

Attributional and Coping Styles of Involved and Non-Involved Children in
Peer Victimization

by

Megan Randall

A Dissertation Presented in Partial Fulfillment
of the Requirements for the Degree
Doctor of Philosophy

Approved April 2013 by the
Graduate Supervisory Committee:

Linda C. Caterino, Chair
Kathryn Nakagawa
Kathleen McCoy

ARIZONA STATE UNIVERSITY

May 2013

ABSTRACT

This dissertation study examines the coping methods and attributional styles of peer victimized children versus those who are not involved with acts of bullying. Data corresponding to elementary school children (n=317) over a period of four years from four public elementary schools in the Southwest United States was used in the present study. Latent class analyses and correlations were conducted to explore (1) whether externalizing versus internalizing or passive emotional reactions differentially influence the attributions children make regarding victimization, (2) whether externalizing types of emotional reactions differentially influence the coping methods victimized children utilize, and (3) whether children identified as "bullies" experience different types of emotional reactions than those identified as "victims." Findings revealed that children who identified as self-reported victims tended to report higher levels of internalizing feelings. However, contradictory to what was hypothesized, the victim group also reported higher levels of being mad. Specific patterns arose between the types of attributions that victimized and non-victimized children made, where the children who identified more frequently as being victims tended to report that they believed bullying took place due to reasons that were more personal in nature and more stable. Lastly, findings also revealed similarities in the ways victimized children coped with bullying.

DEDICATION

To my parents: the most inspirational, loving, caring, and giving people I will ever know.

I am truly blessed to be your daughter.

ACKNOWLEDGMENTS

I would like to thank Dr. Linda Caterino for being “super woman;” very few people are able to take on multiple roles and be great at all of them, and she happens to be one of the exceptions. I would also like to thank my committee members: Dr. Kathryn Nakagawa and Dr. Kathleen McCoy. Last but most certainly not least, I would like to thank Dr. Becky Ladd for affording me the opportunity to be part of this wonderful study, and for all of her help throughout the years.

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Chapter 1

INTRODUCTION

Overview

The act of peer victimization, and more specifically the subset of victimization known as bullying, is a topic that has been raising considerable attention in recent years, by both researchers and the general public. Data indicates that the high rates of children who identify as either having been, or continue to be victimized, particularly due to bullying, appear to warrant that attention. While peer victimization is known to take place across a variety of settings, it has been found to be more prevalent in schools than in any other environment (Delfabbro, Winefield, Trainor, Dollard, Anderson, & Metzger et al., 2006). Tragic events such as Columbine High School (Columbine, Colorado), the Virginia Polytechnic and State University (Blacksburg, Virginia) shootings, and most recently Sandy Hook Elementary (Newton, Connecticut), among many other events, which have been similar in nature, have brought to light the seriousness and necessity of ensuring that the school environment is a safe place. Among the list of factors that may infringe upon a school's safety is bullying, which is said to be the most prevalent form of violence in schools, and the behavior that affects the greatest number of students (Bauman & Del Rio, 2005).

Statistics show that during the 2008-2009 academic year approximately 28% of students in the United States of America ages 12-18 reported being bullied at school (Student Reports of Bullying and Cyber-Bullying: Results from the 2009 School Crime Supplement to the National Crime Victimization Survey). Further, research indicates that bullying is not just a serious issue at schools in the United States, but rather one that is a

frequent problem at primary schools in a number of different countries, including Austria, England, Germany, Norway, and Turkey (Onder & Yurtal, 2008).

According to Fox and Bouton (2006), a common description of “peer victimization” as being "the experience among children of being a target of the aggressive behavior of other children, who are not siblings and not necessarily age-mates" (p. 110). The term “peer victimization” encompasses various forms, including verbal (i.e., making threats), physical (i.e., hitting), and relational (i.e., social exclusion) victimization from others (Collins, McAleavy & Adamson, 2004; Fekkes, Pijpers, Verloove-Venhorick, 2005; Gladstone, Parker, & Malhi, 2006).

Peer victimized children often times fall prey to bullying. Although many definitions for bullying exist, the most common theme among them is that bullying can be categorized as a subset of aggressive behavior that involves the intention of hurting an individual or group of individuals (Onder & Yurtal, 2008). Generally, bullying has been described by Olweus (1993) as a situation in which a student “is exposed repeatedly and over time, to negative actions on the part of one or more students” (pg. 9), where negative actions may be physical or psychological in nature (Hoover, Oliver & Hazler, 1992). More specifically, bullying has been defined as a state of affairs in which one or more stronger students persecute(s) or attempt(s) to persecute a fellow peer or group of peers in order to disturb, disgrace, harm or injure the weaker student(s) in the absence of provocation, repeatedly and over time (Hoover, Oliver, & Hazler, 1992; Olweus, 1993).

Bullying has become a commonly reported school problem, across various cultures and educational settings, both within the United States and internationally. In the 1990’s, approximately 10% of elementary and middle-school aged children in the United

States of America reported being victimized by peers (bullies), and the rate of identified victims has only risen sharply in subsequent years to nearly 30% in 2008. The increasing number of children who report being bullied at school is a worldwide trend (Hodges, Boivin, Bukowski, & Vitaro, 1999; Nansel, Overpeck, Pilla, Ruan, Simons-Morton & Scheidt, 2001; Onder & Yurtal, 2008). International research indicates prevalence rates ranging between 8- 46% for children who are bullied regularly, where “regular bullying” is defined as peer victimization that occurs several times a month or on a weekly basis (Fekkes, et al., 2005; Smith, Morita, Junger-Tas, Olweus, Catalano et al., 1999).

Special mention should be given to the fact that estimates of bullying prevalence rates vary greatly; this occurs for a variety of reasons, including demographic characteristics, such as age, ethnicity, and gender. Other explanations for the variability in bullying and victimization prevalence rates include the reporting methods being employed (i.e., self report vs. peer nomination), and time frames being used (Hanish, 2000; Furlong, Sharkey, Felix, Tanigawa, & Green, 2007). Additionally, research indicates that not all victims report episodes of victimization; accordingly, adults may be unaware of bullying incidences or they may become overwhelmed by such acts. Thus, adults or authority figures in the child’s life do not always take action and/or implement precautionary measures (Bradshaw, Sawyer & O’Brennan, 2007; Carney & Merrell, 2001; Fekkes, Pijpers, & Verloove-Venhorick, 2005).

Defining Bullying

One particularly interesting barrier in identifying the occurrence(s) of bullying is the fact that there is no universal definition for bullying; consequently, the specific actions and behaviors children and adults perceive as constituting an act of bullying are

still unknown (Hoover, Oliver, & Hazler, 1992). Hoover, Oliver, and Hazler (1992) have suggested that the extent to which children perceive events and experiences at school to be negative may be more important than the behaviors and actions that are subjectively witnessed by adults. For example, aggressive behaviors, especially those displayed by boys, can mistakenly be assumed to be part of the normal maturation process (Carney & Merrell, 2001). Western social constructs have created expectations for boys to engage in physical activities, such as “rough and tough” play, whereas girls are anticipated to engage in more quiet and personal social activities (Maccoby, 1998). Interestingly, most of the participants in a study by Hoover, Oliver, and Hazler (1992) portrayed bullying as a mild, verbal form of aggression. This finding is consistent with the notion that aggressive behavior, especially as it is viewed as being related to “typical” development, may be overlooked.

Effects of Bullying

Bullying negatively affects those who fall victim to this type of behavior. In general, research on victimization indicates that the psychological response(s) to the various forms of victimization, including human-induced victimization, such as bullying, are usually immediate and often intense (Janoff-Bulman & Frieze, 1983). Some of the most common emotional reactions people experience in response to victimization include confusion, shock, helplessness, anxiety, fear, and depression (as cited in Janoff-Bulman & Frieze, 1983). Additionally, peer victimized children tend to be more passive and mistrustful (as cited in Onder & Yurtal, 2008). Further, studies reveal that children who are chronically peer victimized have greater adjustment problems (Kochenderfer & Ladd, 1996) and an increased risk of several different physical, social, psychosexual, and

mental health issues, some of which have long-term detrimental effects (as cited in Hoover, Oliver, & Hazler, 1992). Included in the list of commonly associated concerns are: academic struggles, acute and chronic stress, anxiety, depression, sleep difficulties, and physical issues, such as headaches and stomachaches (Bollimer, Milich, Harris, & Maras, 2005; Collins et al., 2004; Gladstone et al., 2006; Glew, Fan, Katon, & Rivara, 2008; Fekkes et al., 2005; and Seals & Young, 2003). Moreover, Kochenderfer-Ladd and Wardrop (2001) found evidence that indicates that peer victimization is closely linked to children's feelings of loneliness and dissatisfaction with their social relationship(s).

