, 42% verbal victimization, 31% social victimization, and 10% electronic victimization at least once in the previous 4 weeks. Overall, 19% reported physical bullying occurring once or twice a month and 4% experienced it once or more per week (Lemstra, Nielsen, Rogers, Thompson, & Moraros, 2012). In another study the most common type of bullying reported by students was being ‘called names’ where 69.6% of bullied students reported this occurrence (Skrzypiec, Slee, Murray-Harvey, & Beatriz Pereira, 2011). In a study of over 700 teens Sharp (1995) found youth reported verbal bullying as the most stressful and hurtful.

In this latter study a small number (9.6%) of students reported numerous (three or more ways) in which they were bullied, while 67.6% of bullied students only reported one form of bullying. There were no significant differences between males and females in the number of ways they were bullied. The more ways in which students were bullied, the more often it seemed to occur, with 30.8% of those reporting three or more ways of being victimized also reporting they were bullied on ‘most days.’ This is in comparison to 6.5% of those bullied in two ways and 5.4% of those bullied one way being bullied on ‘most days’ (Skrzypiec et al., 2011).

Trends in Bullying

Much of the existing literature has shown boys are more likely than girls to be involved in bullying, as bully or bullied (Craig et al., 2009, Juvonen & Schuster, 2003; Nansel et al., 2001; Sanders & Phye, 2004). Olweus (1993) found boys were bullied mostly by other boys, with more than 80% reporting this to be the case. Boys also carry out much of the bullying to which girls
are subjected. More than 60% of girls who were bullied reported it was carried out mainly by boys. An additional 15% to 20% said they were bullied by both genders.

Besag (2006) suggested higher rates of relational aggression for females may result from earlier intellectual development compared with males and/or the influence of differential factors of socialization. Owens (1996) argued these differences are linked to differences in friendship patterns between sexes. Besag (1989) suggested that in relationships boys tend to seek power or dominance, whereas girls seek affirmation and affiliation, a feeling of belonging, and shared intimacy. Despite the lack of physical harm, indirect bullying for females has been viewed as having effects at least as debilitating as physical bullying. This might be because relational aggression is not as overtly evident or rapidly noticed by adults and victims (Besag, 2006).

Sullivan and colleagues (2004) posed basic tenets about bullying: bullying is an unpredictable behavior, striking without pattern and harming about one sixth of students; it occurs regardless of type of school; it is not restricted by race, gender, class, or other natural distinctions; and it is at its worst during early adolescence. They also note certain identifiable patterns in the epidemiology of bullying in secondary schools: a) There is a steady decrease in victimization throughout secondary school, between the ages of 12 and 18; b) bullying is at its worst during the beginning of secondary school; c) overall bullying decreases as children get older, but where direct physical aggression decreases, other forms increase (direct and indirect verbal and nonverbal methods; d) when bullying does continue, it can become more severe in older adolescence; e) as age increases, adolescents show less empathy towards their victims. (Sullivan et al., 2004).

These patterns are evident in many studies which found bullying is more common in elementary and middle school, and that it steadily decreases through high school (Fitzpatrick,
Dulin, & Piko, 2007; Peskin, Tortolero, & Markham, 2006). This may be due to results that a considerable part of the bullying is carried out by older students (Espelage & Holt, 2001; Olweus, 1993). As students progress into high school, there are fewer grades above them to contain bullies.

An important consideration in research on bullying rates is that many students never report these incidents. Smith and Shu (2000) estimated that 30% of victims never reveal their victimization. As students advance through school, fewer students seem to talk about incidents. It may be more acceptable to admit being bullied when very young, so that with increasing age children may be less likely to report being bullied (Rigby, 2007). In elementary school about 55% of bullied students reported they had talked to “somebody at home” about the bulling. In middle school this percentage dropped to roughly 35% (Olweus, 1993). Also factoring into this problem is that around 40% of bullied students in the elementary school and almost 60% of students in middle school reported that teachers “put a stop to it” only “once in a while” or “almost never.” (Olweus, 1993).

Due to a lack of students reporting bullying incidents or a failure to have adults intervene effectively, a single student can be victimized for a long period of time (Sanders & Phye, 2004). Twenty-eight percent of victims are bullied for at least a few months, and this can last to more than 6 months (Slee, 1994). Perry, Kusel, and Perry (1988) concluded that after being bullied once, victims are likely to be further bullied, and a tendency for a student to be repeatedly victimized is established by middle school. Olweus (1977, 1978) showed that once students are bullied for a certain period, they are more likely to be bullied several years later. This is also true for bullies in that students who are aggressive toward their peers at one point in time are also
aggressive at a later point in time. Being a bully or a victim is something that can last for a substantial period of time, often several years (Olweus, 1993).

**Characteristics of Victims**

Experts in the bullying research field have identified the most prevalent characteristics of victims, who tend to:

- Believe that they cannot control their environment; have ineffective social skills; have poor interpersonal skills; are less popular than others; have underlying fears of personal inadequacy; blame themselves for their problems; are given labels suggesting inadequacy; feel socially isolated; are afraid of going to school; are physically younger, smaller and weaker than peers; have limited skills for gaining success and acceptance; lack of communication capabilities during high-stress incidents; have a poor self-concept; show physical mannerisms associated with depression; have frequent feelings of personal inadequacy; perform self-destructive actions; believe others are more capable of handling various situations; have difficulty relating to peers; have family members who are over-involved in their decisions and activities; perceived progressive failures cause them to put forth less effort with each presenting opportunity; and feel external factors have more of an impact on them than internal control. (Sanders & Phye, 2004, p. 18).

Any person can be subjected to bullying at any time, but some individuals are targeted because of personal characteristics that single them out in comparison to their peers. A large percentage of bullying occurs in schools and is motivated, in part, by bias or prejudice (c.f. Sullivan, 2011). Victimization that occurs because of cultural and physical differences (e.g., race, weight), or differences in educational support (e.g., special needs children) and actual or perceived minority status with regard to sexual orientation (e.g., homosexual, bisexual) are
particularly devastating (Russell, Ryan, Toomey, Diaz, & Sanchez, 2011; Sullivan, 2011). When victims are viewed as being fundamentally different, their tormentors dismiss or deny some element of the victim’s humanity (Sullivan, 2011).

Victims often have inadequate support systems to facilitate development of quality relationships with others (Champion, 1997). Many are very sensitive to comments and evaluations made by peers (Slee, 1994). Although most desire social approval, victims are rarely involved with prosocial activities (Bernstein & Watson, 1997; Troy & Sroufe, 1987). Female victims tend to exhibit social distress and social avoidance and unfortunately this distress and avoidance, as well as fear of negative comments and evaluation, often prevents victims from seeking support (Sanders & Phye, 2004; Slee, 1994).

Sex Differences in Victimization

Physical bullying is more common among boys than girls where boys are more likely to experience physical victimization and be threatened than girls, across all grades (Smith, 1999; Smith & Sharp, 1994). Yet, nonphysical bullying (words and gestures) is a common form of bullying among boys as well (Olweus, 1993). Girls, by contrast, more often encountered indirect forms of victimization (e.g., being purposely left out of social activities, spreading false rumors about them) and verbal aggression. Olweus (1993) also found the percentage of boys and girls who were indirectly bullied was approximately the same but noted that a larger percentage of boys were also exposed to direct bullying.

Genetic and Family Factors

In a study of genetic factors, Ball and colleagues (2008) found that genetic influences explained over 73% of individual differences in children’s victimization, with the remainder being explained by environmental influences. The authors noted methodological limitations that
make it unsafe to draw firm conclusions about causal familial influences because genetic and environmental influences are confounded within families (Ball et al., 2008). Because victimization is not a direct behavior, but instead an exposure to a behavior, genetic influences could be viewed as heritable characteristics that influence vulnerability to victimization (Ball et al., 2008). Introverted personality, social cognitive deficits, and emotional regulation and emotional displays could mediate genetic influences on victimization (Ball et al., 2008).

Other familial factors that have been associated with victimization include being overprotective of a child. Olweus (1993) suggests that this can be both the cause and the result of being bullied. Child-rearing techniques that have been evidenced by victims include intrusive, overprotective parenting (Bowers et al., 1994; Olweus, 2001), intrusive parental psychological control (Perry, Hodges, & Egan, 2001), and coercive power/assertive parenting (Kochenderfer & Ladd, 1997; Rigby, 1993, 1994). Victims often perceive their families as enmeshed (Bowers et al., 1994). Children in these families are never given the chance to learn positive conflict resolution skills because their parents tend to avoid conflict with their child. Victims of bullying were more likely to be identified as having an early inhibited temperament, evidenced by being quiet, restrained, and fearful of unfamiliar stimuli (Gladstone et al., 2006).

**Personality Characteristics**

Beyond, or as a result of parenting styles, certain personality characteristics are associated with victims. Olweus (1993) suggested that most victims tend to be more anxious, insecure, cautious, and quiet than other students. Victims tend to react by crying or withdrawal when they are attacked by another student. Victims can suffer from low self-esteem, self-depreciate, view themselves as failures, feel stupid, ashamed, and unattractive (Olweus, 1993; Rigby, 2002). Victims tend to seek approval, but may lack certain social skills, leading to a
dearth of friends (Rigby, 2002). Bullying may be a precursor to anxiety, but some research also suggests that victims are predisposed to an anxious susceptibility through pre-existing internalizing vulnerabilities, making them be perceived as weak, and unlikely to retaliate. This may propagate a negative cycle where anxious individuals may be at a higher risk of victimization, and bullying may then heighten emotional distress, negative attitudes about the self, and interpersonal difficulties (Garcia Coll, Kagan, & Reznick, 1984; Grills & Ollendick, 2002).

Physical Characteristics

When students are asked to explain why certain children are bullied, there is a trend to identify negative external characteristics, deviations from the norm including obesity, hair color, different ways of speaking, glasses, and students from a lower socioeconomic status (Brixval, Rayce, Rasmussen, Holstein, & Due, 201; Olweus, 1993). When asking 13 to 19 year-old victims why they felt that they were bullied 41% identified weight status as the primary reason, followed by nonheterosexual orientation (38%), intelligence or school performance (10%), race or ethnicity (6%), physical disability (3%), religion (1%), and low family income (1%) (Puhl, Luedicke, & Heuer, 2010). This trend is slightly different from the name-calling that students reported hearing at school. Askew and Ross (1988) reported that the most frequent names related to ethnicity, race, or religious beliefs (72%) but that “anal” or “sexual” names were nearly three times more likely to be viewed as harmful. They posited that this greater sensitivity arises from the direct attack upon the character of the individual rather than racial, cultural, or religious backgrounds.

In retrospective accounts of their bullying males or females mostly recalled being teased about physical appearance in regards to weight or height or about other aspects such as the way
they dressed or hair color. Males also had a tendency to recall being teased about getting good grades or being brainy, their mood (e.g., not being cheerful), their social skills (e.g., not being good at initiating or maintaining conversations), and difficulty following rules (e.g., not doing well in school and being a trouble-maker) (Roth, Coles, & Heimberg, 2002). Evidencing the trend for males to be bullied more often, there were no items for which women recalled greater teasing than men (Roth et al., 2002).

Victims may stand out from the crowd through a tendency to demonstrate different academic, social, mental, physical, and interpersonal characteristics (Sanders & Phye, 2004). Cognitively and/or emotionally, victims often have negative views of themselves. They can believe they are dull, stupid, and worthless with low self-esteem and high social anxiety (Hoover & Juul, 1993; Lane, 1989; Slee, 1994). Victims lack adequate emotional problem-solving strategies to avoid, de-escalate, or work out interpersonal and intrapersonal conflicts (Andreou, 2001; Mahady Wilton, Craig, & Pepler, 2000). This can result in worrying, depression, and psychosomatic symptoms (Kaltiala-Heino, Rimpela, Rantanen, & Rimpela, 2000) or depressive and suicidal thoughts (Roland, 2002). Victims also appear to be less intelligent than nonvictims with victims having poorer academic scores (Perry et al., 1988; Roland, 1989) social intelligence, social cognition, and mental skills (Kaukiainen et al., 1999; Sutton, Smith, & Swettenham, 1999).

Whitney, Smith, and Thompson (1994) compared students with special education needs (physical disabilities, visual and hearing impairments) with mainstream peers and found students with special educational needs experienced a higher percentage of victimization in middle school (62% and 48% respectively) and high school (55% and 16% respectively) with much higher regular high school victimization (once a week or more often) (30% compared to 11% of
mainstream peers). Special Education Needs children were also more likely to be ostracized or purposely ignored more frequently than mainstream peers (Twyman et al., 2010). Whiney et al. (1994) identified three reasons why this was the case:

1. Learning difficulties or other disabilities make them a target.
2. They tend to be less well integrated into their class.
3. Some children with behavioral problems act out in aggressive ways and are susceptible to becoming both aggressor and victim.

Male victims are usually younger students, physically weaker, more vulnerable, and often rejected by the class (Besag, 1989; Olweus, 1997; Sanders & Phye, 2004; Veenstra et al., 2007;), anxious in social situations, and more likely to fail or be unable to compete in activities requiring good eye-hand coordination (Rivers, 2011).

Perpetrators of bullying often target victims for other physical disadvantages including being disabled, overweight, or physically unattractive (Sweeting & West, 2001). Carter and Spencer’s (2006) meta-analysis of studies from 1989 to 2003 supported that students with disabilities, visible or not, experienced bullying more often than other students. Children with medical conditions that are physically apparent (e.g. cerebral palsy, paralysis, and spina bifida), Autism spectrum disorders, obesity, diabetes, stuttering, and developmental and behavioral difficulties are already at a disadvantage. Being the victim of bullying likely exacerbates this disadvantage causing further academic, social, and behavioral deficits. (Sullivan, 2011).
**Negative Effects of Victimization**

A smooth passage through adolescence allows children to develop awareness that they are part of a larger community. Bullying hinders this by isolating, excluding, and pushing children to the fringe of the social group (Sullivan et al., 2004). Investigations conducted across a number of countries have shown that peer victimization is an international problem that can have both short-term and long-term negative mental health and academic consequences, including: a) reduced self-esteem (Andreou, 2000; Boulton, Smith, & Cowie, 2010; Hampel, Manhal, & Hayer, 2009; Lodge & Feldman, 2007; Sullivan et al., 2004; Vreeman & Carroll, 2007; b) lower academic achievement (Dake, Price, & Telljohann, 2003; Eisenberg & Aalsma, 20005; Glew, Fan, Katon, Rivara, & Kernic, 2005; Hazler, Hoover, & Oliver, 1992; Kochenderfer & Ladd, 1996); c) poorer class attendance (Dake et al., 2003; Eisenberg & Aalsma, 2005; Glew et al., 2005; Kochenderfer & Ladd, 1996; d) rejection by peers (Boulton et al., 2010; Kochenderfer-Ladd & Skinner, 2002); and e) greater self-destructive behaviors (Dake et al., 2003; Glew et al., 2005). Victimization has also been linked with an increase in aggressive behavior (Eisenberg & Aalsma, 2005; Sullivan, 2011; Sullivan et al., 2004).

School victimization has been linked to compromised emotional health (Eisenberg & Aalsma, 2005) and physical health, sleep disturbances, abdominal pain, and headaches (Vreeman & Carroll, 2007). Emotionally victims of bullying may feel any of the following; fear, alienation, anger, shame, depression, disenfranchisement, stupid, hurt, a subhuman quality, being trampled on, ugly and uselessness (Sullivan, 2011; Sullivan et al., 2004). Victims may become more insecure, anxious, oversensitive, cautious, quiet, withdrawn, worried, unhappy, and neurotic than is the norm, and, if fearful of new situations, may show extreme introversion (Sullivan, 2011;
Sullivan et al., 2004). Byrne (1999) stated that these feelings develop because victims cannot effectively cope with the experience of being bullied.

Victimization has been associated with the development of a poor self-concept and social withdrawal (Boulton & Underwood, 1992; Olweus, 1978, 1992). Victims have a harder time making friends (Nansel et al., 2001) and when they do they tend to have poorer relationships and lower friendship quality (Nansel et al., 2001; Yoolim, 2010). The difficulties resulting from bullying, the social and emotional disturbances, can have long-term consequences, lasting throughout their school years (Boulton et al., 2010) and on into adulthood (Olweus, 1993).

Bullying “can create a “Hell on Earth” for someone who is victimized, and can seriously threaten that person’s opportunities in life…. [T]he social climate of school … is where [people] develop a large part of their morality, [and] their understanding of how the world works” (Sullivan, 2011, p.3). Bullying behaviors hamper rights to human dignity, privacy, freedom, and security, serving to dehumanize victims to the point that bullies can act without conscience towards them (Sullivan, 2011).

Victimization and its effects can hinder a child’s ability to succeed academically (Boulton et al., 2010; Varjas et al., 2006). The most common reaction to bullying is withdrawal in which victims learn to avoid certain areas at school where bullying has taken place. This avoidance can become more severe to the point in which some individuals avoid school for a period of time or even drop out (Berthold & Hoover, 2000). This tends to negatively impact academic achievement (Boulton et al., 2010; Kochenderfer-Ladd & Skinner, 2002; Meyer-Adams & Conner, 2008; Olweus, 1993; Townsend, Flisher, Chikobvu, Lombard, & King, 2008). Partly due to excessive avoidance, victims’ academic performance may decline or decrease to the point of failure (Hazler et al., 1992; Olweus, 1978).
Vailancourt and colleagues (2010) have posited that the stress of victimization disrupts the immune system, causing a trend for victims of bullying to have poorer health outcomes. Bullying has been linked with sleep disturbances, abdominal pain, and headaches, not related to the physical harm caused by bullying (Rigby, 1994; Vreeman & Carroll, 2007). In a study of high school students Sharp (1996) found that 22% felt physically sick and that 20% had sleeping difficulties after they had been bullied.

Research has consistently found that young people who are frequently victimized suffer from more internalizing symptoms than nonvictims (Baldry, 2004; Craig, 1998; Hodges & Perry, 1999; Kaltiala-Heino et al., 2000; O’Moore, 2000). Childhood teasing may lead to the development of thinking patterns common to both anxiety and depression, such as beliefs that the world is a dangerous place where limited control over outcomes can be had (Roth et al., 2002). A meta-analysis by Hawker and Boulton (2000) found that the largest effect sizes were for depression and that the smallest were for anxiety. Loneliness and social and global or general self-esteem fell in between these extremes (Hawker & Boulton, 2000).

Seals and Young (2003) asserted that the depression caused by bullying is associated with diminished social interaction and that students involved in bullying as bullies or victims were more depressed than students who were not involved. West and Salmon (2000) reported that bullying may be related to cautious tendencies, with victims becoming more sensitive and quiet, more anxious and insecure. These tendencies can lead to depression, diminishing quality of interpersonal relationships, which allows children to be further victims of bullying. Bond, Carlin, Thomas, Rubin, and Patton (2001) also linked victimization and poor interpersonal relationships to adolescent depression, with stronger links for females.
Given that bullying hinders social ties, one might expect it to be more predictive of social than psychological forms of maladjustment. There is little evidence for this claim. Across Hawker and Boulton’s (2000) meta-analysis victimization was no more strongly related to social self-worth than to global self-worth, slightly less to social anxiety than to general anxiety, and less related to loneliness than to depression. The emotional suffering stemming from victimization is not confined or more strongly tied to the social domain (Hawker & Boulton, 2000).

**Anxiety**

As noted, victims are typically fearful and anxious (Besag, 1989; Olweus, 1993; Rigby, 1996; Ross, 1996; Tattum & Tattum, 1992). Bond and colleagues (2001) found that any victimization, regardless of frequency, was significantly associated with anxiety symptoms and predicted the onset of these symptoms among participants. Another study investigating peer victimization, global self-worth, and anxiety found a significant positive correlation between victimization and anxiety, which was stronger for girls than it was for boys (Grills & Ollendick, 2002). Anxiety related to bullying may generalize to certain circumstances: anticipation of bullying experiences, direct episodes of bullying, and exposure to situations containing peer evaluation (Rigby, 2002; Slee, 1994). Childhood victimization may also lead to anxiety and social phobias in adulthood (Gladstone et al., 2006).

**Depression**

Boulton and Hawker (1997) suggested that the subordination of the victim within the peer group, especially when constantly reinforced, is likely to increase susceptibility to depressive illness. Victims seem to have an increased risk of mood-related psychopathology including a) depression (Boulton and Underwood, 1992; Crick & Grotpeter, 1996; Dake et al.,

Besag (1989) discussed the cognitive changes of victims, wherein victims “begin to believe in the abusive name-calling, thinking perhaps names such as ‘baby’, ‘wimp’, and ‘idiot’ must be true, for otherwise they would have been able to cope with the bullying. Their inability to cope proves that they are inferior. A gradual but pervasive erosion of self-esteem takes place” (p. 53). Besag (1989) also suggests that this inability to cope and inability to stop victimization may cause children to develop learned helplessness, reinforcing a belief that there is little control over outcomes in life, a thinking pattern common to depression. Gilbert (1992) linked attacks on one’s social rank to the maintainence of depression, and Baumeister and Leary (1995) suggested that this type of threat to social bonds can lead to depression and other types of negative affect.

There has been strong empirical evidence of the link between bullying and depression. In one study it was found that only 8.1% of nonvictimized students had developed depressed mood. This was dramatically higher, at 16.2% of victimized youth who were bullied once or twice per month. This was even greater for those who experienced victimization more often, with depressed mood prevalence rate at 26% and 37.3%, respectively, for youth who were physically bullied once a week or many times per week (Lemstra et al., 2012). Espelage and Holt (2001) found that 20% of middle school children who were bullied scored within the clinical range on a standard depression measure.
Rigby and Slee (1999) found that students directly involved in bullying had the highest rates for suicide ideation and suicide (Sullivan et al., 2004). Ellason and Ross (1997) report a significant relationship between self-harming behavior and suicidal ideation and the number of perpetrators of physical abuse and the number of types of abuse experienced by participants in childhood. The Victoria Coroner indicated that 40% of suicide victims have been bullied in school in 2007 (Field, 2013). Suicide as a result of bullying is an astonishing and forceful reflection of the school systems and broad societies in which it occurs (Sullivan, 2011).

**Lasting Effects of Victimization**

It has been thought that adult vulnerability is a result of failing to overcome early negative experiences such as bullying. Those unable to cope with childhood deprivations during discontinuities are unlikely to be able to fully function in the adult world. In terms of the discontinuities, the physiological changes during puberty and the new experiences encountered during this time have an impact on successful or unsuccessful psychological functioning in adulthood (Rivers, 2011).

Victims of bullying can continue to suffer in adulthood, possibly having low self-esteem and experiencing high stress, depression, psychosocial problems, psychosexual difficulties, anxiety, and psychosomatic symptoms (Arseneault et al., 2006; Campbell & Morrison, 2007; Carney & Merrell, 2001; Kaltiala-Heino et al., 2000; Tehrani, 2004) as well as suicidal ideation (Kaltiala-Heino et al., 1999). In Roth et al. (2002) recollections of childhood teasing were correlated with social anxiety and anxiety sensitivity in a college population. Gladstone and colleagues (2006) surveyed 226 patients at an outpatient depression clinic and found that 31.5% had been bullied and that 23.9% reported that this was severe bullying. These individuals had significantly higher self-reported depression scores, more anxiety symptoms, and greater rates of
comorbid agoraphobia and social phobia (Gladstone et al., 2006). McCabe, Antony, Summerfeldt, Liss, and Swinson, (2003) found that 92% of their sample of individuals diagnosed with social phobia, 50% of those diagnosed with Obsessive-Compulsive Disorder, and 35% of those diagnosed with Panic Disorder reported severe teasing and bullying experienced in childhood.

Coping with Victimization

General Information on Coping

According to the Transactional Model by Lazarus and Folkman (1984), stress occurs when external demands surpass an individual’s perceived ability to cope. Coping is generally defined as an individual’s effort to make changes to or reduce negative affect resulting from stressful events (Lazarus & Folkman, 1984). Coping serves to regulate emotions and change the person’s relation to the environment causing distress. Individual characteristics and social environments help to define how a person faces, responds to, and overcomes life events (Pierce, Sarason, & Sarason, 1996). Coping is an ongoing process used on a daily basis to help with interactions and the resulting emotions (Folkman, Lazarus, Gruen, & DeLongis, 1986; Lazarus & Folkman, 1984). The ways in which children and adolescents cope with stress can either increase or decrease the impact of adverse life events, both immediately and remotely. Ineffective coping can result in more short-term emotional distress and propagate the development of physical, psychological, and mental health problems (Compas, Connor-Smith, Saltzman, Thomson, & Wadsworth, 2001).

Lazarus and Folkman (1984) stated that coping can be divided into problem-focused and emotion-focused. Problem-focused coping involves dealing with the problem directly by
confronting the stressor. Emotion-focused coping is an attempt to manage the emotional impact of a stressor (Lazarus & Folkman, 1984)

The coping strategy that is chosen is dependent on the nature of the stressor and the person encountering it. Generally, people focus on attempting to solve the problem (i.e. problem-focused, primary control or approach coping strategies), but if the problem is viewed as beyond a person’s coping ability, that person shifts to attempts to minimize the distress (i.e. emotion-focused, secondary control or avoidant coping strategies) (Carver, Scheier, & Weintraub, 1989; Hampel et al., 2009). However, people sometimes use unhealthy coping strategies poorly matched to the problem (e.g., Folkman & Moskowitz, 2004; Roth & Cohen, 1986).

**Coping with Victimization**

Bullying is a stressful event, and as a result, victims need to make attempts to cope. As with any type of stressful event, individuals may use a variety of coping strategies after being victimized (Newman, Holden, & Delville, 2011). Adaptive coping strategies have helped mediate negative effects related to victimization (Hampel et al., 2009; Kochenderfer-Ladd & Lazarus, 2006; Skinner, 2002) and can work to reduce future victimization (Varjas et al., 2009). In a study looking specifically at coping mechanisms employed by victimized students Skrzypiec and colleagues (2011) found that only about 5% of students felt that they did not cope very well, 32.5% reported coping reasonably well, and 57.8% of the students surveyed reported coping very well with victimization. Yet, while 97.9% of students who were not bullied felt that they coped well with stressors, only 46.2% of those reporting multiple bullying victimizations felt they had coped effectively (Skrzypiec et al., 2011).
Most Commonly Used Coping Strategies Following Bullying

A number of studies have been designed to investigate the most commonly used coping strategies by victims of bullying. There have been some variations in the results accounted for by region and gender. Some studies have found that ignoring the problem, verbal aggression, and physical aggression were among the most often used coping strategies (Camodeca & Goossens, 2005; Mahady et al., 2000). Naylor, Cowie, and Ray (2001) found the most common coping strategy reported by victims in a study from the United Kingdom was to tell someone about the bullying, and the second most common strategy was to ignore and endure the problem. A study of Danish children (Naylor et al., 2001) indicated that the most common strategy was self-reliance or problem solving, followed by distancing oneself from the bully, and seeking social support.

Kochenderfer-Ladd (2004) found emotional reactions mediated coping strategy selection in victims of bullying. If a victim reacted emotionally it was more likely that he or she would seek advice from others on how to stop the problem, which decreased victimization. However, if he or she reacted with anger, this could lead to seeking revenge, which was shown to cause an increase in victimization. Victims have been found to adopt passive and avoidant methods, including withdrawal, escape, keeping to oneself, and ignoring the problem (Rigby, 2002; Smith, 2004) and Hunter and Boyle (2004) found these strategies were associated with poor social and emotional outcomes. Andreou (2001) also reported the use of internalizing strategies by victims and found that they were correlated with lower self-competence scores. Victims may also engage in self-blame, seeing themselves as responsible for their own victimization (Rigby, 2002).

Different coping styles have been associated with gender and age, but other research has indicated that victimized children are not a homogeneous group with regard to coping strategies.
Waasdorp and Bradshaw (2011) identified certain classes characterized by similar coping strategies. The majority of the children in their study (44.0% to 61.9% of the youths) used primarily passive strategies with little use of other coping strategies. A relatively small aggressive response group emerged, as well, tending to endorse physically and verbally aggressive responses. There was an active or support-seeking group in middle school that sought support from a parent or adult, but this group was not present in a high school setting. In high school, there was an undifferentiated group that sought support, told the bully to stop, and/or walked away, but they were not characterized primarily by seeking social support. This undifferentiated group in high school seemed to have more social and emotional problems, possibly suggesting that these responses may not be adaptive in that context (Waasdorp & Bradshaw, 2011).

Hampel and colleagues (2009) examined the adaptive coping styles proposed by Lazarus and Folkman (1984): problem-focused (situation control, positive self-instructions, seeking informational support), emotion-focused coping (minimization, distraction), and maladaptive coping styles (passive avoidance, rumination, resignation, aggression) in victims of bullying. They found that victims of bullying, direct and relational, scored higher on passive avoidance, resignation, and aggression (Hampel et al., 2009). The different types of bullying were also associated with negative affect and harmful tendencies. Direct and relational victimization was associated with more anger control problems, emotional distress, and negative self views. Direct victims also showed some antisocial behavior (Hampel et al., 2009).

Maladaptive coping strategies, passive avoidance, rumination, and resignation were found across victims of all types of bullying (Hampel et al., 2009). Independent of gender maladaptive coping styles contributed to a worsening of the negative effects of victimization.
Yet, their results showed unfavorable effects of victimization on psychological functioning can be mediated by problem-focused coping (Hampel et al., 2009).

Bullying was found to cause changes in the coping styles students reported they would use. In a study by Skrzypiec et al. (2011) 25.6% of the nonbullied students surveyed said they would never seek adult support, compared with 14.3% of bullying victims. This trend extended to peer support with 30% of nonbullied students versus 15.8% of bullied students, saying that they would very often ask friends for help with the bullying, while 23% of those who had been bullied in multiple ways said that they would never use this option. Increased levels of victimization could further change coping styles with differences in responses for those bullied in one, two, and three or more ways. The most bullied respondents reported more use of distancing, externalizing, escaping, and submission. Both those bullied in two ways and those bullied in three or more ways reported a greater use of internalizing coping strategies (Skrzypiec et al., 2011).

Sex Differences in Coping

When faced with bullying, the choice of coping strategies is partly determined by gender. The literature indicates that young female victims are more likely than young males to seek social support, use reference to others, internalize, and use avoidance as preferred coping styles (Camodeca & Goossens, 2005; Eschenbeck et al., 2007; Kochenderfer-Ladd & Skinner, 2002; Kristensen & Smith, 2003; Poynton & Frydenberg, 2011; Roecker Phelps, 2001; Rose & Rudolph, 2006). The use of these coping styles may be a result of it being normative that it is more socially acceptable for females than males to seek support from others, creating an environment in which they feel comfortable to approach others with regard to problems (Rigby, 1999).
Consistent with these studies, a number of others have found that while social support seeking and internalizing are strategies most commonly used by girls, boys tend to use more externalizing strategies (Causey & Dubow, 1992; Frydenberg & Lewis, 1991; Hunter et al., 2004; Naylor et al., 2001). For example, Owens, Daly, and Slee (2005) found that when compared with males, females used more compromise strategies (i.e. reasoning, listening, understanding, compromising, and smoothing things over), obliging strategies (i.e. fulfilling the needs of others first, apologizing, and giving in to another person), and avoidance strategies (i.e. walking away, withdrawing, holding feelings and words inside, and remaining distant). On the other hand, boys have consistently been found to be more likely to use externalizing strategies (i.e. taking it out on others, yelling, cursing, and getting mad) (Bijttebier & Vertommen, 1998), physical aggression (Craig et al., 2007; Kristensen & Smith, 2003), or avoidance and distancing responses (Camodeca & Goossens, 2005; Eschenbeck et al., 2007; Hampel & Petermann, 2005).

Females have been found to use a wide range of coping strategies and were more likely than males to use effective coping strategies (Kristensen & Smith, 2003; Skrzypiec et al., 2011; Smith et al., 2001). Skrzypiec and colleagues (2011) found there were significant differences in most coping styles that they measured (i.e., seeking adult support, seeking peer support, problem solving, distancing, internalizing, escape, and nonchalance), where females scored higher than males in all, though no sex differences were found for submission and externalizing. However, coping style sex differences decreased as victimization increased, to the point that no sex differences were found in students bullied in multiple ways (Skrzypiec et al., 2011).
Social Support

Bullying is often unreported or underreported with many victims choosing not to seek help; however, some research has found contrary results suggesting that some victims will seek social support from friends, parents, teachers, or counselors (Rigby, 2002; Smith, Talamelli, & Cowie, 2004). Social support is the presence or perceived presence of caring, available assistance from others, and belief about or existence within a social network (Rigby, 2002). Seeking social support appears to depend on many factors including gender, age, and the type of victimization. As victims age, they are less likely to seek social support (Hunter et al., 2004).

A handful of studies have demonstrated that a high level of perceived social support can mitigate the negative effects of bullying (Newman, Holden, & Delville, 2005; Rigby, 2000) through either the supportive actions or just the belief that support is available (Barrera, 1986; Lakey & Cohen, 2000; Lakey & Drew, 1997). Social support can impact coping behaviors directly by reducing negative effects through getting hurtful feelings and emotions out (Weidong, Rukavina, & Wright, 2012) or provide resources and information on more effective coping strategies (e.g., Beehr & McGrath, 1992; Lakey & Cohen, 2000).

An individual’s feelings about his or her social support network can improve or hinder the utility of this coping style. The level of connection that a person feels toward members of his or her social network will have a direct impact on the effectiveness of the support he or she receives (Marsella & Snyder, 1981). Malecki, Demaray, and Davidson (2008) and Espelage and Swearer, (2011) found that perceptions of social support mediated the relationship between victimization and personal adjustment, clinical maladjustment, and emotional symptoms. The predictive power of being victimized in schools on negative affect and negative adjustment was eliminated after social support was taken into account.
In adolescence peers serve as the primary support group. However, this is not an absolute. An unpopular student’s nonpeer’s social relationships (i.e. siblings, parents, grandparents, and extended family members) may protect against negative outcomes such as delinquency, loneliness, and social maladaptation through emotional support and fostering social skills development for peer interactions (Rivers, 2011). Fonag, Steele, Steele, Higgit, and Target (1994) argued that certain social situations (i.e. positive parenting, a good relationship with a primary caregiver, the availability of social support, informal and formal social support, and an involvement in organized religion) can provide a cushion against difficulties. The usefulness of social support can vary based on gender. Kochenderfer-Ladd and Skinner (2002) found that social support assisted victimized girls, but where boys using this strategy were placed at a disadvantage, becoming less well-liked by peers compared to those who used different coping styles.

**Rumination**

Much of the coping literature has supported a trend in which individuals tend to ruminate more when faced with a distressing event (Lyubomirsky & Tkach, 2004; Nolen-Hoeksema & Davis, 1999; Nolen-Hoeksema & Morrow, 1991). Rumination is a way of responding in which the individual repetitively focuses on symptoms of distress as well as the distress’s causes and consequences instead of focusing on active problem solving (Nolen-Hoeksema, Wisco, & Lyubomirsky, 2008). Among a school-aged population bullying may be one of the most frequently encountered distressing events. Therefore, victimization may increase rumination, thereby substantiating further depressive symptoms (Erdur-Baker, 2009).

Rumination tends to enhance the intensity and duration of negative affect and increase attention given to the negative side of events and victims’ pessimism about themselves and their

Adolescents who ruminate are more likely to experience depression because of this passive and repetitive way of dealing with negative affect (Erdur-Baker, 2009). As rumination and peer victimization increase and as perceived problem-solving ability decreases, depressive symptoms increase. Victimization, rumination, problem-solving, and the interaction between these factors and gender appear to lack joint predictive power, suggesting each is independently related to depressive symptoms (Erdur-Baker, 2009).

Effectiveness of Coping Methods

Negative, persistent, long-term effects of victimization may be dependent upon the coping styles that a child or adolescent chooses to employ (Hunter & Boyle, 2004; Kochenderfer-Ladd, 2003; Kochenderfer-Ladd & Skinner, 2002). Newman and colleagues (2011) examined residual effects of victimization in a college sample and analyzed the results based on the use of different coping mechanisms. They found that a history of bullying was associated with a greater use of all three coping strategies they measured (i.e., problem-focused coping, emotion-focused coping, and avoidant coping). The authors hypothesized that use of all coping styles increased because when faced with frequent victimization one tries to adapt and structure his or her environment in any way possible. For example, addition to avoiding the stressor through the use of various distractions (avoidance being the most frequent strategy reported in the literature), one might problem solve, such as changing one’s route to school.
(Newman et al., 2011). However, mere use of a coping strategy does not imply that it is always effective.

The authors also found that coping strategies partially mediated the direct path between victimization and stress, but the pathway remained significant. The indirect pathways from victimization to stress through both problem-focused and avoidant coping were significant; however, the indirect path through avoidant coping was significantly stronger than paths through any other strategy (Newman et al., 2011). Although victimization increased all types of strategies, an avoidant coping style seemed to prolong stress responses. According to the authors, these findings suggest an increase in stress during college because victims may have developed coping strategies that are maladaptive when dealing with stressors other than bullying (an uncontrollable stressor (Newman et al., 2011). The authors suggested that victimization and the resulting coping efforts have lingering effects on future coping strategies. Certain coping strategies may result in a vicious cycle where stress (being victimized) leads to poor coping, which in turn leads to further stress. Some of these strategies are more beneficial to the emotional health of an individual. For example, problem-focused coping was not found to be a significant mediator between victimization and stress, suggesting that those who used more adaptive forms of coping were not as susceptible to the increased stress in college. In other words, victims capable of effectively using a larger repertoire of strategies in childhood are able to adequately deal with stress later in life (Newman et al., 2011).