Research suggests that once victimized, individuals tend to see themselves in the future more readily in the role of victim; that is, once an incident has happened, the traumatic experience becomes "available," allowing the individual to view him or herself as being "representative" of the subsample of people who are victimized (Janoff-Bulman & Frieze, 1983). Post-victimization, individuals have been found to experience lower levels of self-concept, as well as a heightened rate of internalizing and externalizing problems (Card & Hodges, 2008). Sadly, it is not surprising then, that some data suggests that children who are continually bullied have increased thoughts about suicide (Fekkes et al., 2005). In fact, Olweus's research (1993, 1999) recognized peer victimization as being a significant factor in youth suicides. Interestingly, research reveals that children who respond emotionally, either submissively or aggressively, to peer victimization will likely experience prolonged bullying; whereas, an association between de-escalation within bullying episodes has been found with individuals who respond to victimization with problem-solving strategies (e.g., active assertiveness) (Craig, Pepler, & Blais, 2007).

Victimization and Directionality of Traits

Despite our awareness that bullying is detrimental to the individuals who fall victim to it, numerous obstacles exist in our understanding of these forms of maladaptive behavior. In particular, consideration must be given to the causal direction between internalizing problems and peer victimization. Several researchers have suggested that peer victimized children have a similar set of characteristics, which are commonly referred to as internalizing behaviors; internalizing traits include shyness, introversion, depression, submissiveness, anxiety, and social withdrawal or loneliness among other things (Bollimer et al., 2005). Some investigators have posited that these internalizing characteristics may be a contributing and key factor in peer victimization (Gladstone, Parker, & Malhi, 2006; Nansel, Overpeck, Pilla, Ruan, Simons-Morton et al., 2001; Perren & Alsaker, 2006). It is believed that children who possess these internalizing traits, such as having an anxious and sensitive temperament style, convey a more vulnerable, non-assertive persona to bullies, thus becoming “easy targets”, as they are considered to be weaker and more vulnerable than their peers (Bollimer et al., 2005; Gladstone, Parker, & Malhi, 2006; Olweus, 1993). Interestingly, some research indicates that family members of victims also show more defensive types of behavior, less repudiation, and less overt hostility (as cited in Onder & Yurtal, 2008).

In addition to having a similar set of personality characteristics, some investigators have found evidence that another set of risk factors tend to be present in children who are peer victimized, including being physically smaller and weaker than their same-aged peers, being from lower socioeconomic backgrounds, and being overrepresented in special education (Baldry & Farrington, 1999; Hoover, Oliver, & Hazler, 1992; Olweus,

1993; Schwartz, Dodge, & Coie; 1993). In their studies, Hoover, Oliver, and Hazler (1992) found that social issues, appearance (i.e., weight and facial hair), and a sense of not belonging were the risk factors most commonly reported by peer victimized students; high academic achievement was also identified as being a risk factor, where many students in rural schools reported feeling pressure to be “anti-intellectual” in order to fit in. Interestingly, children who viewed themselves as being overweight, “homely” or less attractive, as well as being overly emotional were found to be most at risk for overt forms of victimization.

Other researchers argue that it’s the act of victimization that leads to the development of anxiety and depression, especially in adolescents; subsequently suggesting that emotional problems are not the determining factors in future victimization (Bond, Carlin, Thomas, Rubin, & Patton, 2001). In their study, Bond et al. (2001) found that bullying preceded health complaints, such as anxiety and depression, particularly among adolescent girls. While Mirowsky and Ross (2006) have suggested that the interaction between a child or adolescent and his or her environment, which includes peers, has an overall effect on psychosocial functioning and contributes to how he or she copes with emotional difficulties. They posit that one’s identity is formed based partially on peer social feedback; thus suggesting that when one’s identity is not consistent with his or her own self-image, he or she may display poor emotional regulation and impaired psychosocial functioning. Additionally, the level to which children perceive acts of victimization to be humiliating and aversive may ultimately affect how fearful and avoidant they are if they should be involved in future occurrences of bullying, as well as how negatively they self-evaluate (Reijntjes, Kamphuis, Prinzie, & Telch, 2010).

Relationships and Bullying

Relationships have been identified as a particularly influential factor in bullying behavior, where research indicates that family members provide the most central form(s) of relationships during childhood; however, as children are exposed to new environments (e.g., school), significant relationships with others, including teachers and peers, increase (Silver, Measelle, Armstrong, & Essex, 2010). “Negative” relationships with teachers or peers tend to evoke stress and/ or conflict, and may be a contributing factor to the development of future externalizing behaviors, such as bullying (Silver, Measelle, Armstrong, & Essex, 2010). Further, evidence indicates that the quality of the relationship between kindergarten teachers and children is linked with school adjustment, aggression, and conduct problems in school (Silver, Measelle, Armstrong, & Essex, 2010).

Peer relationships also appear to play a vital role in the development and maintenance of aggressive behavior and victimization (Mercer, McMillen, & DeRosier, 2009). In regards to victims, some question exists as to whether victims prefer to play in isolation or whether they are socially withdrawn because they are unaccepted (Perren & Alsaker, 2006). Egan and Perry (1998) have proposed that peer victimized children are socially outcast because they lack certain pro-social skills, such as cooperation and friendliness. Sentse, Scholte, Salmivalli, and Voeten (2007) have suggested that adolescents are accepted among their peer group if they display what their peer group perceives as normative or positive behavior. Conversely, the inverse of this is also true, that is, if an adolescent displays non-normative behavior, their peer group will reject or ignore that individual.

In opposition, Marini, Dane, Bosacki, and the Brock Research Institute for Youth Studies in Canada (2006) have found that victims have an increased amount of peer relational difficulties due to the fact that they have suffered indirect or relational bullying. They suggest that adolescents who are indirectly victimized (i.e., pushed out of a social group because of rumors or gossip) may be suffering from increased social anxiety due to indirect bullying affecting their social status, and in turn having a significant impact on their fear of disapproving peers. Juvonen, Graham, and Schuster (2003) suggest that victims experience social marginalization in the form of being avoided by classmates. Their findings revealed that victims had a low social status when compared to non-bullied peers, and that psychological distress was elevated for victims due to worry associated with the inability to find acceptance by their peer group.

Additionally, peer rejection appears to be a constant predictor of externalizing behavior during middle childhood, adolescence, and adulthood (as cited in Silver, Measelle, Armstrong, & Essex, 2010). The contrary appears to be true of pro-social interventions by peers, which have been found to be effective in preventing or limiting aggressive acts on the playground (Mercer et al., 2009). Overall, evidence suggests that in general, victimized individuals describe their quality of friendship with others as being “poor” (Smith, Talamelli, Cowie, Naylor, & Chahanu, 2004).

Interestingly, in regards to bullies, during early adolescence youth strive to establish a life independent of their parents; as such, Attraction Theory suggests that young adolescents are particularly drawn to others who possess characteristics that reflect independence (Espelage & Swearer, 2003).

Aggressive youth are more likely to affiliate with aggressive peers, which leads to the maintenance of an overall violent mentality among these groups (Mercer, McMillen, & DeRosier, 2009).

Age Differences in Bullying Activities and Coping Behaviors

Another well-researched risk factor associated with peer-victimization is age. In their study, Hanish and Guerra (2000) found that younger children are less competent in self-protection, that is, they typically have relatively less developed cognitive, physical, and social skills, which are helpful against peer attacks. Existing evidence suggests that physical and verbal aggression tends to be highest at the beginning of each school year and then diminishes throughout the course of the year for elementary school aged children (Roseth, Pelligrini, Bohn, Van Ryzin, & Vance, 2007); this may be due to a new environment, which includes a potentially new set of classmates. Generally, younger children are apt to exhibit higher rates of aggression; this trend, however, tends to decrease as children mature and develop the necessary pro-social skills, including coping skills, so that they can effectively deal with negative events, such as peer victimization (Ronen, Rahav, & Moldawsky, 2007). Knowledge of developmental stages is particularly important for primary school teachers since they are working with one of the most vulnerable populations; that way they can be mindful and focus their efforts on creating an anti-bullying climate from the very start of the school year. However, research also indicates that teachers are more effective at identifying bullying behavior among elementary school students, in comparison to middle and high school aged youth.

Interestingly, the first grade has been identified as a particularly vital year; specifically, research indicates that aggression during the first grade is an important antecedent for aggressive behavior later in life (Ronen, Rahav, & Moldawsky, 2007).

In terms of coping, some data suggests that secondary school students (ages 11 to 14 years old) are more likely to use coping strategies (in general) than primary school students (ages 9 to 11 years old) (Hunter & Borg, 2006). However, evidence is conflicting in this area, where findings from the Zimmer-Gembeck & Skinner (2008) study support the contention that adolescents, when compared to younger children, are more likely to seek out peers for emotional support when faced with daily stressors; in contrast, results from the Hunter and Borg (1996) study suggest that younger children are more likely to cope by seeking out help from a peer or adult, as compared to older students who are more likely to do “nothing.” Similar to the Hunter and Borg (1996) study, research also suggests middle-school students are less likely to inform adults (e.g., school staff and parents) about acts of bullying because they perceive that reporting the incident will do little to remedy the problem (as cited in Casey-Cannon, Hayward, & Gowen, 2001). Further, older students (e.g., high school students) have been found to hold more fixed beliefs about aggressive peers and be less likely to try to intervene to change bullies’ behavior (Yeager, Trzesniewski, Tirri, Nokelainen, & Dweck, 2011). In comparison, younger children may be more likely to seek out support from others, particularly parents or guardians, because they are not yet in the developmental stage characterized by striving for independence and peer acceptance (Hunter & Borg, 1996).