Many positive coping strategies have been found to moderate the relationship between victimization and negative affect. The emotion-focused coping strategies of compensation, denial, and developing a positive attitude toward victimization were found to moderate the relationship between being bullied, health problems, and well-being (Dehue, Bolman, Völlink, &
Pouwelse, 2012). Support seeking from peers and family showed a significant buffering effect, moderating the relationship between victimization and depression (Machmutow, Perren, Sticca, & Alsaker, 2012). Problem-focused coping has been found to moderate the relationship between victimization and substance abuse (Brady, Tschann, Pasch, Flores, & Ozer, 2009). Both problem-focused and emotion-focused coping have been found to significantly moderate the relationship between victimization and negative outcomes, the most severe of which is obviously suicide.

**Reasons For Living**

As mentioned earlier, there is a well-supported relationship between bullying and suicide ideation. For example, Rigby and Slee (1999) found that victimized students were at the highest risk for suicide in their sample. Consistent with this, the Victoria Coroner found that 40% of suicide victims had been bullied in school (Field, 2013). Further, Hershberger and D’Augelli (1995) found that 42% of LGBT youths had attempted suicide after experiencing bullying victimization.

Numerous studies have consistently demonstrated that reasons for living may play protective roles in preventing individuals from putting their suicidal thoughts into action or from engaging in suicidal ideation (Richardson-Vejlgaard, Sher, Oquendo, Lizardi, & Stanley, 2009). Linehan and Goodstein (1983) found that suicidal and nonsuicidal individuals differ in how they view life-oriented beliefs and expectancies. In both general and clinical populations, they found that individuals reporting prior suicidal behavior reported having fewer important reasons for living when considering suicide when compared to those with no history of suicidal behavior. Research involving a college population (Connell & Meyer, 1991) revealed that nonsuicidal
individuals compared to individuals with a history of suicide attempts had greater survival and coping beliefs, a greater responsibility to their family, and more moral objections to suicide.

However, the relationship between bullying victimization and reasons for living per se has not yet been explored. In fact, a search of a standard literature database (PsycINFO) using the key terms “reasons for living” and “bullying,” revealed no studies at all. The first term alone yielded 263 articles, and the latter yielded 4,970 at the time of this writing. With an increasing “reasons for living” literature, it seems important to extend it to encompass the topic of bullying.

**Current Study**

Prior research has suggested that victimization is linked with an increase in negative outcomes such as depression, anxiety, stress, rumination, and suicidal ideation. These negative outcomes can persist into adulthood and perhaps worsen over time or predispose one to other difficulties in adulthood. It has been shown that maladaptive coping can exacerbate negative symptoms while adaptive coping (problem-focused and emotion focused) can reduce some of the negative impact of victimization. This author sought to examine literature-supported predictions pertaining to the relationships between bullying, tendencies toward rumination, symptoms of depression, anxiety, stress, and to beliefs and expectancies related to suicide (i.e., reasons for living). Further, the author examined the extent to which particular approaches to coping mediated or moderated the effects of bullying victimization.

**Hypotheses**

1. Males would report experiencing all types of bullying victimization (physical, verbal, relational) more than females.

2. Bullying victimization would be positively related to depression, anxiety, stress, and rumination and negatively related to reasons for living.
3. Rumination would mediate the relations between victimization and depression, anxiety, and stress.

4. Greater reports of bullying victimization would be related to greater use of adaptive (problem-focused and emotion-focused) and maladaptive coping strategies.

5. Maladaptive coping strategies would mediate the relationship between bullying victimization and depression, anxiety, stress, and reasons for living.

6. Problem-focused coping strategies would moderate the relationship between bullying victimization and depression, anxiety, stress, and reasons for living such that those who used more problem-focused coping would be buffered from bullying effects.

7. Emotion-focused coping strategies would moderate the relationship between victimization and depression, anxiety, stress, and reasons for living such that those who used more emotion-focused coping would be buffered from bullying effects.
CHAPTER 2

METHODS

Participants

Participants of this project were 642 students at a moderately sized university in the southeastern United States. Participants had a mean age of 21.11 years (SD = 5.69 years) and 178 (27.7%) were male and 449 (69.9%) were female.

Procedure

This project involved analyses of extant data. The 642 participants completed an online survey that encompassed a variety of variables pertaining to several projects of interest to the researchers. The measures selected for the current study were thus part of a much larger database consisting of 23 different measures. Of those, six measures were selected for inclusion in the current study and are described below.

The study received approval from the relevant Institutional Review Board prior to data collection. Participants were recruited via an online participant management system that uses tracking numbers to ensure anonymity is maintained. Participation was voluntary and each participant was awarded modest credit applicable to a psychology course.

Measures

Demographic Questionnaire

A basic demographic survey assessing age, sex, race, student status, grade point average, and income was administered to all participants to assist with characterization of the sample and to serve as covariates.
Retrospective Bullying Questionnaire

The Retrospective Bullying Questionnaire (RBQ) was derived from a questionnaire developed by Rivers (2001). In its current version, the RBQ contained 44 items, with most being multiple-choice, and some open-answer. The following definition of bullying opened up the questionnaire: “Bullying is an intentional hurtful behavior. It can be physical or psychological. It is often repeated and characterized by an inequality of power so that it is difficult for the victim to defend him/herself.”

The RBQ covers six types of victimization in school (two physical, being hit or punched and stolen from; two verbal, being called names and threatened; and two relational, having lies told and being excluded), the frequency, perceived seriousness, and duration of bullying, the gender of bullies, and the number of bullies encountered. Questions are asked for elementary, middle, and high school years. This survey includes a question regarding suicidal ideation and self-harm for victims of bullying. While was normed in various countries (e.g., UK, Spain, Germany), the RBQ has not been widely used or normed in the United States (despite having been written originally in English and translated into German and Spanish) with one exception being the work of Chambless (2011). The RBQ has been found to have good test-retest reliability for elementary school victimization ($r = .88$) and for middle and high school victimization ($r = .87$) (Schafer et al., 2004).

This study is focused on middle and high school victims and examining physical, verbal, and relational bullying using the following definition by Schafer and colleagues (2004): “A person was considered a victim when they reported being bullied in one or more ways ‘sometimes’ or more (frequency) and classified this as ‘quite serious’ or ‘extremely serious’
(intensity),” (Schafer et al., 2004, p. 384-385). The RBQ in the current data set had a Cronbach’s Alpha of .75.

In order to assess high school victimization, two questions were analyzed for each type of bullying (physical, verbal, and relational). These questions were prefaced with a description of the types of bullying (e.g. The next questions are about physical forms of bullying – hitting and kicking, and having things stolen from you). Participants were then asked “How often did the above occur?” with possible responses being “Never”, “Rarely”, “Sometimes”, “Frequently”, or “Constantly” and “How serious did you consider these bullying-attacks to be?” with possible responses being “I wasn’t Bullied”, “Not at all”, “Only a bit”, “Quite Seriously”, and “Extremely Seriously.” Based on the definition of a victim by Schafer and colleagues (2004), if a participant responded to the question of frequency with any response between “Sometimes” and “Constantly” and responded to the intensity question with “Quite Serious” or “Extremely Serious” he or she was classified as a victim. If a participant did not meet these criteria, he or she was not classified as a victim. In SPSS this gave a possible 0 (not a victim) and 1 (victim) coding for each type of bullying. These three variables were combined for an overall victimization index with possible scores ranging from 0 to 3.

Data were encoded in this manner to match the definition of a victim set forth by Schafer and colleagues (2004). During a literature review (PsychInfo), this scale was not used in this way previously. There were only four listed uses of this questionnaire with little information on how the measure was scored. One author (Chambless, 2010) relied solely on the intensity scale and used it as a continuous variable. The victimization index was chosen instead as relying just on the intensity question as that question alone does not give necessary information about the frequency of victimization
The Brief COPE

The Brief COPE is a 28-item measure consisting of 14 two-item scales used to assess several responses known to be relevant to effective and ineffective coping (Carver, 1997). This scale was developed after researchers noticed that the clinical samples become impatient with the full COPE (Carver et al., 1993), possibly due to redundancy within the individual scales. The Brief COPE reduced scales from the original four-item scales to two-item scales, dropped two scales due to little value being found in previous research and redundancy with other scales, and added an additional scale (Self-Blame Scale) guided by research findings since the publication of the initial scale (Carver, 1997; Carver et al., 1989). The Brief COPE includes scales that measure problem-focused coping (active coping, planning, using instrumental support), emotion-focused coping (using emotional support, positive reframing, acceptance, denial, religion, and humor); and maladaptive coping (venting, behavioral disengagement, substance abuse, self-distraction, and self-blame) (Carver, 1997; Carver et al., 1989). The alpha reliabilities of the scales averaged across three administrations included in this measure have been found to range from α =.50 (for venting) to α =.90 (for substance abuse) (Carver, 1997). In the current administration alpha reliabilities ranged from α =.76 (for Self Distraction) to α =.91 (for substance abuse).

Depression, Anxiety, and Stress Scale (DASS)

The DASS is a 42-item self-report measure that assesses for symptoms associated with depression, anxiety, and stress in adolescents and adults with regard to experiences in the past week. Participants rate items on a 4-point Likert scale with responses ranging from 0 (did not apply to me at all) to 3 (applied to me very much or most of the time). Researchers indicated the DASS shows good internal consistency with alpha coefficients ranging from .84 (Anxiety subscale) to .95 (Depression subscale) (Lovibond & Lovibond, 1995). Readministration across a
6-week time span demonstrated solid test-retest reliability, especially taking into account the fact it measures symptoms that may fluctuate and that are specifically referenced to the previous week ($r = .57–.67, p < .001$). The subscales of the DASS are significantly correlated ($r = .79–.83, p < .01$), as would be expected given the overlap between the key variables. It was also found that means and standard deviations for the DASS administered in an internet format were not significantly different from paper-and-pencil forms of the measure (Zlomke, 2009). In the current administration alpha coefficients for Depression was $\alpha = .95$, Anxiety was $\alpha = .92$, and Stress was $\alpha = .95$.

**Dissipation-Rumination Scale (DRS)**

The DRS is a 42-item measure with a 6-point Likert scale (0= completely false for me, 5=completely true for me) where those higher in rumination and low in dissipation score higher than high dissipaters-low ruminators (Caprara, 1986). Rumination is a tendency to cognitively perseverate on negative situations and emotions including anger, worry, and/or sadness, while dissipation is the tendency to ‘let go’ of negative cognitions such that a person less emotionally burdened by them. High rumination-low dissipation is associated with greater dysfunction and thus may have higher levels of depression or anxiety, find it difficult to forgive others, or be prone to aggressive responses. On the other hand, low rumination-high dissipation is associated with more adaptive responses to stressors (e.g., Burnette, Taylor, Worthington, & Forsyth, 2007; Collins & Bell, 1997).

The scale has demonstrated good internal consistency with reported alpha coefficients ranging from .79 to .87 (Caprara, 1986). Test-retest reliability for a 24-hour period was 0.81 (Caprara, 1986), yet that is an unusual time-frame in which to measure test stability and other studies have not addressed that issue. In regards to construct validity those with higher levels of
rumination were found to be relatively more likely to return an insult and retaliate aggressively following provocation (Caprara, 1986; Collins & Bell, 1997). The alpha coefficient for the current administration was $\alpha = .87$.

**Expanded Reasons for Living Inventory**

The Expanded Reasons for Living Inventory (RFL; Linehan, Goodstein, & Nielsen, 1983) is a 72-item measure of beliefs related to suicide. The RFL differs from most suicidal measures in that it assesses adaptive coping skills and beliefs rather than negative traits in suicidal individuals. The respondents rate statements on a 6-point Likert scale of how important a reason would be for living, ranging from 1 (not at all important) to 6 (extremely important). There are six subscales in the RFL including Survival and Coping Beliefs (SCB), Responsibility to Family (RF), Child-related Concerns (CRC), Fear of Suicide (FS), Fear of Social Disapproval (FSD), and Moral Objections (MO) (Linehan et al., 1983). The first three subscales are considered positive reasoning, addressing reasons to live; the latter three are considered negative reasoning, addressing reasons not to die by suicide. The 24-item Responsibility to Friends subscale is included in the expanded RFL. This subscale was originally omitted after a factor analysis but may tap into additional reasons for living, and, therefore, was kept in the expanded inventory.

The RFL has been shown to have good internal consistency, with previously reported Cronbach alpha coefficients on each subscale ranging from .72 to .95 (e.g., Lamis, Ellis, Chumney, & Dula, 2009; Linehan et al., 1983;). There is also evidence of construct validity as it has been shown to differentiate between suicidal and nonsuicidal individuals as well as attempters and nonattempters (Connell & Meyer, 1991; Linehan et al., 1983). The current
administration’s subscale alpha coefficients ranged from $\alpha = .81$ (for Fear of Social Disproval) to $\alpha = .96$ (for Survival and Coping Beliefs).

**Statistical Analyses**

**MANOVA**

In order to test the first hypothesis that males will experience more of all types of victimization, a MANOVA was conducted with sex as the predictor variable (males vs. females) and the outcome variables of frequency of the three types of victimization as measured by items on the RBQ (physical, verbal, and relational).

**Linear Regression**

In order to test the second hypothesis that an increase in victimization would be related to an increase in depression, anxiety, and stress, an index of the number of types of bullying experienced in high school (adding physical, verbal, and relational creating possible scores of 0, 1, 2, and 3) was entered as the predictor into multiple linear regression analyses with Depression, Anxiety, and Stress (as measured by the DASS) as outcome variables. To test that victimization would be associated with fewer endorsed reasons for living an index of victimization was entered as the predictor into a linear regression with Reasons for Living, both overall, and the subscales as outcome variables. Linear regression was chosen so that the analysis could control for sex as a covariate and so that the statistical analysis would be consistent with the processes used in the later mediation and moderation models. Sex was entered in the first step of the linear regression to serve as a statistical control, given that previous research has indicated some differences in bullying effects based on gender.

In order to test the third hypothesis that an increase in victimization is linked with greater rumination, an index of the number of types of bullying experienced in high school was entered
as the predictor into a linear regressions with Rumination (as measured by the DRS) as the outcome variable.

In order to test the fourth hypothesis that a history of victimization would be associated with a greater use of all coping mechanisms, both adaptive (problem-focused and emotion-focused) and maladaptive, the bullying index was entered as a predictor in a linear regression with an index of adaptive and maladaptive methods listed on the Brief COPE as the outcome variables.

Mediation Models

In order to test the third hypothesis, that rumination will serve as a mediator between victimization and depression, anxiety, and stress, and the seventh hypothesis, that maladaptive coping strategies would mediate the relationship between victimization and negative emotions and reasons for living, a mediation model was conducted using the bootstrapping method created by Preacher and Hayes (2008). The authors’ Indirect Macro was used within SPSS to test the indirect pathways between victimization and depression, anxiety, and stress with rumination serving as a mediator. This Indirect Macro for testing indirect pathways was also used to test maladaptive coping as a mediator between victimization and depression, anxiety, stress, the overall RFL score and the RFL subscales pertaining to the ninth hypothesis. In all of the mediation models, sex was entered as a covariate to determine if it has any effect on the model.

Moderation Models

In order to test the sixth and seventh hypotheses that Adaptive coping (Problem-Focused and Emotion-Focused) would moderate the relationship between victimization and negative emotions (depression, anxiety, and stress) and the Reasons for Living Inventory, moderation analyses were conducted in SPSS. These were done by centering the continuous variables, the
victimization index for high school, and the Problem-Focused and Emotion-Focused coping measures and then creating a cross product of the two centered variables. Subsequently, a multiple linear regression was conducted with the two centered variables and their cross product entered as predictors and the subscales of the DASS and the subscales and total for the RFL being entered as outcome variables. Sex was controlled for in the moderation analysis. Any significant interaction terms were decomposed using methods outlined by Aiken and West (1991).

**Power Analysis**

In order to determine the sample size needed, G*Power 3.1.2 was used. The sample sizes were calculated based on the most saturated proposed analyses within the hypotheses. In this case the proposed mediation models had the most independent variables. Estimated variance by special effect and residual variance were estimated based on previous mediation analyses done on the subject (Hyatt, 2013). An average of the predicted variance of the models was used as the Estimated variance by special effect. \( R^2 \) ranged from .015-.260 (M=.106). Based on this estimation, the residual variance was .894. G*Power estimated the effect size at .119. For the proposed mediation modes, the total number of predictors was 6 with the tested number of predictors being 4. G*Power calculated the total sample size needed to be 162 for \( \alpha \) error probability of .05. The obtained sample for the proposed analyses is 642, which is more than the needed sample size.
CHAPTER 3

RESULTS

Descriptive Statistics

Participants in this project were 642 students (12 nondegree seeking, 3 graduate, and 627 undergraduate) of a moderately sized university in the southeastern United States. Participants had a mean age of 21.11 years ($SD = 5.69$ years) and 178 (27.7%) were male and 449 were female (69.9%). Further descriptive statistics are provided in Table 1.

Table 1.

Demographic Data For All Participants

<table>
<thead>
<tr>
<th>Variable</th>
<th>Category</th>
<th>Value</th>
<th>Percentage of Sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Mean</td>
<td>21.11</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Range</td>
<td>16-60</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Standard Deviation</td>
<td>5.69</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>Male</td>
<td>178</td>
<td>27.7%</td>
</tr>
<tr>
<td></td>
<td>Female</td>
<td>449</td>
<td>69.9%</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>African American</td>
<td>33</td>
<td>5.1%</td>
</tr>
<tr>
<td></td>
<td>American Indian</td>
<td>7</td>
<td>1.1%</td>
</tr>
<tr>
<td></td>
<td>Asian American</td>
<td>7</td>
<td>1.1%</td>
</tr>
<tr>
<td></td>
<td>Caucasian</td>
<td>439</td>
<td>68.4%</td>
</tr>
<tr>
<td></td>
<td>Hispanic</td>
<td>18</td>
<td>2.8%</td>
</tr>
<tr>
<td></td>
<td>Other</td>
<td>45</td>
<td>7.0%</td>
</tr>
<tr>
<td>Level of Education</td>
<td>Freshman</td>
<td>311</td>
<td>48.4%</td>
</tr>
<tr>
<td></td>
<td>Sophomore</td>
<td>122</td>
<td>19.0%</td>
</tr>
<tr>
<td></td>
<td>Junior</td>
<td>78</td>
<td>12.1%</td>
</tr>
<tr>
<td></td>
<td>Senior</td>
<td>116</td>
<td>18.1%</td>
</tr>
<tr>
<td></td>
<td>Graduate</td>
<td>3</td>
<td>0.5%</td>
</tr>
<tr>
<td></td>
<td>Nondegree Seeking</td>
<td>12</td>
<td>1.9%</td>
</tr>
</tbody>
</table>

Hypothesis 1 predicted that males would report experiencing all types of bullying victimization (physical, verbal, relational) more than females. A MANOVA was conducted using
Sex as the predictor variable (males vs. females) and reported frequency of physical, verbal, and relational secondary school victimization as the outcome variables. A one-way MANOVA revealed a significant multivariate main effect for Sex, Wilks’ $\lambda = .952$, $F (3, 588) = 9.812$, $p < .001$, partial eta squared $= .048$. Power to detect the effect was .998. Given the significance of the overall test, univariate main effects were examined.