Bjtirkqvist (1994) proposed that younger children lack sophisticated verbal skills; therefore, aggression is chiefly physical in the juvenile population. Furthermore, in their

study, Perren and Alsaker (2006) found that peer-victimized kindergarteners lacked leadership skills and were distinctly more submissive than their same-aged peers. Not surprisingly then, in terms of emotional responses to acts of bullying, findings from a study conducted by Hunter and Borg (1996), suggest that younger students are more likely to experience feelings of self-pity and helplessness.

Interestingly, research indicates that bullying, particularly the forms that involve aggressive acts, increases again with the transition to middle school, but these behaviors decline shortly after that time period (Pellegrini & Long, 2002; Hoover et al., 1992). Pellegrini and Long (2002) have suggested that this trend occurs because the transition to middle school is the point at which students shift from characteristically small, personal primary schools with well-established social groups, into larger, less supportive secondary schools. Another perspective is that bullying is especially prevalent during late childhood and early adolescence due to the physical maturation process that is co-occurring at this time (Hoover et al., 1992). Nesdale and Scarlett (2004) conducted a study with pre-adolescent boys in grades five through seven; the participants were given a fictitious scenario involving two groups of children, where the “bully” group was described as being the same age as the participants and generally better at playing sports, in contrast to the “victim” group who were noted to be younger and less athletically inclined. Findings revealed that the study participants preferred the bully group to the victim group, suggesting that they “liked” physical confrontation as a means of conflict resolution. Additionally, the fact that the bully group was reported to initiate the physical confrontation between the two groups did not appear to significantly influence the participants' preference for that group.

Reportedly, ninth grade is another time in which students are especially vulnerable to aggression and disruptive behavior (Eliot, Cornell, Gregory, & Fan, 2010). For example, statistics reveal that ninth-grade students in Virginia have been responsible for 45% of all discipline infractions among students in grades 9–12 (Virginia Department of Education, 2005). Further, aggressive behavior in the ninth grade has been linked to low grades and substance abuse (Eliot et al., 2010). Evidence also reveals that one-third to one-half of all clinic referrals are for adolescent children with behavioral disorders. (Ronen, Rahav, & Moldawsky, 2007). Interestingly, results from the Hunter and Borg (1996) study suggest that secondary students who are victimized experience greater feelings of anger and vengefulness, in comparison to primary school aged children.

Regardless of why this trend occurs at these particular points in a child's life, the ramifications of such are important. Peer relations are especially vital to an individual's life during adolescence because during this stage identity development occurs, and research indicates that when individuals are forced to re-establish or reconfigure their social groups, stress increases analogously (Strayer & Noel, 1986). Unfortunately, one way in which peer status is said to be re-established or reconstructed is through the use of aggression because aggressive acts exude a form of dominance in relationships (Strayer & Noel, 1986). From this view, bullying is viewed as a deliberate strategy used to attain dominance. Interestingly, adolescence has also been hypothesized to be a time when students' attitudes about bullying and victimization change (Theriot, Dulmus, Sowers, & Johnson, 2005). During adolescence older students tend to become increasingly preoccupied by social status and peers' opinions, making the persona of being seen as "strong" and desirable important.

Thus, reducing the likelihood of self-identifying as a victim due to the perception that victims are viewed as weak or undesirable (Theriot et al., 2005).

Analogous to bullying behaviors, a child's use and preference for various coping strategies is also dependent on his or her age (or grade level). Evidence suggests that students are less likely to seek out adults (school staff) help as they grow older (Eliot, Cornell, Gregory, & Fan, 2010). In their study, Whitney and Smith (1993) found that generally, children in elementary school grades were more likely to report victimization to an adult or a teacher than were students in secondary grades. This may be related to the notion that students are less likely to seek out help when they perceive staff will be tolerant of the reported victimization. Accordingly, aggressive acts that are relational in nature may be misperceived by adults as being a normal part of the adolescent maturation process. Adolescent students may also be less likely to seek help from adults due to the developmental phase they are in since adolescence has been identified as a period in which individuals strive for autonomy and independence (Eliot et al., 2010).

However, the findings regarding age and help-seeking are mixed, where some research reveals that as adolescents approach adulthood, they may also seek out adult support in situations that they perceive as being uncontrollable or when they have determined that adults have authority in the situation (Zimmer-Gembeck & Skinner, 2008). Further evidence supports the notion that the coping strategy of ignoring bullies is one that is more frequently used with age, and most commonly used among older students (Kochenderfer-Ladd & Pelletier, 2008; Smith, Shu, & Madson, 2001). Results from Hunter and Borg's (2006) research revealed that older students were more likely to "do nothing" about acts of bullying, whereas the younger ones were more likely to seek

out assistance from friends, teachers, and parents. Conversely, in their study, Camodeca and Goossens (2005) found that younger children preferred responding in a nonchalant manner, whereas older students were more likely to choose retaliation/ revenge seeking strategies.

Gender Differences in Bullying Behaviors and Coping Strategies

Much of the research, to date, seems to indicate that boys and girls differ in their opinions and involvement in bullying behavior(s) (Glover et al., 2000; Menesini et al., 1997; Reid et al., 2004; Stockdale et al., 2002). Nabuzoka, Ronning, and Bjorn (2009) have suggested that males are more often both perpetrators and victims of bullying. However, evidence suggests that males and females report similar levels of victimization (Casey-Cannon, Hayward, & Gowen, 2001).

The variation in reporting and identification of victims of bullying may be due to the nature of the victimization that occurs; specifically, research indicates that boys tend to be involved in overt forms of aggression, such as kicking or hitting, whereas girls are more frequently involved in covert forms, such as name-calling and spreading “rumors” (Casey-Cannon, Hayward, & Gowen, 2001). As such, overt types of bullying may be easier for adults, such as school personnel, to witness and label as “bullying,” in comparison to covert forms that are less noticeable.

Further, relational aggression may be overlooked by adults (e.g., school staff), particularly during the middle school and high school years, because of a belief that these types of actions are “normal” adolescent behavior (Casey-Cannon, et al., 2001). Similarly, students may be more likely to report physical forms of bullying, in contrast to relational types, due to their perceptions about how seriously school personnel will treat

these two different forms. Since overt forms of victimization are directly linked to physical aggression, students may hold the belief that overt acts will be taken more seriously than those that involve name-calling and social isolation (relational bullying).

Pellegrini and Long (2002) conducted a three-year longitudinal study that examined students in a rural North American school system. In the first year of the study, students completed a self-report measure, the Olweus Senior Bully-Victim Questionnaire (Olweus, 1989), as well as peer nominations of popularity and friendship. In the following two years children completed direct observational and diary measures, in addition to the peer nominations, and self-report assessment. Findings revealed that the main effect of gender on bullying was significant, where boys were found to bully more often than girls; additionally, results suggested that the bullying trend decreased with time; however, the interaction suggested that the decreases were only significant for boys.

In terms of specific bullying behaviors, boys have been more often found to be involved with physically aggressive acts of bullying, where evidence suggests that males are three to four times more likely to inflict a physical attack than are females (Reid et al., 2004). In comparison, girls tend to be more frequently involved in indirect forms of bullying, often referred to relational bullying, which includes spreading rumors, social exclusion, and name-calling (Fekkes et al., 2005; Reid et al., 2004).

Likewise, females are more often relationally victimized, whereas males are more regularly physically victimized (Hanish, 2000). Further, female victims may be significantly more at risk for suffering internalizing symptoms, such as anxiety/depression, and withdrawn behaviors (Nabuzoka et al., 2009). In regards to why aggression occurs differentially between the two genders, Björkqvist (1994) has proposed

that females aren't necessarily less aggressive, but they are physically weaker; as such, girls develop non-physical means in order to "achieve successful results".

In their study, Menesini et al. (1997) found that female students in Italian and English primary and secondary schools were more likely to be upset about bullying than were their male peers. Furthermore, findings from Hunter and Borg's (1996) research indicate that females are more likely to have feelings of self-pity post-victimization, whereas males are more likely to react by being vengeful. Interestingly, the Menesini et al., (1997) study also revealed that girls were more likely to rate their teacher(s) as being prone to help or intervene in a bullying situation than did the male sample.

Similar to the variation in the types of bullying behaviors expressed by both genders, coping methods are also used differentially by gender. In particular, some researchers suggest that boys cope with instances of bullying by being more direct and confrontational, such as by "fighting back" or by using retaliation/ vengeance (Nabuzoka, Ronning, & Handegard, 2009). Likewise, evidence indicates that males tend to use distraction methods, such as forms of humor, more regularly to stop bullying (Nabuzoka et al., 2009). This trend may occur because males are typically involved in the more physical and overt forms of victimization (Kochenderfer & Ladd, 1997; Smith et al., 2001). Additionally, a study that utilized data extrapolated from the same database at the current investigation, indicated that males tend to cope by revenge seeking methods (Polasky, 2010). Other findings also indicate that boys generally express and use aggressive means of coping (i.e., fighting back/ vengefulness) more frequently than their female peers (Sharp, 1995; Hunter & Borg, 1996); whereas peer victimized females tend to express feelings of self-pity and helplessness more often than boys (Hunter & Borg,

1996). Fascinatingly, however, results from the Sharp (1995) study also suggest that, in general, passive coping strategies are the most common among both genders, followed by assertive methods, and lastly by aggressive approaches.

In comparison, girls have more often been found to report instances of bullying, as well as perceived “support” as being the best mechanism(s) to cope with and stop acts of victimization (Nabukoka et al., 2009). Research supports the notion that females are more likely to cope with experiences of peer-harassment by seeking social support (Hunter & Boyle, 2004). Some posit that this type of reaction occurs because girls deal more regularly with indirect or relational forms of aggression (Kochenderfer-Ladd & Pelletier, 2008). Results from the Hunter and Borg (2006) study expand upon this phenomenon and reveal that girls are most likely to seek out assistance from a “best friend” or parent; whereas males are more likely to seek help from a “friend,” teacher or “head teacher.”

Additionally, girls have been shown to use avoidance tactics, such as ignoring (Nabukoka et al., 2009). Further data exists which suggests that when (adolescent) males do seek social support as a means to cope with victimization they typically try to obtain help from female friends first (Sears, Graham, & Campbell, 2009). In times of distress, males tend to view their female friends as being less likely to judge or mock them (Sears et al., 2009). Interestingly, Hunter and Borg (2006) found that when the experience of negative emotion (regarding the bullying act) increased, so too did the frequency with which victims of both genders sought out social support. This may indicate a threshold for males where victimization may reach a point where the experience is perceived as being too negative or hard to deal with on their own.

In their study, Kristensen and Smith (2003) found that girls between 9 and 16 years of age preferred coping with victimization by utilizing strategies that involved social support markedly more than boys, who generally reported using externalizing approaches, such as “taking it out on others”. Further data provided by Rigby (2000) indicates that females are most likely to first seek out social support from a peer who they have deemed to be their “best friend” before turning to a parent for help. Moreover, while evidence suggests that females tend to cope by reaching out for support from others, teachers have not been identified as a group that is typically sought out. On the contrary, results from the Casey-Cannon et al., (2001) study indicate that even when bullying is common or frequently occurring, few victims identified involving a teacher or other adult as a coping mechanism technique.

Likewise, results from a study conducted by Naylor, Cowie, and del Ray (2001) revealed that males reported that they were mostly likely to seek out support (post-victimization) by telling an adult, such as parent or teacher, whereas females reported telling family and friends about their peer victimization. Findings from the Williams and Cornell (2006) study were analogous, where male participants were found to be less willing to seek help in response to bullying or other threats of violence than their female counterparts.

Conversely, Sears, Graham, and Campbell (2009) have posited that male victims may be less likely to seek friend, peer, or (public) teacher support because requesting assistance from others could be “costly” due to the ramifications of being viewed as “weak.” Eliot et al., (2010) have also suggested that gender differences in help seeking behaviors (in regards to threats or post victimization) may be attributed to males’ beliefs

about gender stereotypes, where boys are more likely to associate help-seeking with personal weakness. Important to note is the fact that much of the data on bullying, victimization, and subsequent coping methods is gathered through self-report measures. As such, males may be less likely to report help seeking behaviors on self-report measures because they do not believe seeking help is socially acceptable (Eliot et al., 2010). Interestingly, Kochenderfer and Ladd (1997) found that victimized children who sought support and shared their victimization experience with family or best friends and demonstrated better post-bullying adjustment than those who directly confronted (e.g., fought back) or ignored their victimizers.

Akin to much of the existent research, a study by Espelage and Holt (2007) indicates that females, in comparison to males, report more peer social support overall. Additionally, their findings suggest that students who identified as being either a victim or bully/victim perceived more social support coming from their peers in comparison to a maternal source/figure; that is, both groups (victim and bully/victim) perceived high levels of peer social support and low maternal social support. This is not surprising being that evidence suggests that a power imbalance exists between mothers and fathers of both victims and bullies, where children in these groups perceive fathers as having more power than mothers (Onder & Yurtal, 2008).

Results from the Hunter and Borg (2006) study revealed that the male students in their sample, which consisted of approximately 6,000 boys and girls in Malta ages 9-14, reported using a coping method, as opposed to doing nothing, more frequently than did the female students. Further, when the females did endorse coping strategies that they had

used, they rated the strategies of coping by seeking out their best friend or parent(s) highest, whereas males reported seeking out a friend, teacher, or a “head teacher.”

In terms of the types of students that use specific coping strategies, results of the study revealed that vengeful students would seek out all of the social supports (i.e., seeking out a friend or parent) as a coping strategy, with the exception of teacher help; students who felt self-pity would seek out all social supports, with the exception of friend or friends’ support; indifferent students would use all of the social supports, with the exception of friends and parents; and students who felt helpless were most likely to use all of the social supports available to them to cope with bullying. Additionally, data demonstrated that a significant predictor of the use of seeking out parental or teacher support was the frequency of bullying.

Other data suggests that males seek out school and teacher support before they involve a classmate to moderate the association between internal distress and the experience of victimization (Davidson & Demara, 2007). This same data indicates that females primarily seek support from parents to moderate feelings of pain/anguish and bullying.

Results from a study by Kochenderfer-Ladd and Skinner (2002) revealed that participants, who consisted of fourth graders, nine to ten years old, believed that social support was initially beneficial, but if the distress/ bullying were long-term or persistent, students were found to cope differentially. In particular, victimized females tended to believe that they benefitted from seeking social support as a “buffer” for social problems, whereas victimized males did not use social support as a coping strategy. Further, some

evidence indicates that female victims are more likely to tell someone about instances of bullying, perhaps as a method of support seeking (O' Laffson & Jo' Hannsdo'ttir, 2004).

In their study, Remillard and Lamb (2005) had participants recall a time when a "very close" female friend hurt them by saying something "mean," excluded them or gossiped about them so that they could respond to a series of questions pertaining to aggression and relationships. Among their sample, seeking social support was the fourth highest coping strategy chosen to deal with acts of relational aggression. The most commonly reported strategy was problem-solving, followed by "wishful thinking," and detachment. Interestingly, seeking social support was the only significant coping method with regard to resolving a conflict in a friendship in order to keep that friend close.

Special consideration should be given to the fact that the majority of the studies that report gender differences in the types of bullying and coping methods employed, involve participants in European and North American countries, ultimately encompassing a western way of thinking and living. Many of these studies suggest that males are predominantly more aggressive and subsequently more frequently involved in acts of bullying. However, Morita, Soeda, Soeda, & Taki, (1999) suggest that the opposite has been the normative view in Japan; they highlight the fact that the word 'ijime' [i.e., bullying] is typically used for 'feminine' attitudes and actions, and that phrase is not used for masculinity. They further report that in Japan female ijime is more frequent than girls' bullying in other countries.

Continuous Bullying Versus First Time Occurrences

For some individuals, peer-victimization is a singular event; unfortunately for others, being the recipient of repeated or continuous bullying is commonplace. Research

indicates victimization is more persistent long-term than bullying, such that the rates of children identified as being a bully decrease as time passes, whereas the rates of victims tend to remain stable over time (Sourander, Helstela, Helenius, & Phia, 2000). Thus, the examination of certain behavioral characteristics and reactions that co-occur between these two groups (singular events versus repeated victims) is central in identifying antecedents to victimization.

Results from the Smith et al., (2004) study suggest that victims who had recently been bullied for the first time were not as confident in telling someone about the incident, where only approximately 40-45% of that group reported that they would tell someone, comparatively, 67% of the individuals who had been bullied in the past indicated that they would tell someone. Theriot, Dulmus, Sowers, and Johnson (2005) had similar findings, where participants who reported being bullied and who identified as being in the “bullied” or “victim” group also experienced significantly more types of bullying behaviors and greater levels of bullying on a weekly basis than the non-labeled victims. Other data indicates that children who were more frequently bullied reported higher levels of seeking-out and using social support (Hunter & Borg, 2006). Additionally, frequently victimized children have been shown to seek assistance from a teacher or parent more often than others (Hunter & Borg, 2006).

Constructive or effective behavioral coping responses have been found to be ones that involve proactive strategies, such as seeking help from others, and problem-solving or conflict resolution; as such, evidence suggests that these types of coping methods tend to reduce the risk of future victimization (Spence, De Young, & Bond, 2009).

In contrast, aggressive coping responses to peer victimization have been found to intensify hostile interactions and increase the risk for further victimization (Spence, De Young, & Bond, 2009).

In terms of cognitive or psychological coping responses, emotional regulation may have a role in maintaining or thwarting future attacks. Emotional regulation can broadly be defined as “the occurrence, intensity, or duration of internal feeling states and emotion-related physiological processes in a way that assists the accomplishment of goals” (Spence, De Young, & Bond, 2009). Research suggests that when faced with stressful situations, such as bullying, poor emotional regulation evokes maladaptive coping strategies, which include withdrawal, aggression, and/or increased levels of behavioral (emotional) expression, such as crying (Spence et al., 2009).