Significant univariate main effects for Sex were obtained for reported physical victimization, $F (1, 590) = 6.827$, $p < .01$, partial eta square $= .011$, power $= .742$; and reported relational victimization $F (1, 590) = 10.095$, $p < .01$, partial eta square $= .017$, power $= .887$. The Levene’s statistics for physical ($F(1, 590) = 14.552$, $p<.001$) and relational victimization ($F(1, 590) = 7.510$, $p=.006$) reveal that group variances are not equal. Males reported greater physical victimization ($M=1.48$, $SD=.931$) than females ($M=1.29$, $SD=.747$). Females reported more relational victimization ($M=2.20$, $SD=1.25$) than males ($M=1.85$, $SD=1.12$). There was no significant difference in verbal victimization frequency between males ($M=1.89$, $SD=1.085$) and females ($M=1.92$, $SD=1.143$). Despite predictions, males only reported greater frequency of one type of victimization. Thus, Hypothesis 1 was not supported.

Hypothesis 2 predicted that Bullying victimization would be positively related to depression, anxiety, stress, and rumination and negatively related to reasons for living. A Victimization Index of the number of types of bullying experienced in high school (adding physical, verbal, and relational creating possible scores of 0, 1, 2, and 3) was entered as the predictor into multiple linear regressions with outcome variables being reported levels of depression, anxiety, and stress (as measured by the DASS), rumination (as measured on the DRS) and reasons for living (as measured by the RFL). Because of indications in the literature that bullying might have differential effects based on Sex and Ethnicity (with males and ethnic
minorities experiencing more victimization), these factors were entered into the regression as statistical controls in the first step. The first linear regression consisted of the depression subscale of the DASS being regressed onto the Victimization Index. The results are presented in Table 2. Above and beyond the control variables, secondary school victimization was a significant predictor of depression for this sample (b=.23, p<.01) and accounted for 7.2% of the variance in depression.

Table 2.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex Ethnicity</td>
<td>-1.63</td>
<td>2.45</td>
<td>-0.806</td>
<td>-0.088*</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Victimization</td>
<td>2.86</td>
<td>0.534</td>
<td>0.228**</td>
<td>0.052**</td>
</tr>
</tbody>
</table>

Note R²=.072
*p<.05, **p<.01

The second linear regression consisted of the anxiety subscale of the DASS being regressed onto the Victimization Index. The results are presented in Table 3. Above and beyond the control variables, secondary school victimization was a significant predictor of anxiety for this sample (b=.23, p<.01) and accounted for 6% of the variance in anxiety.
Table 3.

**Sequential Regression Analysis Summary for Individual Variables Predicting Anxiety**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td>.286</td>
<td>.677</td>
<td>.019</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1.47</td>
<td>.837</td>
<td>.078</td>
<td>.006</td>
</tr>
<tr>
<td>2. Victimization</td>
<td>2.39</td>
<td>.446</td>
<td>.232**</td>
<td>.054**</td>
</tr>
</tbody>
</table>

Note R²=.060
*p<.05, **p<.01

The third linear regression consisted of the stress subscale of the DASS being regressed onto the Victimization Index. The results are presented in Table 4. Above and beyond the control variables, secondary school victimization was a significant predictor of stress for this sample (b=.21, p<.01) and accounted for 4.8% of the variance in stress.

Table 4.

**Sequential Regression Analysis Summary for Individual Variables Predicting Stress**

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td>1.11</td>
<td>.883</td>
<td>.056</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.96</td>
<td>1.09</td>
<td>.039</td>
<td>.005</td>
</tr>
<tr>
<td>2. Victimization</td>
<td>2.81</td>
<td>.589</td>
<td>.209**</td>
<td>.048**</td>
</tr>
</tbody>
</table>

Note R²=.048
*p<.05, **p<.01

The fourth linear regression consisted of the Dissipation-Rumination Scale (DRS) being regressed onto the Victimization Index. The results are presented in Table 5. Above and beyond the control variables, secondary school victimization was a significant predictor of rumination for this sample, (b=.13, p<.01) and accounted for 1.7% of the variance in rumination.
Table 5.

*Sequential Regression Analysis Summary for Individual Variables Predicting Dissipation-Rumination*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex Ethnicity</td>
<td>.967</td>
<td>1.50</td>
<td>.030</td>
<td></td>
</tr>
<tr>
<td>2. Victimization</td>
<td>2.89</td>
<td>1.06</td>
<td>.127**</td>
<td>.016**</td>
</tr>
</tbody>
</table>

Note: R² = .017

*p < .05, **p < .01

The fifth linear regression consisted of the Reason For Living Inventory (RFL) Total being regressed onto the Victimization Index. The results are presented in Table 6. Above and beyond the control variables, secondary school victimization did not appear to be a significant predictor of the RFL Total.
Table 6.

*Sequential Regression Analysis Summary for Individual Variables Predicting RFL Total*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td>18.21</td>
<td>6.96</td>
<td>0.140</td>
<td>0.020*</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>3.48</td>
<td>9.07</td>
<td>0.021</td>
<td></td>
</tr>
<tr>
<td>2. Victimization</td>
<td>-6.12</td>
<td>4.37</td>
<td>-0.075</td>
<td>0.006</td>
</tr>
</tbody>
</table>

Note: \(R^2 = 0.026\)
*\(p < 0.05\), **\(p < 0.01\)

The next series of linear regressions consisted of the subscales of the RFL (Survival and Coping Beliefs (SCB), Responsibility to Family (RF), Child-related Concerns (CRC), Fear of Suicide (FS), Fear of Social Disapproval (FSD), Moral Objections (MO), and Responsibility to Friends) being regressed onto the Victimization Index. The results are presented in Tables 7-13. The standardized regression coefficient for Survival and Coping Beliefs was -.110. This was significant at \(p = 0.02\). The standardized regression coefficient for Responsibility to Family was -.034. This was not significant with \(p = 0.465\). The standardized regression coefficient for Child-related Concerns was -.157. This was significant at a \(p < 0.01\) level. The standardized regression coefficient for Fear of Suicide was .043. This was not significant \((p = 0.364)\). The standardized regression coefficient for Fear of Social Disapproval was .002. This was not significant \((p = 0.973)\). The standardized regression coefficient for Moral Objections was -.153. This was significant at a \(p < 0.01\) level. The Standardized regression coefficient for Responsibility to Friends was -.105. This was significant at a \(p < 0.05\) level. Thus, above and beyond the control variables, secondary school victimization was a significant independent variable in the determination of variance for Survival and Coping Beliefs (SCB), Child-related Concerns (CRC), Moral Objections (MO), and
Responsibility to Friends. For each of these subscales the Victimization Index was negatively related to reasons for living.

Table 7.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td>6.48</td>
<td>2.05</td>
<td>.150**</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-3.20</td>
<td>2.70</td>
<td>-.056</td>
<td>.026**</td>
</tr>
<tr>
<td>2. Victimization</td>
<td>-3.14</td>
<td>1.35</td>
<td>-.110*</td>
<td>.012*</td>
</tr>
</tbody>
</table>

Note R²=.038  
*p<.05, **p<.01

Table 8.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td>1.83</td>
<td>.644</td>
<td>.130**</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.819</td>
<td>.836</td>
<td>-.045</td>
<td>.019*</td>
</tr>
<tr>
<td>2. Victimization</td>
<td>-.321</td>
<td>.439</td>
<td>-.034</td>
<td>.001</td>
</tr>
</tbody>
</table>

Note R²=.020  
*p<.05, **p<.01

Table 9.

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td>.937</td>
<td>.415</td>
<td>.105*</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.151</td>
<td>.531</td>
<td>-.013</td>
<td>.011</td>
</tr>
<tr>
<td>2. Victimization</td>
<td>-.949</td>
<td>.279</td>
<td>-.157**</td>
<td>.025**</td>
</tr>
</tbody>
</table>

Note R²=.036  
*p<.05, **p<.01
Table 10.

*Sequential Regression Analysis Summary for Individual Variables Predicting FS*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Sex</td>
<td>2.32</td>
<td>.930</td>
<td>.116</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>2.54</td>
<td>1.19</td>
<td>.100</td>
<td>.023**</td>
</tr>
<tr>
<td>2.Victimization</td>
<td>.574</td>
<td>.631</td>
<td>.043</td>
<td>.002</td>
</tr>
</tbody>
</table>

Note R^2=.024  
*p<.05, **p<.01

Table 11.

*Sequential Regression Analysis Summary for Individual Variables Predicting FSD*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Sex</td>
<td>.370</td>
<td>.450</td>
<td>.037</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.253</td>
<td>.576</td>
<td>-.020</td>
<td>.002</td>
</tr>
<tr>
<td>2.Victimization</td>
<td>.010</td>
<td>.312</td>
<td>.002</td>
<td>.000</td>
</tr>
</tbody>
</table>

Note R^2=.002  
*p<.05, **p<.01

Table 12.

*Sequential Regression Analysis Summary for Individual Variables Predicting MO*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR2</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.Sex</td>
<td>1.55</td>
<td>.584</td>
<td>.121**</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.096</td>
<td>.749</td>
<td>-.006</td>
<td>.015*</td>
</tr>
<tr>
<td>2.Victimization</td>
<td>-1.35</td>
<td>.400</td>
<td>-.153**</td>
<td>.023**</td>
</tr>
</tbody>
</table>

Note R^2=.038  
*p<.05, **p<.01
Table 13.

*Sequential Regression Analysis Summary for Individual Variables Predicting Responsibility to Friends*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td>6.08</td>
<td>2.56</td>
<td>0.118*</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.575</td>
<td>3.40</td>
<td>0.008</td>
<td>0.014</td>
</tr>
<tr>
<td>2. Victimization</td>
<td>-3.61</td>
<td>1.70</td>
<td>-0.105*</td>
<td>0.011*</td>
</tr>
</tbody>
</table>

Note R² = .025  
*p < .05, **p < .01

Hypothesis 2 was partially supported. The Victimization Index was positively related to depression, anxiety, stress, and rumination and negatively related to certain subscales on the RFL. However, victimization was not predictive of the RFL Total, Responsibility to Family, Fear of Suicide, or Fear of Social Disproval.

Hypothesis 3 predicted that Rumination would mediate the relations between victimization and depression, anxiety, and stress. To test this hypothesis a mediation model was conducted using the bootstrapping method created by Preacher and Hayes (2008). The Indirect Macro was used to test the indirect pathways between victimization and depression, anxiety, and stress with rumination serving as a mediator. Three separate mediation analyses were conducted: the first with the depression subscale, the second with anxiety subscale, and the third with the stress subscale of the DASS as the outcome variables.

In these analyses Sex and Ethnicity were used as controls based on indications in the literature that these factors can serve to either increase victimization, the impact of victimization, or the coping methods used following victimization. The results of the mediation analyses
support the hypothesis that rumination serves as a mediator between victimization and the subscales of the DASS. The results of the individual mediations are presented below.

The Victimization Index significantly predicted depression, as shown in the earlier linear regression. The model summary had an $R^2$ of .194. Thus, the model predicted 19.4% of the variance in Depression, significant at $p<.001$. Each of the pathways represented in the model was also significant (see Table 14). The effect of victimization on depression before factoring rumination as a Mediator (path c) was 2.86. Once paths A and B were considered (path c’), this dropped to 2.29. The significance of both was $p<.001$, but the decrease indicated partial mediation. The Preacher and Hayes (2004) bootstrapping method yielded similar results. The point estimate of Indirect Effects of victimization on depression through rumination (AB paths) was significant ($b=.56$, $se=.24$, 95 CI = .1457, 1.06). These confidence intervals indicated significant partial mediation.
Table 14.

*Rumination as a Mediator Between Victimization and Depression*

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A</td>
<td>2.83 **</td>
<td>1.07</td>
</tr>
<tr>
<td>Path B</td>
<td>.202 **</td>
<td>.023</td>
</tr>
<tr>
<td>Path C</td>
<td>2.86 **</td>
<td>.570</td>
</tr>
<tr>
<td>Path C’</td>
<td>2.29 **</td>
<td>.532</td>
</tr>
</tbody>
</table>

Partial Effect of Control Variables on DV

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>-1.77*</td>
<td>.763</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>2.19*</td>
<td>1.03</td>
</tr>
</tbody>
</table>

R²=.194

*p<.05, **p<.01
The Victimization Index significantly predicted anxiety, as shown in the earlier linear regression. The model summary had an R² of .162. Thus, the model predicted 16.2% of the variance in Anxiety, significant at p<.001. Each of the pathways represented in the model was also significant (see Table 15). The effect of victimization on anxiety before factoring rumination as a Mediator (path c) was 2.52. Once paths A and B were considered (path c’), this dropped to 2.10. The significance of both was p<.001, but the decrease indicated partial mediation. The Preacher and Hayes (2004) bootstrapping method yielded similar results. The point estimate of Indirect Effects of victimization on anxiety through rumination (AB paths) was significant (b=.41, se=.18, 95 CI = .104, .825). These confidence intervals indicated significant partial mediation.
Table 15.

*Rumination as a Mediator Between Victimization and Anxiety*

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A</td>
<td>2.91**</td>
<td>1.09</td>
</tr>
<tr>
<td>Victimiation&gt;Ruminati on Path B</td>
<td>.144**</td>
<td>.020</td>
</tr>
<tr>
<td>Path C</td>
<td>2.52**</td>
<td>.481</td>
</tr>
<tr>
<td>Victimiation&gt;Anxiety Path C</td>
<td>2.10**</td>
<td>.459</td>
</tr>
<tr>
<td>Partial Effect of Control Variables on DV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>-.117</td>
<td>.661</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1.47</td>
<td>.870</td>
</tr>
</tbody>
</table>

R²=.155

*p<.05, **p<.01
The Victimization Index significantly predicted stress, as shown in the earlier linear regression. The model summary had an R\(^2\) of .223. Thus, the model predicted 22.3% of the variance in stress, significant at \(p<.001\). Each of the pathways represented in the model was also significant (see Table 16). The effect of victimization on stress before factoring rumination as a Mediator (path c) was 2.91. Once paths A and B were considered (path c’), this dropped to 2.17. The significance of both of these was \(p<.001\), but the decrease indicated partial mediation. The Preacher and Hayes (2004) bootstrapping method yielded similar results. The point estimate of Indirect Effects of victimization on stress through rumination (AB paths) was significant (b=.75, se=.30, 95 CI = .117, 1.35). These confidence intervals indicate significant partial mediation.
Table 16.

*Rumination as a Mediator Between Victimization and Stress*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A</td>
<td>3.02**</td>
<td>1.09</td>
</tr>
<tr>
<td>Victimization&gt;Ruminati on</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path B</td>
<td>.245**</td>
<td>.025</td>
</tr>
<tr>
<td>Rumination&gt;Anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path C</td>
<td>2.91**</td>
<td>.629</td>
</tr>
<tr>
<td>Victimization&gt;Anxiety</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path C’</td>
<td>2.17**</td>
<td>.575</td>
</tr>
<tr>
<td>Partial Effect of Control Variables on DV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.814</td>
<td>.829</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.917</td>
<td>1.08</td>
</tr>
</tbody>
</table>

*R^2=.223*

*p<.05, **p<.01

Hypothesis 4 predicted that greater reports of bullying victimization would be related to greater use of Adaptive (Problem- Focused and Emotion- Focused) and Maladaptive coping strategies. The previously mentioned bullying index was entered as a predictor in a linear regression with an index of adaptive and maladaptive methods listed on the Brief COPE as the outcome variables. One analysis was performed with adaptive coping strategies as the outcome variable and a second was performed with Maladaptive Coping as the outcome variable. In these analyses, Sex and Ethnicity were used as controls based on indications in the literature that these
factors can serve to either increase victimization, the impact of victimization, or the coping methods used following victimization. This hypothesis was supported by significant regressions for both Adaptive and Maladaptive coping strategies. Details for the specific regressions are included below.

The first linear regression consisted of the Adaptive Coping Strategies (Problem-Focused and Emotion-Focused) being regressed onto the Victimization Index. The results are presented in Table 17. Above and beyond the control variables, secondary school victimization is a significant predictor of adaptive coping methods for this sample (b=.12, p<.05) and accounted for 3.7% of the variance.

Table 17.

*Sequential Regression Analysis Summary for Individual Variables Predicting Adaptive Coping Methods*

<table>
<thead>
<tr>
<th></th>
<th>B</th>
<th>SE</th>
<th>β</th>
<th>ΔR²</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Sex</td>
<td>3.30</td>
<td>1.35</td>
<td>.117*</td>
<td></td>
</tr>
<tr>
<td>Ethnicity</td>
<td>3.72</td>
<td>1.57</td>
<td>.114*</td>
<td>.026**</td>
</tr>
<tr>
<td>2. Victimiation</td>
<td>2.00</td>
<td>.887</td>
<td>.109*</td>
<td>.012*</td>
</tr>
</tbody>
</table>

Note R²=.037
*p<.05, **p<.01

The second linear regression consisted of the Maladaptive Coping Strategies being regressed onto the Victimization Index. The results are presented in Table 18. Above and beyond the control variables, secondary school victimization was a significant predictor of Maladaptive Coping methods for this sample (b=.18, p<.01) and accounted for 3.2% of the variance in maladaptive coping.
Hypothesis 5 predicted that Maladaptive Coping Strategies (as measured by the Brief COPE) would mediate the relationship between bullying victimization and depression, anxiety, stress, and reasons for living. To test this hypothesis a mediation model was conducted using the bootstrapping method created by Preacher and Hayes (2008). The Indirect Macro was used to test the indirect pathways between victimization and depression, anxiety, and stress with Maladaptive Coping Strategies serving as a mediator. For the subscales of the DASS, three separate mediation analyses were conducted: the first with the depression subscale, the second with anxiety subscale, and the third with the stress subscale as the outcome variables.

In these analyses, Sex and Ethnicity were used as controls based on indications in the literature that these factors can serve to either increase victimization, the impact of victimization, or the coping methods used following victimization. The results of the mediation analyses support the hypothesis that Maladaptive Coping serves as a mediator between victimization and the subscales of the DASS. The results of the individual mediations are presented below. The section of the hypothesis related to the Reason for Living Inventory was only partially supported.
The Victimization Index significantly predicted depression, as shown in the earlier linear regression. The model summary had an $R^2$ of .258. Thus, the model predicted 25.8% of the variance in Depression, significant at $p<.001$. Each of the pathways represented in the model was also significant (see Table 19). The effect of victimization on depression before factoring rumination as a Mediator (path c) was 2.55. Once paths A and B were considered (path c’), this dropped to 1.42 and significance dropped from $p<.001$ to $p=.008$, indicating partial mediation. The Preacher and Hayes (2004) bootstrapping method yielded similar results. The point estimate of Indirect Effects of victimization on depression through rumination (AB paths) was significant ($b=1.11$, se=.35, 95 CI = .5003, 1.923). These confidence intervals indicate significant partial mediation.
Table 19.

*Maladaptive Coping as a Mediator Between Victimization and Depression*

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A</td>
<td>1.85 **</td>
<td>.45</td>
</tr>
<tr>
<td>Maladaptive&gt;Maladaptive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path B</td>
<td>.610 **</td>
<td>.056</td>
</tr>
<tr>
<td>Maladaptive&gt;Depression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path C</td>
<td>2.55 **</td>
<td>.590</td>
</tr>
<tr>
<td>Maladaptive&gt;Depression</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path C'</td>
<td>1.42 **</td>
<td>.534</td>
</tr>
<tr>
<td>Partial Effect of Control Variables on DV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>-1.76*</td>
<td>.755</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.844</td>
<td>.98</td>
</tr>
</tbody>
</table>

R²=.258

*p<.05, **p<.01*
The Victimization Index significantly predicted anxiety, as shown in the earlier linear regression. The model summary had an $R^2$ of .192. Thus, the model predicted 19.2% of the variance in Anxiety, significant at $p<.001$. Each of the pathways represented in the model was also significant (see Table 20). The effect of victimization on anxiety before factoring Maladaptive Coping as a Mediator (path c) was 2.23. Once paths A and B were considered (path $c'$), this dropped to 1.57. The significance of both was $p<.001$ but a decrease indicated partial mediation. The Preacher and Hayes (2004) bootstrapping method yielded similar results. The point estimate of Indirect Effects of victimization on anxiety through rumination (AB paths) was significant ($b=.65$, $se=.24$, 95 CI = .279, 1.24). These confidence intervals indicate significant partial mediation.
Table 20.

**Maladaptive Coping as a Mediator Between Victimization and Anxiety**

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A</td>
<td>1.60 **</td>
<td>.457</td>
</tr>
<tr>
<td>Path B</td>
<td>.412 **</td>
<td>.048</td>
</tr>
<tr>
<td>Path C</td>
<td>2.23 **</td>
<td>.492</td>
</tr>
<tr>
<td>Path C’</td>
<td>1.57 **</td>
<td>.461</td>
</tr>
</tbody>
</table>

Partial Effect of Control Variables on DV

<table>
<thead>
<tr>
<th>Variables</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>.206</td>
<td>.659</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.462</td>
<td>.844</td>
</tr>
</tbody>
</table>

R²=.192

*p<.05, **p<.01
The Victimization Index significantly predicted stress, as shown in the earlier linear regression. The model summary had an $R^2$ of .181. Thus, the model predicted 18.1% of the variance in stress, significant at $p<.001$. Each of the pathways represented in the model was also significant (see Table 21). The effect of victimization on stress before factoring Maladaptive Coping as a Mediator (path c) was 2.59. Once paths A and B were considered (path c’), this dropped to 1.88 and the significance dropped from $p<.001$ to $p=.0018$, indicating partial mediation. The Preacher and Hayes (2004) bootstrapping method yielded similar results. The point estimate of Indirect Effects of victimization on stress through rumination (AB paths) was significant ($b=.70$, $se=.30$, 95 CI = 2.15, 1.40). These confidence intervals indicate significant partial mediation.
Table 21.

*Maladaptive Coping as a Mediator Between Victimization and Stress*

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A</td>
<td>1.36 **</td>
<td>.46</td>
</tr>
<tr>
<td>Path B</td>
<td>.523 **</td>
<td>.06</td>
</tr>
<tr>
<td>Path C</td>
<td>2.59 **</td>
<td>.64</td>
</tr>
<tr>
<td>Path C’</td>
<td>1.88 **</td>
<td>.60</td>
</tr>
</tbody>
</table>

**Victimization>Maladaptive coping**

**Partial Effect of Control Variables on DV**

- Sex: .909, S.E. = .86
- Ethnicity: -.551, S.E. = 1.09

R^2 = .181

*p < .05, **p < .01

Mediation analyses involving the Reasons For Living Inventory Total and its subscales showed some indication of partial mediation. For the RFL Total the model summary had an R^2 of .036. Thus, the model predicted 3.6% of the variance in the RFL Total, significant at p < .05. The only significant pathway in the model was between Victimization and Maladaptive coping (B = 1.19, se = .51, p < .05). The effect of victimization on the RFL Total before factoring Maladaptive Coping as a Mediator (path c) was 6.71. Once paths A and B were considered (path c’), this dropped to -5.59. Neither of these pathways reached significance, but there was a
drop from $p=.157$ to $p=.240$, indicating partial mediation. The Preacher and Hayes (2004) bootstrapping method yielded similar results. The point estimate of Indirect Effects of victimization on stress through Maladaptive Coping (AB paths) was not significant ($b=-1.06$, $se=.90$, $95\ CI = -3.91, .075$). These confidence intervals do not indicate significant partial mediation.

The mediation analysis for Survival and Coping Beliefs supported a significant partial mediation. The point estimate of Indirect Effects of victimization on stress through rumination (AB paths) was significant ($b=-1.15$, $se=.47$, $95\ CI = -2.48, -.469$). These confidence intervals suggest significant partial mediation. The overall model summary had a $R^2=.085$. The $C$ ($B=-2.50$, $se=1.48$, $p=.09$) and $C'$ paths ($B=-1.34$, $se=1.46$, $p=.36$) were not significant but did show a decrease indicating partial mediation. Results are presented in Table 22.
Table 22.  
Maladaptive Coping as a Mediator Between Victimization and Survival and Coping Beliefs

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A</td>
<td>1.53 **</td>
<td>.46</td>
</tr>
<tr>
<td>Path B</td>
<td>-.757 **</td>
<td>.16</td>
</tr>
<tr>
<td>Path C</td>
<td>-2.50</td>
<td>1.48</td>
</tr>
<tr>
<td>Path C’</td>
<td>-1.34</td>
<td>1.46</td>
</tr>
</tbody>
</table>

Victimization>Maladaptive 
Maladaptive>SCB 
Victimization>SCB 
Partial Effect of Control Variables on DV 
Sex 7.55 2.12 
Ethnicity -0.602 2.83 

R²=.085
*p<.05, **p<.01

The mediation analysis for Responsibility to Family supported a significant partial mediation. The point estimate of Indirect Effects of victimization on stress through maladaptive (AB paths) was significant (b=-.238, se=.12, 95 CI = -.548, -.048). These confidence intervals suggest significant partial mediation. The overall model summary had a R²=.031 (p<.05). The C (B=-.185, se=.491, p=.70) and C’ paths (B=.053, se=.497, p=.92) were not significant but did show a decrease indicating partial mediation. Results are presented in Table 23.
**Table 23.**

*Maladaptive Coping as a Mediator Between Victimization and RTF*

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A: Victimization &gt; Maladaptive</td>
<td>1.85 **</td>
<td>.48</td>
</tr>
<tr>
<td>Path B: Maladaptive &gt; RTF</td>
<td>-.128*</td>
<td>.05</td>
</tr>
<tr>
<td>Path C: Victimization &gt; RTF</td>
<td>-.185</td>
<td>.491</td>
</tr>
<tr>
<td>Path C’: Victimization &gt; RTF</td>
<td>.053</td>
<td>.497</td>
</tr>
</tbody>
</table>

Partial Effect of Control Variables on DV:

<table>
<thead>
<tr>
<th>Variable</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td>1.84**</td>
<td>.698</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.392</td>
<td>.911</td>
</tr>
</tbody>
</table>

R²=.031

*p<.05, **p<.01

The mediation analysis for Child-Related Concerns supported a significant partial mediation. The point estimate of Indirect Effects of victimization on stress through Maladaptive Coping (AB paths) was significant (b=-.158, se=.077, 95 CI = -.383, -.047). These confidence intervals suggest significant partial mediation. The overall model summary had a R²=.055 (p<.001). The C (B=-.933, se=.307, p=.003) and C’ paths (B=-.770, se=.309, p=.013) were both significant at p<.05 but did show a decrease indicating partial mediation. Results are presented in Table 24.
The mediation analysis for Fear of Suicide supported a significant partial mediation. The point estimate of Indirect Effects of victimization on stress through Maladaptive Coping (AB paths) was significant (b=.396, se=.183, 95 CI = .130, .875). These confidence intervals suggest significant partial mediation. The overall model summary had a $R^2=.057$ ($p<.001$). The C (B=.421, se=.677, $p=.535$) and C’ paths (B=.017, se=.678, $p=.980$) were not significant but did show a decrease indicating partial mediation. Results are presented in Table 25.
Table 25.

**Maladaptive Coping as a Mediator Between Victimization and FS**

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A</td>
<td>1.65**</td>
<td>.484</td>
</tr>
<tr>
<td>Victimization&gt;Maladaptive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path B</td>
<td>.244**</td>
<td>.070</td>
</tr>
<tr>
<td>Maladaptive&gt;FS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path C</td>
<td>.421</td>
<td>.677</td>
</tr>
<tr>
<td>Victimization&gt;FS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path C’</td>
<td>.017</td>
<td>.678</td>
</tr>
<tr>
<td>Victimization&gt;FS</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial Effect of Control Variables on DV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>2.41*</td>
<td>.952</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>1.89</td>
<td>1.23</td>
</tr>
</tbody>
</table>

R^2=.057

*p<.05, **p<.01

The mediation analysis for Fear of Social Disproval supported a significant partial mediation. The point estimate of Indirect Effects of victimization on stress through Maladaptive Coping (AB paths) was significant (b=.169 se=.005, 95 CI = .035, .395). These confidence intervals suggest significant partial mediation. The overall model summary had a R^2=.017 (p=.119). The C (B=-.079, se=.334, p=.814) and C’ paths (B=-.242, se=.339, p=.475) were not significant but did show a decrease indicating indirect effects. Results are presented in Table 26.
Table 26.

Maladaptive Coping as a Mediator Between Victimization and FSD

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A</td>
<td>1.92**</td>
<td>.467</td>
</tr>
<tr>
<td>Victimization&gt;Maladaptive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path B</td>
<td>.085*</td>
<td>.035</td>
</tr>
<tr>
<td>Maladaptive&gt;FSD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path C</td>
<td>-.079</td>
<td>.334</td>
</tr>
<tr>
<td>Victimization&gt;FSD</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path C'</td>
<td>-.242</td>
<td>.339</td>
</tr>
<tr>
<td>Partial Effect of Control Variables on DV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>.457</td>
<td>.467</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>-.467</td>
<td>.610</td>
</tr>
</tbody>
</table>

R²=.017

*p<.05, **p<.01

The mediation analysis for Moral Objections supported a significant partial mediation. The point estimate of Indirect Effects of victimization on stress through Maladaptive Coping (AB paths) was significant (b=-.196 se=.003, 95 CI = -.468, -.046). These confidence intervals suggest significant partial mediation. The overall model summary had a R²=.056 (p<.001). The C (B=-1.53, se=.442, p<.001) and C’ paths (B=-1.33, se=.446, p=.003) were significant at p<.05 but did show a decrease indicating partial mediation. Results are presented in Table 27.
Table 27.

**Maladaptive Coping as a Mediator Between Victimization and MO**

<table>
<thead>
<tr>
<th>Path</th>
<th>B</th>
<th>S.E.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Path A</td>
<td>1.78**</td>
<td>.488</td>
</tr>
<tr>
<td>Victimization&gt;Maladaptive</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path B</td>
<td>-.112*</td>
<td>.045</td>
</tr>
<tr>
<td>Maladaptive&gt;MO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path C</td>
<td>-1.53**</td>
<td>.442</td>
</tr>
<tr>
<td>Victimization&gt;MO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Path C'</td>
<td>-.133**</td>
<td>.446</td>
</tr>
<tr>
<td>Victimization&gt;MO</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partial Effect of Control Variables on DV</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>1.69**</td>
<td>.618</td>
</tr>
<tr>
<td>Ethnicity</td>
<td>.116</td>
<td>.802</td>
</tr>
</tbody>
</table>

\[ R^2 = .056 \]

\*p < .05, **p < .01

Mediation analyses involving the Responsibility to Friends Subscale did not indicate significant mediation. For the Responsibility to Friends Subscale, the model summary had an \[ R^2 \] of .035, significant at \( p < .05 \). The pathways between Victimization and Maladaptive Coping (B=1.34, se=.50, \( p < .01 \)), the C Path between Victimization and Responsibility to Friends (B=-4.31, se=1.86, \( p < .05 \)), the C’ Path between Victimization and Responsibility to Friends (B=-4.06, se=1.88, \( p < .05 \)), and the Partial Effects of Sex on the Model (B=7.50, se=2.71, \( p < .01 \)) were significant. Once paths A and B are considered, there was a drop in the coefficients and
probability, but the point estimate of Indirect Effects of Victimization on Responsibility to Friends through Maladaptive Coping (AB paths) was not significant ($b = -0.242$, $se = 0.304$, 95 CI = -1.26, .128). These confidence intervals do not indicate significant partial mediation.

Hypothesis 6 predicted that Problem- Focused Coping strategies would moderate the relationship between bullying victimization and depression, anxiety, stress, and reasons for living such that those who use more Problem- Focused Coping would be buffered from bullying. This was done by centering the continuous variables, the Victimization Index for high school and the Problem-Focused Coping measures, and then creating a cross product of the two centered variables. Following this, a multiple linear regression was conducted with the two centered variables and their cross product entered as predictors with the subscales of the DASS and the subscales and RFL Total being entered as outcome variables. Sex and Ethnicity were controlled for in the moderation analysis by entering them in the first block of the regression. It was intended that any significant interaction terms would be decomposed using methods outlined by Aiken and West (1991); however, none of the interaction terms reached significance with the closest probability to significance being $p = .074$. Hypothesis 6 was not supported by the data.

To test that Problem-Focused Coping would moderate the relationship between a history of victimization and depression a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .082$, $F(5, 430) = 19.03$, $p = .001$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Depression scores, $R^2 = .013$, $F(2, 433) = 2.83$, $p = .06$.

Centered versions of the Victimization Index and use of Problem-Focused Coping were entered into the second step of the regression. These variables significantly added to the amount of variance in the criterion accounted for, $\Delta R^2 = .069$, $\Delta F(2, 431) = 16.20$, $p < .001$. Both of these
variables were significant predictors; Victimization $b = 2.276$, $se=.587$, $\beta=.180$, $p <.001$ and Problem-Focused Coping $b = .315$, $se=.085$, $\beta=.174$, $p <.001$.

In the final step of the regression analysis an interaction term between Victimization scores and Problem-Focused Coping scores was created, which did not account for a significant proportion of the variance in Depression scores, $\Delta R^2 = .000$, $\Delta F(1, 430) = .000$, $p = .997$, $b = .000$, $se=.110$, $\beta=.000$, $p = .997$.

To test that Problem-Focused Coping would moderate the relationship between a history of victimization and anxiety a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .094$, $F(5, 422) = 8.80$, $p = .001$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Anxiety scores, $R^2 = .007$, $F(2, 425) = 1.58$, $p = .207$.

Centered versions of the Victimization Index and use of Problem-Focused Coping were entered into the second step of the regression. These variables significantly added to the amount of variance in the criterion accounted for, $\Delta R^2 = .088$, $\Delta F(2, 423) = 18.61$, $p <.001$.Both of these variables were significant predictors; Victimization $b = 1.97$, $se=.490$, $\beta=.188$, $p <.001$ and Problem-Focused Coping $b = .291$, $se=.069$, $\beta=.198$, $p <.001$.

In the final step of the regression analysis an interaction term between Victimization scores and Problem-Focused Coping scores was created, which did not account for a significant proportion of the variance in Anxiety scores, $\Delta R^2 = .007$, $\Delta F(1, 422) = 3.16$, $p = .076$, $b = .161$, $se=.090$, $\beta=.084$, $p = .076$.

To test that Problem-Focused Coping would moderate the relationship between a history of victimization and stress a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .088$, $F(5, 419) = 8.108$, $p = .001$. In the first step two variables were
included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Stress scores, $R^2 = .008, F(2, 422) = 1.751, p = .175$.

Centered versions of the Victimization Index and use of Problem-Focused Coping were entered into the second step of the regression. These variables significantly added to the amount of variance in the criterion accounted for, $\Delta R^2 = .086, \Delta F(2, 420) = 9.904, p < .001$. Both of these variables were significant predictors; Victimization $b = 2.312, se = .633, \beta = .172, p < .001$ and Problem-Focused Coping $b = .402, se = .090, \beta = .212, p < .001$.

In the final step of the regression analysis an interaction term between Victimization scores and Problem-Focused Coping scores was created, which did not account for a significant proportion of the variance in Stress scores, $\Delta R^2 = .088, \Delta F(1, 419) = 8.108, p = .335, b = .115, se = .120, \beta = .046, p = .335$.

To test that Problem-Focused Coping would moderate the relationship between a history of victimization and the RFL Total a hierarchical multiple regression analysis was conducted. The overall model was not significant, $R^2 = .027, F(5, 299) = 1.652, p = .146$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Stress scores, $R^2 = .018, F(2, 302) = 2.841, p = .060$.

Centered versions of the Victimization Index and use of Problem-Focused Coping were entered into the second step of the regression. These variables did not significantly predict the variance in the criterion accounted for, $\Delta R^2 = .008, \Delta F(2, 300) = .2832, p = .283$.