Similarly, Shelley and Craig (2010) found that boys who reported higher levels of characterological self-blame and the use of coping methods that were internalizing and distancing in nature experienced greater levels of victimization over time. For girls, higher levels of victimization over time were predicted by greater levels of characterological self-blame, depressive attributional styles, and lower levels of coping methods that utilized social support. Internalizing problems, such as depression and negative self-view, may increase or strengthened post bullying. Specifically, the extent to which individuals experience internalizing problems prior to victimization maintains, solidifies, and possibly reinforces or amplifies perceptions regarding their standing as a victim of peer torment, in contrast to only being a consequence of bullying (Reijntjes, Kamphuis, Prinzie, & Telch, 2010). Interestingly, Sourander, et al., (2000) found bullying and victimization rates to be more persistent longitudinally for boys than girls,

where nearly all the males in their study who were victimized at age 16 had also been bullied at age 8. Additionally, their findings revealed that emotional and behavioral problems were associated with long-term bullying and victimization rates.

Ecological and Environmental Influences on Bullying

Throughout one's lifespan, individuals are inevitably faced with a variety of "stressful" situations. The ways in which these situations are handled, however, can vary greatly from person to person depending on a number of factors, including: personal experience(s), genetics, and environment. Some developmental or ecologically-oriented theorists (e.g., Silver, Measelle, Armstrong, & Essex, 2010) suggest that a number of circumstances or conditions in the environment either promote maladaptation or promote competence

Many of the investigations conducted on peer-victimized children have examined teacher(s), students, and the overall school climate, and whether those factors provide victims with feelings of safety or fear. The findings of such studies have proven to be quite useful in determining the specific roles that teachers and school systems may play in relation to the bullying process. School climate has been found to be an especially important factor to examine when attempting to understand how and why children form beliefs about violence, and specifically bullying (Espelage & Swearer, 2003). Teachers, administrators, and other personnel play a vital role in creating the school atmosphere; their words and actions affect what students see and hear, ultimately affecting what a child views as being acceptable behavior(s).

The level of competitiveness that is accepted within the school environment has been found to affect the amount of bullying which occurs; prevalence rates are typically

higher in schools where bullying types of behaviors are more readily accepted by staff and students (Espelage & Swearer, 2003). The term “readily accepted” includes behaviors such as failing to administer consequences for witnessed or reported instances of bullying and failing to praise/give positive reinforcement for observed or reported respectful and desired peer interactions. Some theorists suggest that competition is naturally promoted in American schools, which may be detrimental to establishing and maintaining peer relationships (as cited in Hoover, Oliver, & Hazler, 1992). In his study, Prewitt (1988) suggested that competitiveness in Japan was found to be at least partly responsible for increases in the rates of bullying (ijime). This phenomenon may be true for the United States as well, although it hasn’t been fully explored as of yet.

Numerous studies have revealed that school personnel across all grade levels, elementary, middle and high school, report lower rates of bullying than do students. Research indicates that teachers underestimate the number of children involved in bullying because they are unaware of bullying episodes, they misidentify the children involved, deem the behaviors that are occurring as being “normal” or more trivial than perceived by those who fall victim to them, and feel unconfident in their ability to deal with the situation (Bradshaw, Sawyer, & O’Brennan, 2007; Carney & Merrell, 2001; Espelage & Swearer, 2003; Hoover, Oliver, & Hazler, 1992).

A study by Carney and Merrell (2001) revealed that important adult figures in a child’s life, including parents and educators, often times overlooked bullying and victimization; as a result, intervention occurred far less frequently than was necessary to remediate and prevent the problem(s). In a similar study, Fekkes and colleagues (2005), found analogous results, where nearly half of the 16% of their sample (of children) who

reported being bullied on a regular basis did not tell their teachers that they were being bullied; further, in regards to the reports of active bullying, the majority of teachers and parents did not talk to bullies about their behavior after the bullying episodes had occurred. Hoover, Oliver, and Hazler (1992) also found similar results; the majority of their sample who self-identified as being a victim generally felt that school personnel did not do an adequate job of responding to acts of victimization, where 66% of the (self-identified) victims felt that personnel handled situations “poorly”.

Interestingly, lower rates of bullying tend to occur in schools that practice positive disciplinary actions, have higher academic standards, and greater levels of parental involvement (Espelage & Swearer, 2003). Furthermore, there has been at least one study that reveals a link between lower rates of externalizing behaviors (as exhibited by males) and positive perceptions regarding school climate (Kuperminic, Leadbeater, Emmons, & Blatt, 1997).

Attributions, Emotional Responses, and Their Influence on Coping

Regardless of why bullying occurs, the way in which this behavior is dealt with varies greatly from person to person. One’s perception of victimization may be more important than the bullying act itself in terms of instigating aggression (Thornberg & Knutson, 2011). As such, some individuals appear to cope with instances of peer victimization better than do others. Aside from the environmental, ecological, age and gender differences that have been hypothesized to be contributing factors to facilitating, maintaining, and dealing with bullying, individual characteristics are also believed to be a key component. Existing research indicates that social skills and social information processing deficits tend to be more common among aggressive individuals (Estell,

Farmer, Pearl, Van Acker & Rodkin, 2008); whereas, pro-social and socially-skilled behaviors (e.g., assertiveness, conflict management, etc.) predict lower levels of victimization over time (Card & Hodges, 2008). Some have posited that adolescents who maintain more of an entity theory (a belief in fixed traits or labels, such as “super predator”) may experience greater feelings of negativity about themselves after conflicts, and those feelings may also contribute to more vengeful coping responses, such as revenge seeking (Yeager et al., 2011).

In their study of adolescent non-bullying victims and non-victims Champion, Vernberg, and Shipman (2003) found that the victims partook in more aggressive behavior towards peers than did the non-victims; in particular, victims engaged in reactive aggression following instances of bullying, versus non-victims who reported being able to avoid nearly all aggressive exchanges with peers. However, consideration must be given to the fact that in general, none of the participants had significantly elevated scores on aggressive behavior(s) towards peers. Interestingly, when presented with hypothetical ambiguous confrontation scenarios the students in the victim group reported that they would be more likely to cope by using physical aggression and less likely to utilize information-seeking methods than those in the non-victim group. These findings may suggest that when faced with potential conflict situations victims may fail to seek out additional information and be quicker to access physically aggressive responses. Interestingly, as related to conflict scenarios, females in the victim group reported fewer self-controlled responses and less cooperative behaviors than non-victim girls.

Research conducted by Joscelyne and Holtum (2006) attempted to examine students' explanations of aggression in schools, where participants were neither identified as bullies or victims; however, they were from ethnic minority groups, and as such believed to be part of a group of students that was regularly involved in acts of aggression at school. Generally, participants in this study provided different types of attributional explanations for the behaviors of victims versus bullies. In particular, attributions made about bullies appeared to be based on less stable characteristics, allowing for more room for change. That is, participants tended to attribute stable characteristics (e.g., something unchangeable about the victim) as being the reasons why certain individuals were bullied. Furthermore, even when behavioral characteristics were included in explanations of bullying, they, for the most part, were paired with characterological explanations that could not be easily or rapidly changed.

In regards to how “outsiders” view acts of bullying, existing data suggests that children tend to view and explain bullying based on individualistic conditions (victim or bully causation) versus cultural, social or situational factors (Thornberg & Knutsen, 2011). Research indicates that outsiders, particularly females, generally attribute the causes of peer victimization to the victim by interpreting him or her as “different” or divergent from the norm (Thornberg & Knutsen, 2011). Furthermore, when students do attribute the cause to the bully, they tend to do so based on the conditions of instrumental motives (e.g., “He wants his backpack”) and psychological motives (e.g., “She is jealous of how pretty she is”) (Thornberg & Knutsen, 2011). Fascinatingly, however, 28% percent of the participants in a study conducted by Frisen, Jonsson, and Persson (2007) reported that they believed bullies engaged in aggressive acts because they had low self-

esteem, followed by 26% of the population stating that bullying others made the bully feel “cool,” and 15% suggesting that the bully had “problems.”

In comparison to outsiders’ views, data on individuals directly involved in bullying suggest that victims’ attributions are generally depressive in nature (an external locus of control) which subsequently results in them believing that they lack power to prevent or stop their victimization and they are unable to change their experiences (Shelley & Craig, 2010). Evidence suggests that victims report higher levels of depression, as well as lower levels of global self-worth and social acceptance in comparison to non-bullied children; additionally, both victims and non-involved peers rate victims as having lower levels of scholastic competence, physical appearance, and behavioral conduct (Callaghan & Joseph, 1995). Bolmer, Harris, and Milich’s (2005) research suggests that visible responses to instances of bullying may be critical in determining whether future attacks reoccur or persist. In particular, Bolmer et al. (2005) state that parents and teachers often advise children to “just ignore” bullying; however, that advice perpetuates the belief that showing distress when bullied is actually inviting further abuse and ultimately prevents them from being assertive. Subsequently, children who heed the advice of ignoring may: be less likely to react by using reactive or visible means (e.g., saying “stop,” fighting back, etc.), experience greater levels of guilt or shame, and be viewed as easy targets for the future.