In the final step of the regression analysis an interaction term between Victimization scores and Problem-Focused Coping scores was created, which did not account for a significant proportion of the variance in RFL Total scores, $\Delta R^2 = .000, \Delta F(1, 299) = .058, p = .810, b = .209, se = .872, \beta = .014, p = .810$.
To test that Problem-Focused Coping would moderate the relationship between a history of victimization and Survival and Coping Beliefs a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .036$, $F(5, 378) = 2.859, p = .015$. In the first step two variables were included: Sex and Ethnicity. These variables accounted for a significant amount of variance in Stress scores, $R^2 = .023$, $F(2, 381) = 4.564, p = .011$. In this step Sex was the only variable that was significant, $b = 6.180, se=2.177, \beta=.144, p = .005$.

Centered versions of the Victimization Index and use of Problem-Focused Coping were entered into the second step of the regression. These variables did not significantly add to the amount of variance in the criterion accounted for, $\Delta R^2 = .010, \Delta F(2, 379) = 2.051, p = .130$.

In the final step of the regression analysis an interaction term between Victimization scores and Problem-Focused Coping scores was created, which did not account for a significant proportion of the variance in Survival and Coping Beliefs scores, $\Delta R^2 = .003, \Delta F(1, 378) = 1.015, p = .335, b = .279, se=.277, \beta=.052, p = .314$.

To test that Problem-Focused Coping would moderate the relationship between a history of victimization and Responsibility to Family scores a hierarchical multiple regression analysis was conducted. The overall model was not significant, $R^2 = .018$, $F(5, 404) = 1.482, p = .194$. In the first step two variables were included: Sex and Ethnicity. This step did account for a significant amount of variance in Responsibility to Family scores, $R^2 = .018$, $F(2, 407) = 3.66, p = .027$. In this step, Sex was the only variable that was significant, $b = 1.73, se=.695, \beta=.122, p = .013$.

Centered versions of the Victimization Index and use of Problem-Focused Coping were entered into the second step of the regression. These variables did not significantly add to the amount of variance in the criterion accounted for, $\Delta R^2 = .000, \Delta F(2, 405) = .066, p = .936$. 

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In the final step of the regression analysis an interaction term between Victimization scores and Problem-Focused Coping scores was created, which did not account for a significant proportion of the variance in Responsibility to Family scores, $\Delta R^2 = .000$, $\Delta F(1, 404) = .010$, $p = .921$, $b = .009$, $se = .089$, $\beta = .005$, $p = .921$.

To test that Problem-Focused Coping would moderate the relationship between a history of victimization and Child-Related Concerns a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .044$, $F(5, 388) = 3.593$, $p = .003$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Child-Related Concerns scores, $R^2 = .013$, $F(2, 391) = 2.536$, $p = .081$.

Centered versions of the Victimization Index and use of Problem-Focused Coping were entered into the second step of the regression. These variables significantly added to the amount of variance in the criterion accounted for, $\Delta R^2 = .024$, $\Delta F(2, 389) = 4.749$, $p = .009$. Only the Victimization Index was a significant predictor for Child-Related Concerns; Victimization $b = -.928$, $se = .307$, $\beta = -.152$, $p = .003$.

In the final step of the regression analysis an interaction term between Victimization scores and Problem-Focused Coping scores was created, which did not account for a significant proportion of the variance in Child-Related Concerns scores, $\Delta R^2 = .008$, $\Delta F(1, 388) = 3.214$, $p = .074$, $b = .100$, $se = .056$, $\beta = .091$, $p = .074$.

To test that Problem-Focused Coping would moderate the relationship between a history of victimization and Fear of Suicide a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .033$, $F(5, 387) = 2.605$, $p = .025$. In the first step two variables were included: Sex and Ethnicity. These variables accounted for a significant amount
of variance in Fear of Suicide scores, $R^2 = .029$, $F(2, 390) = 5.752$, $p = .003$. Both Sex ($b = 2.576$, $se=.953$, $\beta=.135$, $p = .007$) and Ethnicity ($b = 2.652$, $se=1.224$, $\beta=.108$, $p = .031$) were significant predictors of Fear of Suicide.

Centered versions of the Victimization Index and use of Problem-Focused Coping were entered into the second step of the regression. These variables did not significantly add to the amount of variance in the criterion accounted for, $\Delta R^2 = .002$, $\Delta F(2, 388) = .475$, $p < .622$.

In the final step of the regression analysis an interaction term between Victimization scores and Problem-Focused Coping scores was created, which did not account for a significant proportion of the variance in Fear of Suicide scores, $\Delta R^2 = .002$, $\Delta F(1, 387) = .614$, $p = .434$, $b = .097$, $se=.124$, $\beta=.040$, $p = .434$.

To test that Problem-Focused Coping would moderate the relationship between a history of victimization and Fear of Social Disproval a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .008$, $F(5, 417) = .689$, $p = .632$. In the first step the inclusion of Sex and Ethnicity did not account for a significant portion of variance, $R^2 = .003$, $F(2, 420) = .730$, $p = .482$.

Centered versions of the Victimization Index and use of Problem-Focused Coping were entered into the second step of the regression and did not significantly account for the change in variance, $\Delta R^2 = .003$, $\Delta F(2, 418) = .556$, $p = .574$.

In the final step of the regression analysis the interaction term did not account for a significant proportion of the variance in Fear of Social Disproval scores, $\Delta R^2 = .002$, $\Delta F(1, 417) = .877$, $p = .350$.

To test that Problem-Focused Coping would moderate the relationship between a history of victimization and Moral Objections a hierarchical multiple regression analysis was conducted.
The overall model was significant, $R^2 = .048$, $F(5, 407) = 4.071$, $p = .001$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Stress scores, $R^2 = .013$, $F(2, 410) = 2.680$, $p = .070$.

Centered versions of the Victimization Index and use of Problem-Focused Coping were entered into the second step of the regression. These variables significantly added to the amount of variance in the criterion accounted for, $\Delta R^2 = .027$, $\Delta F(2, 408) = 5.845$, $p = .003$. This contribution was from the Sex variable, $b = 1.397$, $se=.622$, $\beta=.110$, $p < .05$. The centered Victimization Index was the only variable in this step that was a significant predictor of variance, $b = -1.429$, $se=.443$, $\beta=-.158$, $p = .001$.

In the final step of the regression analysis an interaction term between Victimization scores and Problem-Focused Coping scores was created, which did not account for a significant proportion of the variance in Depression scores, $\Delta R^2 = .007$, $\Delta F(1, 407) = 3.089$, $p = .080$, $b = .143$, $se=.081$, $\beta=.087$, $p = .080$.

To test that Problem-Focused Coping would moderate the relationship between a history of victimization and Responsibility to Friends a hierarchical multiple regression analysis was conducted. The overall model was trending towards significant, $R^2 = .030$, $F(5, 349) = 2.133$, $p = .061$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Responsibility to Friends scores, $R^2 = .015$, $F(2, 352) = 2.753$, $p = .065$.

The centered versions of the Victimization Index and use of Problem-Focused Coping entered into the second step significantly added to the amount of variance in the criterion accounted for, $\Delta R^2 = .014$, $\Delta F(2, 350) = 2.567$, $p < .078$. In the final step the interaction term did not account for a significant proportion of the variance in Responsibility to Friends scores, $\Delta R^2 = $
Hypothesis 7 predicted that Emotion-Focused Coping strategies would moderate the relationship between victimization and depression, anxiety, stress, and reasons for living such that those who use more emotion-Focused Coping would be buffered. This was done by centering the continuous variables, the Victimization Index for high school and the Emotion-Focused Coping measures, and then creating a cross product of the two centered variables. Following this a multiple linear regression was conducted with the two centered variables and their cross product entered as predictors with the subscales of the DASS and the subscales and total for the RFL being entered as outcome variables. Sex and Ethnicity were controlled for in the moderation analysis by entering them in the first block of the regression. Any significant interaction terms would be decomposed using methods outlined by Aiken and West (1991); however, only one of the interaction terms reached significance (that of Survival and Coping Beliefs) and was then decomposed. Hypothesis 7 was only partially supported by the data and only with regard to Survival and Coping Beliefs.

To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and depression a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .077$, $F(5, 422) = 7.030, p < .001$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Depression scores, $R^2 = .012$, $F(2, 425) = 2.529, p = .081$.

Centered versions of the Victimization Index and use of Emotion-Focused Coping were entered into the second step of the regression. These variables significantly added to the amount of variance in the criterion accounted for, $\Delta R^2 = .064$, $\Delta F(2, 423) = 14.67, p < .001$. Both of these variables were significant predictors; Victimization $b = 2.568$, $se=.625$, $\beta=.194$, $p < .001$, and
Emotion-Focused Coping $b = .162$, $se = .053$, $\beta = .144$, $p = .003$.

In the final step of the regression analysis an interaction term between Victimization scores and Emotion-Focused Coping scores was created, which did not account for a significant proportion of the variance in Depression scores, $\Delta R^2 = .001$, $\Delta F(1, 422) = .470$, $p = .493$, $b = -.053$, $se = .077$, $\beta = -.033$, $p = .493$.

To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and anxiety a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .093$, $F(5, 416) = 8.51$, $p < .001$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Anxiety scores, $R^2 = .006$, $F(2, 419) = 1.19$, $p = .305$.

Centered versions of the Victimization Index and use of Emotion-Focused Coping were entered into the second step of the regression. These variables significantly added to the amount of variance in the criterion accounted for, $\Delta R^2 = .087$, $\Delta F(2, 417) = 19.92$, $p < .001$. Both of these variables were significant predictors; Victimization $b = 2.27$, $se = .509$, $\beta = .211$, $p < .001$, and Emotion-Focused Coping $b = .171$, $se = .043$, $\beta = .186$, $p < .001$.

In the final step of the regression analysis an interaction term between Victimization scores and Emotion-Focused Coping scores was created, which did not account for a significant proportion of the variance in Anxiety scores, $\Delta R^2 = .000$, $\Delta F(1, 416) = .179$, $p = .672$, $b = .026$, $se = .062$, $\beta = .020$, $p = .672$.

To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and stress a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .091$, $F(5, 413) = 8.291$, $p = .001$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance
in Stress scores, $R^2 = .008$, $F(2, 416) = 1.70, p = .184$.

Centered versions of the Victimization Index and use of Emotion-Focused Coping were entered into the second step of the regression. These variables significantly added to the amount of variance in the criterion accounted for, $\Delta R^2 = .083$, $\Delta F(2, 414) = 18.931, p < .001$. Both of these variables were significant predictors; Victimization $b = 2.735, se=.655, \beta=.198, p < .001$, and Emotion-Focused Coping $b = .233, se=.056, \beta=.197, p < .001$.

In the final step of the regression analysis an interaction term between Victimization scores and Emotion-Focused Coping scores was created, which did not account for a significant proportion of the variance in Stress scores, $\Delta R^2 = .000$, $\Delta F(1, 413) = .000, p = .983, b = .002, se=.085, \beta=.001, p = .983$.

To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and the RFL Total a hierarchical multiple regression analysis was conducted. The overall model was not significant, $R^2 = .033$, $F(5, 294) = 1.990, p = .080$. In the first step two variables were included: Sex and Ethnicity. These variables accounted for a significant amount of variance in RFL Total scores, $R^2 = .025$, $F(2, 297) = 3.795, p = .024$. In this step, Sex was the only variable that was significant, $b = 19.614, se=7.28, \beta=.154, p < .001$.

Centered versions of the Victimization Index and use of Emotion-Focused Coping were entered into the second step of the regression. These variables did not significantly predict the variance in the criterion accounted for, $\Delta R^2 = .007$, $\Delta F(2, 295) = 1.038, p = .356$.

In the final step of the regression analysis an interaction term between Victimization scores and Emotion-Focused Coping scores was created, which did not account for a significant proportion of the variance in RFL Total scores, $\Delta R^2 = .001$, $\Delta F(1, 294) = .303, p = .582, b = .352, se=.639, \beta=.032, p = .582$.
To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and Survival and Coping Beliefs a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .052$, $F(5, 370) = 4.069$, $p = .001$. In the first step two variables were included: Sex and Ethnicity. These variables accounted for a significant amount of variance in Stress scores, $R^2 = .030$, $F(2, 373) = 5.67$, $p = .004$. In this step, Sex was the only variable that was significant, $b = 9.98$, $se = 2.18$, $\beta = .164$, $p = .001$.

Centered versions of the Victimization Index and use of Emotion-Focused Coping were entered into the second step of the regression. These variables did not significantly add to the amount of variance in the criterion accounted for, $\Delta R^2 = .012$, $\Delta F(2, 371) = 2.311$, $p = .101$.

In the final step of the regression analysis an interaction term between Victimization scores and Emotion-Focused Coping scores was created, which accounted for a significant proportion of the variance in Survival and Coping Beliefs scores, $\Delta R^2 = .011$, $\Delta F(1, 370) = 4.17$, $p = .042$, $b = .409$, $se = .200$, $\beta = .104$, $p = .042$. This interaction term was significant and was decomposed as suggested by Aiken and West (1 SD above and below the mean; 1991). See Figure 1. The decomposition shows that for those reporting a high use of Emotion-Focused Coping, there was not much variation in those that had high and low victimization. For those that had low Emotion-Focused Coping, those with Low Victimization had much higher scores on Survival and Coping Beliefs than those that experiences high rates of victimization. This suggests that those with the lowest scores on Survival and Coping Beliefs are those who have experienced high victimization and who endorse a low use of Emotion-Focused Coping.
To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and Responsibility to Family scores a hierarchical multiple regression analysis was conducted. The overall model was not significant, $R^2 = .023$, $F(5, 395) = 1.876$, $p = .098$. In the first step two variables were included: Sex and Ethnicity. This step did account for a significant amount of variance in Responsibility to Family scores, $R^2 = .022$, $F(2, 398) = 4.40$, $p = .013$. In this step Sex was the only variable that was significant, $b = 1.95$, $se=.694$, $\beta=.139$ $p = .005$.

Centered versions of the Victimization Index and use of Emotion-Focused Coping were entered into the second step of the regression. These variables did not significantly add to the amount of variance in the criterion accounted for, $\Delta R^2 = .001$, $\Delta F(2, 396) = .066$, $p = .755$.

In the final step of the regression analysis an interaction term between Victimization scores and Emotion-Focused Coping scores was created, which did not account for a significant proportion of the variance in Responsibility to Family scores, $\Delta R^2 = .000$, $\Delta F(1, 395) = .066$, $p = .104$.
To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and Child-Related Concerns a hierarchical multiple regression analysis was conducted. The overall model was trending towards significance, $R^2 = .028$, $F(5, 380) = 2.182$, $p = .055$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Child-Related Concerns scores, $R^2 = .012$, $F(2, 383) = 2.364$, $p = .095$.

Centered versions of the Victimization Index and use of Emotion-Focused Coping were entered into the second step of the regression. These variables did not significantly add to the amount of variance in the criterion accounted for, $\Delta R^2 = .015$, $\Delta F(2, 381) = 2.84$, $p = .060$.

In the final step of the regression analysis an interaction term between Victimization scores and Emotion-Focused Coping scores was created, which did not account for a significant proportion of the variance in Child-Related Concerns scores, $\Delta R^2 = .001$, $\Delta F(1, 380) = .471$, $p = .493$.

To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and Fear of Suicide a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .035$, $F(5, 381) = 2.74$, $p = .019$. In the first step two variables were included: Sex and Ethnicity. These variables accounted for a significant amount of variance in Fear of Suicide scores, $R^2 = .032$, $F(2, 384) = 6.358$, $p = .002$. Both Sex ($b = 2.76$, $se=.969$, $\beta=.143$, $p=.005$) and Ethnicity ($b = 2.81$, $se=1.241$, $\beta=.114$, $p=.024$) were significant predictors of Fear of Suicide.

Centered versions of the Victimization Index and use of Emotion-Focused Coping were entered into the second step of the regression. These variables did not significantly add to the
amount of variance in the criterion accounted for, $\Delta R^2 = .003$, $\Delta F(2, 382) = .495$, $p = .610$.

In the final step of the regression analysis an interaction term between Victimization scores and Emotion-Focused Coping scores was created, which did not account for a significant proportion of the variance in Fear of Suicide scores, $\Delta R^2 = .000$, $\Delta F(1, 381) = .050$, $p = .824$.

To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and Fear of Social Disproval a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .010$, $F(5, 411) = .819$, $p = .537$. In the first step the inclusion of Sex and Ethnicity did not account for a significant portion of variance, $R^2 = .004$, $F(2, 414) = .835$, $p = .434$.

Centered versions of the Victimization Index and use of Emotion-Focused Coping were entered into the second step of the regression and did not significantly account for the change in variance, $\Delta R^2 = .003$, $\Delta F(2, 412) = .551$, $p = .577$.

In the final step of the regression analysis the interaction term did not account for a significant proportion of the variance in Fear of Social Disproval scores, $\Delta R^2 = .003$, $\Delta F(1, 411) = 1.323$, $p = .251$.

To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and Moral Objections a hierarchical multiple regression analysis was conducted. The overall model was significant, $R^2 = .040$, $F(5, 399) = 3.314$, $p = .006$. In the first step two variables were included: Sex and Ethnicity. These variables did not account for a significant amount of variance in Moral Objections scores, $R^2 = .011$, $F(2, 402) = 2.324$, $p = .099$.

Centered versions of the Victimization Index and use of Emotion-Focused Coping were entered into the second step of the regression. These variables significantly added to the amount of variance in the criterion accounted for, $\Delta R^2 = .023$, $\Delta F(2, 400) = 4.702$, $p = .010$. The centered
Victimization Index was the only variable in this step that was a significant predictor of variance, 

\[ b = -1.372, \, se = .465, \, \beta = -.147, \, p = .003. \]

In the final step of the regression analysis an interaction term between Victimization scores and Emotion-Focused Coping scores was created, which did not account for a significant proportion of the variance in Depression scores, \( \Delta R^2 = .006, \, \Delta F(1, 399) = 2.384, \, p = .123, \, b = .089, \, se = .058, \, \beta = .077, \, p = .123. \)

To test that Emotion-Focused Coping would moderate the relationship between a history of victimization and Responsibility to Friends a hierarchical multiple regression analysis was conducted. The overall model was significant, \( R^2 = .034, \, F(5, 344) = 2.44, \, p = .034. \) In the first step two variables were included: Sex and Ethnicity. These variables did account for a significant amount of variance in Responsibility to Friends scores, \( R^2 = .019, \, F(2, 347) = 3.403, \, p = .034. \) In this step, Sex was the only variable that was significant, \( b = 6.949, \, se = 2.694, \, \beta = .137, \, p = .010. \)

The centered versions of the Victimization Index and use of Emotion-Focused Coping entered into the second step significantly added to the amount of variance in the criterion accounted for, \( \Delta R^2 = .014, \, \Delta F(2, 345) = 2.56, \, p < .079. \) In the final step the interaction term did not account for a significant proportion of the variance in Responsibility to Friends scores, \( \Delta R^2 = .001, \, \Delta F(1, 344) = .261, \, p = .610. \)

The following table (Table 28) summarizes whether the preceding results supported each of the hypotheses covered in this document and the rationale for deciding whether or not each hypothesis was supported.
Table 28.

*Hypothesis, Support, and Reasoning*

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Supported</th>
<th>Reasoning</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Males would report experiencing all types of bullying victimization (physical, verbal, relational) more than females.</td>
<td>No</td>
<td>Despite Predictions, Males only reported experiencing more Physical victimization with Females experiencing more relational, and with no difference in verbal.</td>
</tr>
<tr>
<td>2. Bullying victimization would be positively related to depression, anxiety, and stress, rumination, and negative related to reasons for living.</td>
<td>Yes</td>
<td>Victimization led to a significant increase in Depression, Anxiety, Stress, and Rumination. Victimization also significantly negatively predicted Survival and Coping Beliefs (SCB), Child-related Concerns (CRC), Moral Objections (MO), and Responsibility to Friends</td>
</tr>
<tr>
<td>3. Rumination would mediate the relations between victimization and depression, anxiety, and stress.</td>
<td>Yes</td>
<td>Based on the confidence intervals provided by the Preacher and Hayes Bootstrapping model, Rumination served as a mediator for all three outcome variables.</td>
</tr>
</tbody>
</table>
Table 28. (continued)

4. Greater reports of bullying victimization would be related to greater use of adaptive (problem-focused and emotion-focused) and maladaptive coping strategies

   Yes  
   Victimization predicted greater use of both adaptive and maladaptive coping methods, above and beyond the control variables.

5. Maladaptive coping strategies would mediate the relationship between bullying victimization and depression, anxiety, stress, and reasons for living.

   Yes  
   Depression, Anxiety, Stress, Survival and Coping Beliefs, Responsibility to Family, Child-Related Concerns, Fear of Suicide, Fear of Social Disproval and Moral Objections showed a significant point estimate of Indirect Effects of victimization through maladaptive coping.

6. Problem-focused coping strategies would moderate the relationship between bullying victimization and depression, anxiety, stress, and reasons for living such that those who use more problem-focused coping

   No  
   The interaction term between Secondary School Victimization and Problem-Focused Coping did not show significant predictive capabilities for any of the outcome variables examined.
Table 28. (Continued)

would be buffered from bullying.

7. Emotion-focused coping strategies would moderate the relationship between victimization and depression, anxiety, stress, and reasons for living such that those who use more emotion-focused coping would be buffered.

| Partially | The interaction term between Secondary School Victimization and Emotion-Focused Coping showed significant predictive capabilities for Survival and Coping Beliefs, but not for any of the other outcome variables examined. |
CHAPTER 4
DISCUSSION

The purpose of this study was to examine the retrospective impact of Secondary School Victimization on the Reasons For Living Inventory as well as any possible effects of various types of reported coping mechanisms. A major goal of this study was to replicate findings from various bullying literature in a sample of students taken from a college population located in the Southeastern United States. There have been few studies focusing on the long-term effects of bullying victimization within the college population and fewer still on long-term effects of victimization in the U.S. Appalachian region.

While there have been previous studies linking victimization status to suicidal ideation, none of those studies used the Reasons for Living Inventory. Numerous studies have consistently demonstrated that reasons for living may play protective roles in preventing individuals from putting their suicidal thoughts into action or from engaging in suicidal ideation (Richardson-Vejlgaard et al., 2009). Further, Linehan and Goodstein (1983) found that suicidal and nonsuicidal individuals differ in how they view life-oriented beliefs and expectancies.

Negative, persistent, long-term effects of victimization may be dependent upon the coping styles which a child or adolescent chooses to employ (Hunter & Boyle, 2004; Kochenderfer- Ladd, 2003; Kochenderfer-Ladd & Skinner, 2002; Newman et al., 2011). Both problem-focused and emotion-focused coping have been found to significantly moderate the relationship between victimization and negative outcomes, the most severe of which is obviously suicide, while maladaptive coping styles (passive avoidance, rumination, resignation, aggression) contributed to a worsening of the negative effects of victimization. As certain coping styles serve to buffer the negative effects of victimization, and reasons for living serve to play protective
roles in preventing individuals from putting their suicidal thoughts into action, a main goal in this study was to examine the interaction between these two variables.

Hypothesis 1 predicted that males would report experiencing all types of bullying victimization (physical, verbal, relational) more than would females. This hypothesis was based on the fact that much of the existing literature has shown boys are more likely than girls to: a) be involved in bullying, as bully or bullying victim (Craig et al., 2009, Juvonen & Schuster, 2003; Nansel et al., 2001; Sanders & Phye, 2004); b) experience more physical bullying across all grades (Smith, 1999; Smith & Sharp, 1994); and, c) experience common nonphysical bullying (words and gestures). On the other hand, the percentage of boys and girls who were indirectly bullied was approximately the same (Olweus, 1993). Despite this seeming solidity of this prediction based on the literature, the current data did not support this hypothesis. Males reported greater physical victimization (M=1.48, SD =.931) than females (M=1.29, SD=.747), but females reported more relational victimization (M=2.20, SD=1.25) than males (M=1.85, SD=1.12) and there was no significant difference in verbal victimization frequency between males (M=1.89, SD= 1.085) and females (M=1.92, SD =1.143).

Despite some research indicating greater rates for males than females in all types of victimization, some researchers (Besag, 2006; Olweus, 1993) have found a higher prevalence of relational victimization for females. Thus, the current results in that domain are not entirely contradictory with prior research. In fact, Besag (2006) suggested higher rates of relational aggression for females may result from an earlier intellectual development compared with males and/or the influence of differential factors of socialization. This is clearly an area in need of further investigation.
Verbal victimization is common among both sexes, although it is usually manifested in different ways. Females tend to inflict verbal victimization instead of physical victimization, while males tend to inflict verbal victimization in conjunction with physical victimization. The present study did not differentiate the ways in which one was verbally victimized, so the lack of differences between males and females could be a result of the high frequency with which both sexes experience verbal victimization. Again, these findings were not entirely inconsistent with some findings in the literature (e.g. Besag, 2006; Olweus, 1993; Owens, 1996).

Hypothesis 2 predicted that bullying victimization would be positively related to depression, anxiety, stress, and rumination and negative related to reasons for living. Victims of bullying can continue to suffer in adulthood, possibly having low self-esteem and experiencing such problems as high stress, depression, psychosocial problems, psychosexual difficulties, anxiety, and psychosomatic symptoms (Arseneault et al., 2006; Campbell & Morrison, 2007; Carney & Merrell, 2001; Kaltiala-Heino et al., 2000; Tehrani, 2004) as well as suicidal ideation (Kaltiala-Heino et al., 1999). This hypothesis supported the trend found in the literature. Above and beyond the control variables of sex and ethnicity, secondary school victimization was found to be a significant independent variable in the determination of variance in depression, anxiety, stress, and rumination for this sample.

Secondary school victimization was also found to be negatively related to reasons for living. Specifically, victimization was found to significantly and negatively predict the Survival and Coping Beliefs (SCB), Child-Related Concerns (CRC), Moral Objections (MO), and Responsibility to Friends subscales of the Reasons for Living Inventory (RFL). As victimization had never been linked to the RFL, this study was somewhat exploratory with no firm predictions regarding which subscales might be significantly related. The relationship between victimization
and the RFL Total was not significant, but 4 of 7 subscales were significantly negatively related to victimization. The ability for retrospective reports of victimization to impact depression, anxiety, stress, rumination, and reasons for living highlights the potentially profound long-term effects of bullying.

Hypothesis 3 predicted that rumination would mediate the relationships between victimization and depression, anxiety, and stress. Hampel and colleagues (2009) found that across victims of all types of bullying there was increased rumination. Rumination tends to increase the intensity and duration of negative affect, the attention given to the negativity of events, and victim pessimism about themselves and their future (Lyubomirsky & Nolen-Hoeksema, 1995). According to Newman and colleagues (2011), an increase in stress can occur during college because victims may have developed coping strategies that are maladaptive when dealing with stressors other than bullying (an uncontrollable stressor). Based on this, it was expected that if victims had a history of a higher use of rumination, their negative affect in college may have been intensified as a result of the indirect pathway through rumination. In this current study, based on the confidence intervals provided by the Preacher and Hayes Bootstrapping model, rumination served as a mediator for depression, anxiety, and stress, thereby supporting Hypothesis 3. This further supported the notion that certain maladaptive coping patterns can intensify the duration or intensity of negative affect.

Hypothesis 4 predicted that greater reports of bullying victimization would be related to greater use of adaptive (problem-focused and emotion-focused) and maladaptive coping strategies. Newman and colleagues (2011) examined residual effects of victimization in a college sample and analyzed the results based on the use of different coping mechanisms. They found that a history of bullying was associated with a greater use of the three coping strategies they
measured (i.e., problem-focused coping, emotion-focused coping, and avoidant coping). The authors suggested that use of all coping styles increased because when faced with frequent victimization one tries to adapt and structure his or her environment in any way possible. For the current hypothesis the author sought to determine whether a similar pattern would be seen for the subscales on the Brief COPE, as Newman and colleagues used a different coping measure.

In this study Adaptive (a combination of Problem-Focused and Emotion-Focused subscales) and Maladaptive coping, as measured by the brief COPE, were used as outcome measures. The results supported that victimization predicted greater use of both adaptive and maladaptive coping methods above and beyond the control variables. This indicates that victims do indeed attempt to cope with bullying in any ways possible, including both effective and ineffective methods. To the degree that the latter persist into adulthood, the impaired ability of former victims to cope with life stressors may contribute to the adult difficulties noted above (e.g., Arseneault et al., 2006; Campbell & Morrison, 2007; Kaltiala-Heino et al., 1999)

Hypothesis 5 predicted that Maladaptive coping strategies would mediate the relationship between bullying victimization and depression, anxiety, stress, and reasons for living. As mentioned earlier, the methods which one uses to cope following victimization can impact the intensity or duration of negative affect experienced. Maladaptive coping strategies (venting, behavioral disengagement, substance abuse, self distraction, and self-blame) have been found to negatively impact the healing process following victimization (e.g. Hampel et al., 2009; Newman et al., 2011). For the current hypothesis the author sought to determine whether the same processes would extend to the RFL. Based on the Bootstrapping method created by Preacher and Hayes (2008), Depression, Anxiety, Stress, Survival and Coping Beliefs, Responsibility to Family, Child Related Concerns, Fear of Suicide, Fear of Social Disproval, and Moral
Objections showed a significant point estimate of Indirect Effects of victimization through maladaptive coping. Thus, significant variance in these variables based on victimization could be explained by the process of engaging in maladaptive coping. Victimization was negatively associated with the RFL, and maladaptive coping displayed significant indirect pathways between victimization and the RFL, which is similar to trends observed in other outcomes of victimization.

Hypothesis 6 predicted that Problem-focused coping strategies would moderate the relationship between bullying victimization and depression, anxiety, stress, and reasons for living such that those who used more problem-focused coping would be buffered from the negative effects of bullying. For example, problem-focused coping (active coping, planning, using instrumental support) has been found to moderate the relationship between victimization and substance abuse (Brady et al., 2009). Problem-focused coping was not found to be a significant mediator between victimization and stress, suggesting that those who used more adaptive forms of coping were not as susceptible to the increased stress in college (Newman et al., 2011). In Newman and colleagues’ (2011) results the lack of problem focused coping being a significant mediator suggests that victimization does not work through problem-focused coping to impact negative affect. Some of the impact on negative affect due to victimization can be better explained by maladaptive coping, but this was not the case for more adaptive forms of coping. Because in previous research, problem-focused coping was not found to be a significant mediator, but has been found to be a significant moderator, it was expected that the impact on the outcome variables could be explained by an interaction among victimization and problem-focused coping such that this coping style may buffer against depression, anxiety, stress, and decreased reasons for living. The results from the moderation analyses do not support this
hypothesis. There were no significant predictabilities for the interaction term for any of the outcome variables.

It is unknown why previous findings were not replicated with regards to problem-focused coping serving as a moderator for depression, anxiety, and stress. Most research done on coping mechanisms in a college population has been done with mediation instead of moderation (e.g., Newman et al., 2011). Results from victimization studies examining coping mechanisms in secondary school have found moderation effects for problem-focused coping; however, in the current study this trend did not extend to retrospective reports of victimization. The lack of significant moderation on variables on the RFL Inventory might be explainable by the fact that what the RFL measures is internal states and personal reasons for staying alive when thinking about committing suicide. Problem-focused coping styles are aimed at changing the situation and involve a direct approach to taking action. Reasons for living might be more of a cognitive approach. This disconnect could explain the lack of significant interactions.

Hypothesis 7 predicted that Emotion-focused coping strategies would moderate the relationship between victimization and depression, anxiety, stress, and reasons for living such that those who use more emotion-focused coping will be buffered. In this study the Emotion-Focused Coping subscale of the Brief COPE was used which assess emotional support, positive reframing, acceptance, denial, religion, and humor. In previous research the emotion-focused coping strategies of compensation, denial, and developing a positive attitude toward victimization were found to moderate the relationship between being bullied health problems, and well-being (Dehue et al., 2012). Support-seeking from peers and family has been shown to have a significant buffering effect, moderating the relationship between victimization and depression (Machmutow et al., 2012). Results from moderation analyses only partially supported
the current hypothesis. Contrary to previous findings, emotion-focused coping did not moderate depression, anxiety, or stress. However, emotion-focused coping was found to be a significant moderator for one scale of the RFL, namely Survival and Coping Beliefs.

Social support, which falls under emotion-focused coping in the present study’s measures, has consistently been found to be effective in lessening the negative effects of victimization. However, this was not the finding with regards to depression, anxiety, and stress. Newman and colleagues (2011) found that even after taking coping mechanisms into account, the impact of victimization still remained significant.

Survival and Coping Beliefs were significantly moderated by the interaction between victimization and emotion-focused coping. The decomposition shows that for those who have a higher use of Emotion-Focused Coping there was not much variation in those who reported high versus low levels of victimization. While for those that had lower levels of Emotion-Focused Coping, those with low rates of victimization had much higher scores on Survival and Coping Beliefs than those that experiences high rates of victimization. This suggests that the lowest scores on Survival and Coping Beliefs represent those that have experienced high victimization and endorsed a low use of Emotion-Focused Coping. Survival and Coping beliefs touch on having positive expectations for the future and one’s ability to cope with life’s challenges (Linehan, 1983). As this is one of the factors that victimization can impact, the ability for emotion-focused coping to significantly moderate this have implications for future research.

Some of the results from regression, mediation, and moderation within this study might appear small in comparison to traditional effect sizes. However, when taking into consideration that the outcome variables are large constructs such as depression, anxiety, and stress, accounting for any percentage of that larger whole is significant. This is more striking when the criterion
variables are remote instances occurring years prior to participation in the study.

**Summary**

This study has replicated some previous research in a college population in Appalachia, which is an under-researched population in the bullying literature. General trends seemed to be replicated. With this study the author has also attempted to serve as a bridge between research on coping mechanisms involved with bullying and coping research on suicide by the inclusion of the Reasons for Living Inventory. The relationships between victimization and aspects of the RFL were similar to those found with depression, anxiety, and stress following victimization. This study also had some areas where it did not replicate previous findings (e.g., the buffering effects of problem- and emotion-focused coping), where potential explanations have been given. Yet, other limitations must also be taken into consideration.

**Limitations**

This study was based on convenience sampling, so it may not accurately reflect the attitudes held within the entire college population. The sample was also a relatively homogenous with regards to race and ethnicity and there was also a preponderance of female participants, both of which might limit generalizability. This work would benefit from replication with a larger sample representing more diverse backgrounds in regard to geographic location, age, sex, and race and ethnicity.

The largest limitation of this study had to do with the means by which levels of prior victimization were determined. As far as the author can tell, this method was new with this study. This was due to the population of interest. In a compendium of Bullying and Victimization measures, the RBQ was one of two scales that was applicable past the age of 18 and the only scale that measured frequency and intensity of victimization. (Hamburger, Basile, &
Vivolo, 2011). A search of PsychInfo did not yield any other applicable measures of victimization. The way that the scale was used to create a victimization index was based on the victim definition provided by Shaffer and colleagues (2004). The results are a fairly rough indicator, collapsing a fairly large continuous concept into a 4-point ordinal scale. The lack of significant findings may be related more to the insensitivity of this index rather than the lack of an actual existing relationship.

Future Research

This study was the first that the authors could find to connect the Reasons for Living Inventory to reports of victimization. There is a great deal of research linking victimization to suicide but very little focuses on protective factors such as reasons for living. The positive results for moderation of Survival and Coping Beliefs and the mediation of the scales of the RFL by Maladaptive Coping methods suggest a fruitful area of research could be to investigate whether fostering successful coping mechanisms following victimization would ameliorate negative impact.

In a search for scales that would cover victimization in a college sample, very few applicable questionnaires were found that had traditional college age ranges listed as the target populations. As victimization has become a more widespread problem, there has been a large focus on understanding the impact and focusing on prevention. Total prevention seems improbable given the widespread reach of this phenomenon. Future research should continue to focus on prevention, but researchers must also develop instruments that can assess the long-term impacts of victimization as well as coping methods that can help and buffer victims. In recent years there has been some dedication to these areas, but much work still needs to be done.
REFERENCES


APPENDICES

Appendix A

Informed Consent Document

ATTENTION: Responding to items will be taken as an indication that you have read and understand the information below, and that you are agreeing to be a voluntary participant in this research study.

If you are under 18 years of age, you must withdraw from this study at this time. If you are attempting to earn extra credit or meet a course requirement by completing this survey but are not at least 18 years old, contact your professor about possible alternatives.

You will be participating in a study related to bullying, traumatic events, moral development and personality.

Please read all directions and questions carefully. Do not spend too much time thinking about your responses. There are not any right or wrong ways to respond and all of your responses will be anonymous.

None of the items in this survey request identifying information, so please do NOT provide any identifying information including your name, student ID or social security number, drivers license or state ID number, phone number, address, or other contact information in any of the open response boxes.

While we hope you will complete the entire study, you have the right to skip any items that make you uncomfortable or to which you do not want to respond and the right to withdraw from participating at any time without penalty of any kind.

This study consists of a set of online surveys, which you may now participate in. You will receive credit immediately upon completion of the survey. You will be identified to researchers only by a unique numeric ID code. The survey consists of a number of multiple-choice and/or free-answer questions and may be divided into a number of sections. You must complete all sections in one sitting, as you are not allowed to resume at another time from where you left off. While you are participating, your responses will be stored in a temporary holding area as you move through the sections, but they will not be permanently saved until you complete all sections and you are given a chance to review your responses.