The attribution of self-blame is believed to be associated with victimization; self-blame is hypothesized to be a causal attribution which is typically divided into two forms: characterological (attributing cause to character), and behavioral (attributing cause to a behavior) (Shelley & Craig, 2010). In their study, Shelley and Craig (2010) found that

higher levels of both internalizing and externalizing coping strategies, and characterological self-blame were significant predictors of increased levels of victimization. Interestingly, coping methods that involved revenge-seeking and social support predicted higher levels of victimization for males. Conversely, coping mechanisms that involved distancing and depressive attributional styles predicted higher levels of victimization for females.

Cook, Williams, Guerra, Kim, and Sade (2010) found that individuals who identified as “bullies” exhibited significant externalizing behavior(s), and suffered internalizing symptoms (in adolescence but not childhood); additionally, bullies possessed social competence and academic challenges, had negative attitudes and beliefs about others, maintained negative self-related thoughts, had difficulty resolving problems with others, came from a tumultuous family environment, perceived his or her school as having a negative atmosphere, were influenced by negative community factors, and were generally negatively influenced by his or her peers.

Interestingly, students identified as “victims” in Cook et al.’s (2010) research were also found to engage in externalizing behaviors and were more likely to demonstrate internalizing symptoms, particularly during the transition to adolescence; in addition, victims lacked adequate social skills, possessed negative self-related thoughts, struggled in their ability to solve social problems, came from negative family, community, and school environments, and were noticeably rejected and isolated by peers. In terms of unique predictors, negative attitudes and beliefs about others were found to be significant predictors of bullying behavior for bully victims as well as bullies, but not for victims. In contrast, holding negative attitudes and beliefs about one’s self was

significantly related to victimization for both victims and bully victims and only marginally so for the bully group. Further evidence suggests that children who identify as being victims recall acts of bullying with negative affect that includes visible distress and feelings of anger directed towards the bully. On the contrary, when reporting about past victimization experiences, students who identify as being bullies tend to display minimized negative affect or express positive feelings about the incidents (Bolmer, Harris, & Milich, 2005).

In regards to distinct emotional responses and their role in coping with bullying, Hunter and Borg (2006) found that children who reported feelings of self-pity were more likely to seek assistance from: a “best friend” (but not any other type of “friend” or peer) teacher, “head teacher,” or parent; self-pity did not affect doing nothing about the incident. The feeling of “indifference” was a significant predictor of greater levels of coping by seeking a best friend, teacher, or head teacher’s help, and doing nothing about the victimization. Children who reported feelings of anger were more likely to cope by seeking assistance from friends, best friends, teachers, head teachers, and parents. Likewise, the feeling of vengefulness predicted higher levels of seeking assistance from friends, best friends, head teachers or parents.

In a study conducted by Olweus (1993), parents of peer-victimized students reported that their children had been cautious and sensitive from an early age. Victimized children were found to typically react to instances of bullying by withdrawing and/or avoiding the “bully/ bullies.” Children characterized as victims generally had a negative view of themselves and their everyday situation, and they tended to be nonaggressive, lonely, and isolated. Additionally, victims were said to suffer from low self-esteem,

consider themselves as “failures” or a “losers,” and reported feeling “stupid,” “ashamed,” and “unattractive”. Bouman, Meulen, Goossens, Olthof, Vermande, and Aleva’s (2012) findings provide additional insight, where students who were either self-identified as being a victim or were peer-nominated as such, were reported by peers as being less liked and less popular; likewise, the victims identified as being less socially accepted, reported greater levels of anxious and depressive symptoms, as well as a lower sense of self-worth. However, consideration must be given to the fact that the strength of the associations between the factors differed, where perceived popularity and likeability were associated more strongly with peer reports of victimization than self-reports. Furthermore, when peer nominations and gender were already taken into account, self-nominations did not substantially contribute to the prediction of perceived popularity and likeability.

Additional information regarding victimization and attitudes indicates that explicit attitudes, which are deliberate, reflective and self-controlled, directly predict bullying behavior(s); whereas, implicit attitudes, which are uncontrolled and impulsive, are not generally predictive of acts of bullying (Goethem, Scholte & Weirs, 2010). This data may suggest that bullying is something that is carefully thought about and not something that occurs randomly or as an automatic reflex/reaction to a situation. Findings also revealed an interaction, where implicit bullying attitudes were found to predict bullying behavior (only) in children with relatively positive explicit bullying attitudes; that is, children with a reasonably positive outlook towards explicit bullying who displayed relatively positive implicit bullying attitudes, also exhibited a greater likelihood of bullying than did children with relatively negative implicit bullying attitudes.

Statement of the Problem

Bullying is a serious problem that negatively affects those individuals who are victimized. To date, many anti-bullying efforts have focused on the overt actions and reactions that tend to be utilized by those involved in the process (i.e., bullies, victims, and teachers). Examination of the discrete and/ or inner processes (i.e., perceptions, emotions, etc.) that are involved in bullying behavior(s) is also warranted. However, a limited amount of research has focused primarily on whether specific types of emotional reactions differentially influence children's perceptions of being victimized or affect their feelings and thoughts regarding their victimization experience(s), and whether those emotional reactions influence the coping methods that peer-victimized children choose to utilize. This type of research could be helpful in identifying how victims "deal" with being bullied differentially, both in the way they view (i.e., perceive) the experience and the ways in which they respond (i.e., coping strategies). Specifically, various responses to peer victimization, such as seeking assistance, avoiding or ignoring the incident, or retaliating, have different implications for those affected, the overall school atmosphere, and the efficacy of intervention programs that are utilized to deal with bullying. For example, when individuals use the coping strategy of seeking help or support from others, the task of identifying and dealing with instances of bullying becomes easier. Conversely, other types of coping strategies, such as avoidance behaviors and retaliation, could ultimately be detrimental in that they may involve school absences and physical harm.

Research suggests that one's identity is comprised of several different facets including emotional development, mental health, and physical health. Rosenblum and

Lewis (2005) have proposed that emotional development is the result of cognitive development, hormonal events, and life experiences. They suggest that with a strong, stable sense of identity an individual is able to emotionally cope with stressors.

Rosenblum and Lewis (2005) further posit that people with healthy foundations will be able to independently self-soothe, display emotional control, and avoid reasoning based upon emotion. Additionally, they have suggested that individuals who can tolerate the distress of an intense emotion, such as anger, are able to preserve and negotiate interpersonal relationships; conversely, those who have difficulty in the development of emotional control may not possess the coping skills necessary to manage emotional difficulties and relationships (Rosenblum & Lewis, 2005).

The consequences of unhealthy emotional development in individuals may be exhibited in the form of mental health problems, including conditions such as depression (Rosenblum & Lewis, 2005). In their research, Baldry and Farrington (2005) found that adolescent victims faced their problems in an emotionally oriented way; they hypothesized that victimization is the result of victims using emotionally oriented coping strategies to solve their problems. The results of their study indicate an existing relationship between victimization and the coping style(s) being utilized, which may provide insight as to why victimization continues for some individuals and not for others. Similarly, another study found that victims reported less social competence, which included difficulty with problem-solving with resolving conflicts (Hayne, Nansel, Eitel, Crump, Saylor, Yu et al., 2001). Likewise, Nation, Vieno, Perkins, & Santinello (2008) found evidence to suggest that victims struggle more with social competencies and experience greater difficulty with “negotiating” cooperative relationships. These results

may suggest that lacking knowledge about, or the use of effective coping mechanisms may perpetuate victimization. Additionally, as proposed by Erikson (1950), if an individual fails to have effective emotional regulation to manage the many emotional difficulties and/or interpersonal relationships he or she may encounter, that individual may end up in a role-confused state. Furthermore, Kochenderfer-Ladd and Skinner (2002) have proposed that in general, coping may influence the effects of peer victimization; where they also acknowledge that an individual's own psychological and social situations could simultaneously affect the kind of coping strategy chosen.

It has been suggested that peer victimized individuals have not developed the emotional maturity necessary to cope with being rejected by their peers (Juvonen et al., 2003). However, this theory uses "cope" and "emotional maturity" as singular terms and does not take into account the fact that in regards to victimization, there are different types of emotional reactions and various coping methods. Thus, the question comes to bear whether different types of emotional reactions influence a child's perception(s) of being victimized? Additionally, the specific types of emotional reactions that effect the attributions a child makes regarding victimization, as well as the coping method(s) he or she utilizes needs to be explored.

Peer victimization, specifically bullying, has been identified as being one of, if not the most, prevalent type of violence in the schools, and also the behavior that affects the largest number of students (Bauman & Del Rio, 2005). Research indicates that as a result of bullying, victims suffer from numerous problems, ranging from academic difficulties to health issues to behaviors as serious as suicide (Hanish & Guerra, 2000; Stockdale, Hangaduambo, Duys, Larson, & Sarvela, 2002). Therefore, bullying and

victimization is an extremely important issue that needs to be properly addressed and prevented. While many studies have been conducted on the various overt behaviors and characteristics that victims share as a group, few have examined the perceptions and feelings that victimized individuals may possess.