Please note that while the researchers have no reason to assume any particular person would have any difficulties as a result of participating in this research study, if for whatever reason you find a question or questions within the surveys upsetting or disturbing, or if you are simply considering finding treatment for any psychological condition, counseling is available at http://www.etsu.edu/students/counseling or (423) 439-4841. If you have any questions or concerns about the research study itself, please feel free to contact the Principle Investigator, Dr. Chris S. Dula at 423-439-8307 or dulac@etsu.edu or to contact the ETSU Institutional Review Board at 423-439-6000.

Proceeding from this point will be taken as confirmation that you have read and agree to the information above.
Appendix B

Demographics Questionnaire

Sex:
Female ____  Male ____

Age ___

Racial/Ethnic/Cultural Identity:
African American/Black ____
American Indian ____
Asian American ____
European American/White ____
Hispanic American ____
Other ______

Current level in college:
Freshman ____
Sophomore ____
Junior ____
Senior ____
Graduate ____
Non-degree seeking ____

Are you a full-time student?
Yes ____  No ____

Estimated Current GPA: ____

What is your best estimate of your family’s total combined income over the last year?
$0 to $14,999 ____
$15,000 to $24,999 ____
$25,000 to $49,999 ____
$50,000 to $74,999 ____
$75,000 to $99,999 ____
$100,000 to $149,999 ____
$150,000 to 200,000 ____
Above $200,000 ____

Have you ever been diagnosed with PTSD (Posttraumatic Stress Disorder)?
Yes ____  No ____

If yes to the above question, have you ever received treatment for PTSD?
Yes ____  No ____
Have you ever served as active duty military personnel?
   Yes _____
   No _____

If yes to the above question, have you ever been in combat, served in a combat zone, or been the target of enemy attacks?
   Yes _____
   No _____

Regardless of your political affiliation (if any), how do you see yourself in terms of political views in general?
   A. Non-Political
   B. Slightly Political
   C. Somewhat Political
   D. Fairly Political
   E. Highly Political

Regardless of your political affiliation (if any), how do you see yourself in terms of your political stance in general?
   A. Highly Conservative
   B. Fairly Conservative
   C. Somewhat Conservative
   D. Moderate
   E. Somewhat Liberal
   F. Fairly Liberal
   G. Highly Liberal

Regardless of your religious affiliation (if any), how do you see yourself in terms of spirituality in general?
   A. Non-Spiritual
   B. Slightly Spiritual
   C. Somewhat Spiritual
   D. Fairly Spiritual
   E. Highly Spiritual

Regardless of your religious affiliation (if any), how do you see yourself in terms of your commitment to religion in general?
   A. Non-Religious
   B. Slightly Religious
   C. Somewhat Religious
   D. Fairly Religious
   E. Highly Religious

Do you have any permanent tattoos?
   Yes _____
   No _____

If yes to the above question, how many separate tattoos do you have? _____
Appendix C

Retrospective Bullying Questionnaire

All answers will be treated confidentially.

Are You Male ☐ Female ☐

Age: __________

Please think back to your school days. You may have seen some bullying at school, and you may have been involved in some way. (Tick the choice which best describes your own experiences at school)

I was not involved at all, and I never saw it happen ☐
I was not involved at all, but I saw it happen sometimes ☐
I would sometimes join in bullying others ☐
I would sometimes get bullied by others ☐
At various times, I was both a bully and a victim ☐

Can you briefly describe an incident in which you observed someone else being bullied or an incident in which you felt you were bullied? (Open Answer)

This part deals with your experiences at primary school (4–11 years).

Tick the boxes that are right for you.

1. Did you have a happy time at primary school?
detest disliked neutral liked a bit liked a lot
2. Did you have a happy time at home with your family while in primary school?
detest disliked neutral liked a bit liked a lot

The next questions are about physical forms of bullying – hitting and kicking, and having things stolen from you.

3. Were you physically bullied at primary school?
hit/punched yes no
stolen from yes no
4. Did this happen?
never rarely sometimes frequently constantly
5. How serious did you consider these bullying-attacks to be?
I wasn’t bullied not at all only a bit quite serious extremely serious

The next questions are about verbal forms of bullying – being called nasty names, and being threatened.

6. Were you verbally bullied at primary school?
called names yes no
threatened yes no
7. Did this happen?
never rarely sometimes frequently constantly
8. How serious did you consider these bullying-attacks to be?
I wasn’t bullied not at all only a bit quite serious extremely serious

The next questions are about indirect forms of bullying – having lies or nasty rumors told about you behind your back, or being deliberately excluded from social groups.

9. Were you indirectly bullied at primary school?
had lies told about you yes no
excluded yes no
10. Did this happen?
never rarely sometimes frequently constantly
11. How serious did you consider these bullying-attacks to be?
I wasn’t bullied not at all only a bit quite serious extremely serious

The next questions are about bullying in general.

12. How long did the bullying attacks usually last?
I wasn’t bullied just a few days weeks months a year or more
13. How many pupils bullied you in primary school?
   I wasn’t bullied
   Mainly by one boy
   By several boys
   Mainly by one girl
   By several girls
   By both boys and girls
14. If you were bullied, why do you think this happened? (Open Answer)
This part deals with your experiences at secondary school (11–18 years).
15. Did you have a happy time at secondary school?
   detested disliked neutral liked a bit liked a lot
16. Did you have a happy time at home with your family while in secondary school?
   detested disliked neutral liked a bit liked a lot
The next questions are about physical forms of bullying – hitting and kicking, and having things stolen from you.
17. Were you physically bullied at secondary school?
   hit/punched yes no
   stolen from yes no
18. Did this happen?
   never rarely sometimes frequently constantly
19. How serious did you consider these bullying-attacks to be?
   I wasn’t bullied not at all only a bit quite serious extremely serious
The next questions are about verbal forms of bullying – being called nasty names and being threatened.
20. Were you verbally bullied at secondary school?
   called names yes no
   threatened yes no
21. Did this happen?
   never rarely sometimes frequently constantly
22. How serious did you consider these bullying-attacks to be?
   I wasn’t bullied not at all only a bit quite serious extremely serious
The next questions are about indirect forms of bullying – having lies or nasty rumors told about you behind your back, or being deliberately excluded from social groups.
23. Were you indirectly bullied at secondary school?
   had lies told about you yes no
   excluded yes no
24. Did this happen?
   never rarely sometimes frequently constantly
25. How serious did you consider these bullying-attacks to be?
   I wasn’t bullied not at all only a bit quite serious extremely serious
The next questions are about bullying in general.
26. How long did the bullying-attacks usually last?
   I wasn’t bullied just a few days weeks months a year or more
27. How many pupils bullied you in secondary school?
   I wasn’t bullied
   Mainly by one boy
   By several boys
   Mainly by one girl
   By several girls
   By both boys and girls
28. If you were bullied, why do you think this happened? (open Answer)

PART III: GENERAL EXPERIENCES AT SCHOOL

29. Which were the main ways you used to cope with the bullying?
   (Please tick one or more options)
   I wasn’t bullied at school
   I got help from a teacher
   I tried to make fun of it
   I got help from family / parents
   I tried to avoid the situation
   I tried to handle it by myself
   I tried to ignore it
   I did not really cope
   I fought back
   I got help from friends
   Other

30. Did you ever take part in bullying anyone while you were at school?
   hit/punched   yes no
   stole from    yes no
   called names  yes no
   threatened    yes no
   told lies about yes no
   excluded      yes no

31. Did this happen?
   never rarely sometimes frequently constantly

32. How often did you try to avoid school by pretending to be sick or by playing truant because you were being bullied?
   I wasn’t bullied at school
   Sometimes  Never  Maybe once a week  Only once or twice  Several times a week

33. When you were being bullied, did you ever, even for a second, think about hurting yourself or taking your own life?
   I wasn’t bullied at school
   Yes, once
   No, never
   Yes, more than once

34. Have you been bullied since leaving school?
   I haven’t been bullied since leaving school
   I have been bullied by my family
   I have been bullied by others (please specify):
   Recollections of being bullied at school
   (Only answer these questions, if you were bullied):

35. Do you have vivid memories of the bullying event(s) which keep coming back causing you distress?
   no, never not often sometimes often  always

36. Do you have dreams or nightmares about the bullying event(s)?
   no, never not often sometimes often  always

37. Do you ever feel like you are re-living the bullying event(s) again?
   no, never not often sometimes often  always

38. Do you ever have sudden vivid recollections or “flashbacks” to the bullying event(s)?
   no, never not often sometimes often  always

39. Do you ever feel distressed in situations which remind you of the bullying event(s)?
   no, never not often sometimes often  always
40. If you were bullied, do you feel it had any long-term effects? If so, please describe below: (Open Answer)

PART IV: BULLYING OR HARASSMENT IN THE WORKPLACE

41. Have you ever experienced bullying in your workplace?
   I wasn’t bullied in my workplace
   I have been bullied in my present job
   I was bullied in one of my previous jobs
   I have been bullied in all of my jobs
   I was bullied in more than one of my previous jobs

42. Please state whether you have been bullied at work over the last six months.
   No
   Yes, several times per month
   Yes, very rarely
   Yes, several times per week
   Yes, now and then
   Yes, almost daily

43. If yes, when did the bullying start?
   Within the last 6 months
   Between 6 and 12 months ago
   Between 1 and 2 years ago
   More than 2 years ago

44. If you have been bullied, what did you do?
   (Please tick one or more options)
   Tried to avoid the situation
   Saw my doctor
   Tried to ignore it
   I went for counseling
   Confronted the bully
   I got psychiatric help
   Went to the union/staff association
   Made use of the organization’s grievance procedure
   Went to personnel
   I left the job
   Discussed it with colleagues
   Did not really cope
   Went to occupational health
   Went to the welfare department
   Other
Appendix D

The Brief COPE

These items deal with ways you've been coping with the stress in your life since you experienced the event. There are many ways to try to deal with problems. These items ask what you've been doing to cope with this one. Obviously, different people deal with things in different ways, but we're interested in how you've tried to deal with it. Each item says something about a particular way of coping. We want to know to what extent you've been doing what the item says. How much or how frequently. Don't answer on the basis of whether it seems to be working or not—just whether or not you're doing it. Try to rate each item separately in your mind from the others. Make your answers as true FOR YOU as you can.

Item Response Anchors are 1 = I haven’t been doing this at all; 2 = I’ve been doing this a little bit; 3 = I’ve been doing this a medium amount; 4 = I’ve been doing this a lot

1. I've been turning to work or other activities to take my mind off things.
2. I've been concentrating my efforts on doing something about the situation I'm in.
3. I've been saying to myself "this isn't real."
4. I've been using alcohol or other drugs to make myself feel better.
5. I've been getting emotional support from others.
6. I've been giving up trying to deal with it.
7. I've been taking action to try to make the situation better.
8. I've been refusing to believe that it has happened.
9. I've been saying things to let my unpleasant feelings escape.
10. I’ve been getting help and advice from other people.
11. I've been using alcohol or other drugs to help me get through it.
12. I've been trying to see it in a different light, to make it seem more positive.
13. I’ve been criticizing myself.
14. I've been trying to come up with a strategy about what to do.
15. I've been getting comfort and understanding from someone.
16. I've been giving up the attempt to cope.
17. I've been looking for something good in what is happening.
18. I've been making jokes about it.
19. I've been doing something to think about it less, such as going to movies, watching TV, reading, daydreaming, sleeping, or shopping.
20. I've been accepting the reality of the fact that it has happened.
21. I've been expressing my negative feelings.
22. I've been trying to find comfort in my religion or spiritual beliefs.
23. I've been trying to get advice or help from other people about what to do.
24. I've been learning to live with it.
25. I've been thinking hard about what steps to take.
26. I’ve been blaming myself for things that happened.
27. I've been praying or meditating.
28. I've been making fun of the situation.
Appendix E
Depression, Anxiety, and Stress Scale (DASS)

The rating scale is as follows:
0 1 2 3
0 Did not apply to me at all
1 Applied to me to some degree, or some of the time
2 Applied to me to a considerable degree, or a good part of time
3 Applied to me very much, or most of the time

1 I found myself getting upset by quite trivial things
2 I was aware of dryness of my mouth
3 I couldn't seem to experience any positive feeling at all I experienced breathing difficulty (eg, excessively rapid breathing, breathlessness in the absence of physical exertion)
4 I just couldn't seem to get going
5 I tended to over-react to situations
6 I had a feeling of shakiness (eg, legs going to give way)
7 I found it difficult to relax
8 I found myself in situations that made me so anxious I was most relieved when they ended
9 I felt that I had nothing to look forward to
10 I found myself getting upset rather easily
11 I felt that I was using a lot of nervous energy
12 I felt sad and depressed
13 I found myself getting impatient when I was delayed in any way (eg, lifts, traffic lights, being kept waiting)
14 I had a feeling of faintness
15 I felt that I had lost interest in just about everything
16 I felt I wasn't worth much as a person
17 I felt that I was rather touchy
19 I perspired noticeably (eg, hands sweaty) in the absence of high temperatures or physical exertion
20 I felt scared without any good reason
21 I felt that life wasn't worthwhile
22 I found it hard to wind down
23 I had difficulty in swallowing
24 I couldn't seem to get any enjoyment out of the things I did
25 I was aware of the action of my heart in the absence of physical exertion (eg, sense of heart rate increase, heart missing a beat)
26 I felt down-hearted and blue
27 I found that I was very irritable
28 I felt I was close to panic
29 I found it hard to calm down after something upset me
30 I feared that I would be "thrown" by some trivial but unfamiliar task
31 I was unable to become enthusiastic about anything
32 I found it difficult to tolerate interruptions to what I was doing
33 I was in a state of nervous tension
34 I felt I was pretty worthless
35 I was intolerant of anything that kept me from getting on with what I was doing
36 I felt terrified
37 I could see nothing in the future to be hopeful about
38 I felt that life was meaningless
39 I found myself getting agitated
40 I was worried about situations in which I might panic and make a fool of myself
41 I experienced trembling (eg, in the hands)
42 I found it difficult to work up the initiative to do things
Appendix F

Dissipation-Rumination Scale

Using the following scale, indicate the response which reflects your first reaction to each statement by placing an appropriate number before each item. Please be spontaneous and accurate as much as possible within the limits of the choices offered below:

0 = Completely false of me
1 = Fairly false for me
2 = False to a certain extent
3 = True to a certain extent
4 = Fairly true for me
5 = Completely true for me

1) I never help those who do me wrong.
2) I will always remember the injustices I have suffered.
3) The more time that passes, the more satisfaction I get from revenge.
4) It is easy for me to establish good relationships with people.
5) It takes many years for me to get rid of a grudge.
6) When somebody offends me, sooner or later I retaliate.
7) I do not forgive easily once I am offended.
8) I often bite my fingernails.
9) I won’t accept excuses for certain offenses.
10) I hold a grudge, for a very long time, towards people who have offended me.
11) I remain aloof towards people who annoy me, in spite of any excuses.
12) I can remember very well the last time I was insulted.
13) I am not upset by criticism.
14) I enjoy people who like jokes.
15) I still remember the offenses I have suffered, even after many years.
16) If somebody harms me, I am not at peace until I can retaliate.
17) When I am outraged, the more I think about it, the angrier I feel.
18) I like people who are free.
19) I am often sulky.
20. Sometimes I can’t sleep because of a wrong done to me.
Appendix G

Expanded Reasons For Living Inventory

In each space put a number to indicate the importance to you of each for not killing yourself.

1. Not At All Important 4. Somewhat Important
2. Quite Important 5. Quite Important

1. I have a responsibility and commitment to my family.
2. I believe I can learn to adjust or cope with my problems.
3. I believe I have control over my life and destiny.
4. I have a desire to live.
5. I believe only God has the right to end a life.
6. I am afraid of death.
7. My family might believe I did not love them.
8. I do not believe that things get miserable or hopeless enough that I would rather be dead.
9. My family depends upon me and needs me.
10. I do not want to die.
11. I want to watch my children as they grow.
12. Life is all we have and is better than nothing.
13. I have future plans I am looking forward to carrying out.
14. No matter how badly I feel, I know that it will not last.
15. I am afraid of the unknown.
16. I love and enjoy my family too much and could not leave them.
17. I want to experience all that life has to offer and there are many experiences I haven't had yet which I want to have.
18. I am afraid that my method of killing myself would fail.
19. I care enough about myself to live.
20. Life is too beautiful and precious to end it.
21. It would not be fair to leave the children for others to take care of.
22. I believe I can find other solutions to my problems.
23. I am afraid of going to hell.
24. I have a love of life.
25. I am too stable to kill myself.
26. I am a coward and do not have the guts to do it.
27. My religious beliefs forbid it.
28. The effect on my children could be harmful.
29. I am curious about what will happen in the future.
30. It would hurt my family too much and I would not want them to suffer.
31. I am concerned about what others would think of me.
32. I believe everything has a way of working out for the best.
33. I could not decide where, when, and how to do it.
34. I consider it morally wrong.
35. I still have many things left to do.
36. I have the courage to face life.
37. I am so inept that my method would not work.
38. I am afraid of the actual act. of killing myself (the pain, blood, violence)
39. I believe killing myself would not really accomplish or solve anything.
40. I have hope that things will improve and the future will be happier.
41. Other people would think I am weak and selfish.
42. I have an inner drive to survive.
43. I would not want people to think I did not have control over my life.
44. I believe I can find a purpose in life, a reason to live.
45. I see no reason to hurry death along.
46. I am so inept that my method would not work.
47. I would not want my family to feel guilty afterwards.
48. I would not want my family to think I was selfish or a coward.
49. I would not be able to see the effect of my death on others.
50. Close friends depend upon me and need me.
51. I can find meaning in suffering.
52. There are friends I enjoy and love too much to leave.
53. I have too much pride in myself.
54. Rational people do not kill themselves.
55. If I were depressed enough to want to die, I would be too depressed to kill myself.
56. I make a contribution to society.
57. Society disapproves of killing myself.
58. I have people who love me and who would listen to and understand me.
59. I see no reason to die and let someone else enjoy the things I worked for.
60. It is a sign of weakness and I don't want to be a quitter or a failure.
61. I am afraid that my death would not matter to anyone.
62. The finality of the act would stop me.
63. It would be too much of an embarrassment to my family.
64. It would hurt my close friends too much.
65. There are obligations I feel I should keep.
66. I would think of others worse off than myself.
67. I have a job in which I am involved and where I am needed.
68. I have a responsibility and commitment to my friends.
69. I would know I probably was not serious and it was just a passing thought.
70. Experiencing unhappiness is an important part of life.
71. I would stop feeling sorry for myself.
72. The thought of suicide is totally incomprehensible to me.
VITA

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