Purpose of the study

Consequently, the purpose of this study is to investigate whether different types of emotional reactions influence children's perceptions of being victimized. Specifically, the present investigation intends to examine emotional reactions that fall into one of two overarching categories, passive (i.e., internalizing feelings), or reactive (i.e., externalizing responses), under which reactions such as anger, fear, and embarrassment exist, and how those emotional reactions affect the attributions children make regarding victimization. In particular, this study is focused on attributions that include personal characteristics (i.e., "The color of my skin"), behavioral characteristics (i.e., "I did something mean to them."), and environmental characteristics (i.e., "They are jealous of the things I have."). Additionally, this study seeks to explore whether specific emotional tendencies influence the coping methods children, and specifically peer-victimized children, utilize. The six specific types of coping methods examined in this study are: 1) adult seeking, 2) problem-solving, 3) friend seeking, 4) acting nonchalantly, 5) being immobilize, and 6) revenge seeking.

The study explored the following research questions:

Research Question 1: Do externalizing versus internalizing or passive emotional reactions differentially influence the attributions children make regarding victimization?

Hypothesis 1: A relationship between children who experience passive or internalizing reactions, in regards to victimization, and personal (e.g., “I look different from others.”) or behavioral (e.g., “I did something bad or wrong.”) characteristic attributions will exist. In contrast, there will be a relationship between reactive or externalizing responses and environmental characteristics (e.g., “They are jealous of the things I have.”).

Research Question 2: Do internalizing or passive and externalizing or reactive types of emotional reactions differentially influence the coping methods victimized children utilize?

Hypothesis 2: A relationship will exist between children who react to victimization with internalizing types of reactions and the following coping methods: passive or “immobilized” coping and/ or cognitive distancing or “acting nonchalantly” coping. Conversely, a relationship will exist between externalizing responses and the following coping methods: seeking revenge, seeking a friend, seeking an adult, and/ or problem-solving.

Research Question 3: Do children identified as “bullies” experience different types of emotional reactions than those identified as “victims?”

Hypothesis 3: Students identified as bullies will exhibit different types of emotional reactions than those identified as “victims”. In particular, a positive relationship is expected between bullying behavior and externalizing behavior. Similarly, a positive relationship is expected between victimization and internalizing behavior.

Chapter 2

METHOD

Participants

The data used in the current study was collected as part of a larger effort entitled the ClassAct Project, which was a four-year longitudinal project designed to study correlates of peer victimization. Information was gathered regarding students', teachers', and parents' perceptions of various school behaviors twice a year (in the fall and spring) for four consecutive years. Participants were recruited from four public kindergarten through eighth grade (K-8) elementary schools in the Southwestern United States, serving primarily low-to-middle socioeconomic families. The data set that is being examined for this investigation was gathered in the fall of the last year of the study, referred to as T7. During this time point, parental permission was obtained for 317 4th and 6th grade students (Mean ages =10.54 years and 12.10 years for grades 4 and 6 respectively) to take part in the ClassAct Project. There were 151 males (47.6%) and 166 females (52.4%) in T7. Consistent with the community ethnic and racial background from which they were recruited, the overall present sample was approximately 46% Caucasian, 43% Hispanic, 2% African American, 4% Native American, 1% Asian/Pacific Islander, 0.3% "Other" and 3% Multiethnic. While racial and ethnic data was collected, this information was incomplete on all questionnaires and nomination forms used in the study; therefore an analysis based on these demographics was not done. It should also be noted that while the overall sample contained 317 participants, 15 subjects did not complete one of the instruments (i.e., peer nomination bully measure) and two students did not respond on another measured item (i.e., the "mad" factor). Thus, the sample sizes for each analysis

vary and are reflective of the available data sets for the particular variables of interest; see Table 1 for detailed demographic information.

Instruments

Peer Nominated Bullies.

Children's perceptions of students in their classroom who were thought to be bullies were measured by peer nomination (see Appendix A). Children were asked, "Does ____ pick on others." The students were asked to indicate if they thought each student in their classroom (with the exception of themselves) picked on others using a 2-point scale (1.00 = no; 2.00 = yes). Scores were created by averaging across nominators and standardizing within classrooms.

Victims.

Children's perceptions of whether they fell prey to various types of bullying behavior were assessed by a measure, "The Way Kids Are", which asked children to report how other kids in their class treated them (e.g., "How much do the kids in your class... say mean things or lies about you to other kids?"). They were given the response choices: Never (1.00); A little (2.00); Sometimes (3.00); or A lot (4.00); see Appendix B. There were five items that evaluated how much one thought he or she was the recipient of negative behaviors in school; however one item failed to load in the EFA results (break or ruin things) and was thus dropped from the scale. The four items were averaged to create a composite self-victimization scale that evidenced good reliability ($M = 1.10$; $SD = 0.31$; $\alpha = 0.84$).

Internalizing.

An estimate of student's internalizing feelings was obtained by combining items on the measure, "How I Would Feel," that related to reactions that were more internalizing in nature. Children were prompted with: "If someone were mean to you... would you feel like crying?" and were given the response choices No (1.00); Yes, for a few minutes (2.00); Yes, for most of the day (3.00); or Yes, for longer than a day (4.00); see Appendix C). The five items were averaged to create a composite internalizing scale that evidenced good reliability ($M = 1.90$; $SD = 0.70$; $\alpha = 0.79$).

Externalizing.

A measure of a student's externalizing feelings was attained by examining two items on the "How I Would Feel" protocol that related to reactions that are more externalizing in nature, (i.e., mad and funny). Students were asked, "If someone were being mean to you... would you be mad?" The possible response options were: No (1.00); Yes, for a few minutes (2.00); Yes, for most of the day (3.00); or Yes, for longer than a day (4.00). See Appendix C for tables.

Attributions.

Students' attributions of perceived causes of peer-victimization were measured using the created attribution questionnaire, "When Bad Things Happen at School". Children were asked, "When someone picks on me, it is because..." They were then provided with twenty-eight possible reasons why kids might be mean to others, and their responses were coded as "Never" = 1.00, "Sometimes" = 2.00, "Usually" = 3.00, and "Always." This instrument assesses three forms of attributions: 1) a personal attribution scale which includes 13 items, such as "I don't look as cool as them." ($M = 1.61$; $SD =$

0.50; $\alpha = 0.83$); 2) a behavioral scale which includes 11 items, such as "We don't get along." (M = 1.67; SD = .51; $\alpha = 0.83$); and 3) an environmental scale which includes 4 items, such as "They are jealous of me." (M = 1.59; SD = 0.67; $\alpha = 0.79$). See Appendix E.

Coping.

Children's use of a variety of coping behaviors was assessed using a modified version of Causey and Dubow's (1992) Self-report Coping Scale (SRCS) named "What I Would Do" (see Appendix D). When completing the questionnaire, children were instructed to imagine what they would do if another child were being mean to them, through name-calling or physical harassment, and to then report the frequency with which they use particular strategies for coping with victimization. Specifically, the questionnaire asked: "When kids are being mean to you, do you..." The children responded on a 4-point Likert scale (1.00 = never; 2.00 = sometimes; 3.00 = most of the time; and 4 = every time) indicating how often they make use of each of the 26 possible approaches to cope with bullying (range of scores = 1.00 to 4.00). This instrument assesses six forms of coping: 1) an adult support scale which includes 6 items, such as, "Get help from the teacher" (M = 2.33; SD = 0.85; $\alpha = .89$); 2) a friend support scale which includes 4 items, such as "Tell a friend what happened" (M = 2.48; SD = 0.82; $\alpha = 0.81$); 3) a passive coping or "immobilized" scale which includes 3 items (i.e., "I don't know what to do;" (M = 1.72; SD = 0.62; $\alpha = 0.58$)); 4) a problem-solving scale which includes 4 items, such as "Try to think of ways to stop it." (M = 2.37; SD = .63; $\alpha = 0.59$); 5) a cognitive distancing or "acting nonchalantly" scale which includes 4 items (e.g., "Act like nothing happened;" (M = 1.97; SD = 0.68; $\alpha = 0.67$)); and lastly 6) a 5

item measure that taps seeking revenge (e.g., “Hurt the kid back;”(M = 1.50; SD = 0.68; $\alpha = 0.87$)). See Appendix F.

Procedures

During the four academic years that the larger longitudinal study took place, trained interviewers (i.e., graduate students) administered student questionnaires to groups of students once in the fall and again in the spring. Questionnaires in both English and Spanish were constructed and made available to students based upon their identified “primary language”. To ensure confidentiality, students were asked to stay quiet and to keep their answers to themselves. Prior to the questionnaire administration, participants were informed that their answers would remain private and not shared with other students, parents, or school personnel.

Both English and Spanish-speaking interviewers were available to answer questions from the students during the group administrations. Additionally, interviewers, both English and Spanish speaking, were available to provide additional one-on-one assistance, mainly clarification of questions, on test items during the entire time it took students to complete the questionnaires. It should be noted that there was a limited number of students who were identified as being English Language Learners (ELL), thus, language clarification was only needed by a small number of students whose primary or home language was said to be Spanish (as reported by parent). Each time questionnaires were administered (twice each academic year), a small school-related gift was given to the students who participated in the project, such as colored pencils, water-bottles, and/or backpacks.

Chapter 3

RESULTS

This section includes the statistical findings for this investigation, which aimed at examining the relationship between several variables, including: peer victimization, internalizing and externalizing feelings, attributions, and coping methods. Prior to testing the hypotheses, the psychometric properties of the “When Bad Things Happen at School,” “The Way Kids Are,” “How I Would Feel,” and “What I Would Do” measures were examined using Exploratory Factor Analyses (EFA). After computing the EFAs, Latent Class Analyses were utilized to address the first two research questions. Specifically, 1) whether externalizing versus internalizing or passive emotional reactions differentially influenced the attributions that children made regarding victimization, and 2) whether internalizing or passive and externalizing or reactive types of emotional reactions differentially influenced the coping methods that children utilized. Correlations were utilized to address the third research question, 3) whether children identified as “bullies” (N=48 total) experienced different types of emotional reactions than those identified as “victims” (N=33 total).

Exploratory Factor Analyses

Data reduction methods were employed to reduce the total number of independent variables included in the modeling. The following discusses each of the measures that were utilized in the present study:

“When Bad Things Happen at School:”

The data set for T7 was evaluated using all 28 items on this measure, which assessed why children believed others “pick” on them. Exploratory factor analyses (EFA)

using principal component analysis with direct oblimin rotation revealed three factors with Eigen values greater than 1.00 (Eigenvalues ranged from 1.94 to 6.25 and the factors accounted for 40.91% of the variance in T7, see Table 2 for items, factor loadings, and reliability alphas). The factors that arose from this scale were used as indicators of three different types of attributions that children made in regards to why bullying occurs. In particular, one factor indicated an attribution related to characteristics that were more personal in nature (e.g., "Of the color of my skin."); for the purposes of this study, this attribution was referred to as the Personal attribution. Another factor illustrated an attribution that encompassed behaviors, actions or feelings that one was not directly in control of (e.g., "They are jealous of me."); this attribution was designated the Environmental attribution. Lastly, a third factor indicated an attribution that related to behaviors, actions or feelings that one had some type of control over (e.g., "I did something mean to them."); this attribution was referred to as the Behavioral attribution.

"The Way Kids Are:"

The T7 data set was evaluated using the five items on this questionnaire that indicated being the recipient of negative behaviors and/or actions from other students (e.g., "Pick on you, or tease you?"). Exploratory factor analyses (EFA) using principal components analyses with varimax rotation revealed a single factor with an Eigen value greater than 1.00. One item, "Break or ruin your things" failed to load and was thus dropped. The resulting EFA revealed a 1-factor student perception on how often they were the recipient of bullying actions and/or behaviors (Eigenvalue was 2.70 and the factor accounted for 67.39% of the variance in T7, see Table 3 for items, factor loading,

and the reliability alpha). This factor was utilized in the current investigation to designate the children who identified as being a victim of peer victimization.

"What I Would Do:"

The data set for T7 was evaluated using all 27 items on this measure that assessed children's potential responses to victimization. Exploratory factor analyses (EFA) using principal components analysis with direct oblimin rotation revealed six factors with Eigen values greater than 1.00. However, one item, "I try to find out why it happened, so it won't happen again" had low loadings on two factors, and was thus dropped (Eigenvalues ranged from 1.16 to 6.08 and the factors accounted for 60.80% of the variance in T7, see Table 4 for items, factor loadings, and reliability alphas). In the present study, the six factors that arose from this scale were used as indicators of various coping methods. They included: 1) seeking adult help, 2) seeking a friend's help, 3) problem-solving, 4) acting nonchalant, 5) being immobilized (i.e., not knowing how to respond), and 6) revenge seeking.

"How I Would Feel:"

The T7 data set was evaluated using the seven items on this questionnaire that measured how children would feel if someone were being mean to them. Exploratory factor analysis (EFA) using principal components analysis with direct oblimin rotation revealed one factor with an Eigenvalue greater than 1.00 (Eigenvalue was 2.74 and this factor accounted for 54.71% of the variance in T7, see Table 5 for items, factor loading, and the reliability alpha). Two of the variables, "I would think it's funny" and "Would you be mad?," loaded very low. Subsequently, the two items of mad and funny (e.g., "Would you be mad/ think it was funny?") were used independently in the latent class

analyses and correlations as a measure of feelings that were externalizing in nature, and the other resulting (5-item) factor on this scale was utilized in the current investigation as an indicator of children who identified more closely with internalizing feelings (e.g., "Would you be scared?").

Latent Class Analyses

Latent Class Analysis (LCA) is a statistical method that can be utilized to detect clusters or subtypes of connected cases ("latent classes") from multivariate data. In simplistic terms, LCA provides probability-based classifications for the factors or variables of interest, that is, each of the observed variables (e.g., behavioral and personal attributions) are classified into "clusters" or classes based upon membership probabilities that are estimated from the model (Vermunt & Magidson, 2012). Latent class analysis can best be thought of as an "improved" cluster analysis, which uses statistical, rather than mathematical, methodology to construct the results (Francis, n.d.). Parameters are estimated for class profiles (the description of each class) and the size of each class. One unique property of LCA is that cases are not absolutely assigned to classes, but have a probability of membership for each class (Francis, n.d.).

LCA was initially created to scrutinize variables from dichotomous items, but has been extended to examine observable variables in mixed scale types, including ordinal, and nominal data; most Likert scale variables are considered nominal or ordinal in LCA modeling depending on the relative nature of the Likert choices (Hagenaars & McCutcheon, 2002). However, LCA can also be used with continuous data. According to Templin (2006), continuous factors are "allowed to range anywhere on the real number line" (slide 4); in social science research continuous variable may include things such as a

person's weight or insulin level. Lastly, LCA can also analyze covariates, including demographic information (Hagenaars & McCutcheon, 2002; Vermunt & Magidson, 2012). In social science research, LCA is commonly used to confirm hypothesized case subtypes or to uncover such groups based on multivariate data (Hardigan, 2009). The LCA procedure aims at selecting the smallest number of latent classes that are adequate to account for, or explain away, the relationships observed among the manifest variables (Hagenaars & McCutcheon, 2002).

LCA modeling can be applied to cluster, regression, and factor analyses (Hagenaars & McCutcheon, 2002). Whereas traditional modeling assumptions rely on: normal distribution, linear relationships, and homogeneity, latent models do not depend on these traditional grounds, and thus are reduced in conformity biases (Hardigan, 2009). Typically, the LCA method begins by assessing the T=1 or Null model, which assumes that there is only one-class with mutual independence among all the manifest variables (Hagenaars & McCutcheon, 2002). If the Null model is rejected, that is if one class does not explain away the observed relationships between the variables, a two-class or T = 2 model is generated and evaluated on how well it "fits" to the data. This process is replicated, with an additional class dimension being added and fit to the data, until the simplest model is found which accounts for the relationships between the manifest variables (Hagenaars & McCutcheon, 2002).

Various criteria are available to compare the generated models and assess for fit, including the Bayesian Information Criterion (BIC) (Hagenaars & McCutcheon, 2002). Generally, the ideal model is one that: fits the data well (i.e., has a significant p-value of 0.05 or lower), and has a low BIC value (Berozfsky, Biemer, & Kalsbeek, 2010). Models

must also be reviewed to insure key indicator variables are also significant in contributing toward the model parameters. Models with insignificant variables, but lower BIC scores are not useful in adequately classifying clusters and are eliminated. Probability means can be utilized to assess cluster membership probabilities for (ranges of) values of indicators and covariates; they can also be useful in comparing differences between the classes. The Wald statistic is provided to assess the statistical significance of a set of parameter estimates. For each indicator included in the model, the Wald statistic tests the restriction that each approximation in the set of beta parameter estimates associated with that indicator equals zero. A non-significant p-value associated with this Wald statistic means that the indicator does not discriminate between the clusters in a statistically significant way (Vermunt & Magidson, 2012). Additionally, Bivariate Residuals (BVRs) may be used to specify direct effect parameters in a model (Vermunt & Magidson, 2012). Generally, a direct effect parameter associated with a large Bivariate Residual Statistic (BVR) would be included in a model to improve the fit of the model without the direct effect. Finding no significant residuals is another indication that a model provides a good fit to the data (Vermunt & Magidson, 2012). In general, BVRs larger than 3.84 identify correlations between the associated variable pairs that have not been adequately explained by the model (Vermunt & Magidson, 2012).

Results and Analysis for Question 1:

Within Group Comparison of Victim, Internalizing, and Attributions

In regards to the first two research questions, an examination of individual clusters in the resulting LCA models (that addressed the two hypotheses) can be viewed in two perspectives: one being a comparison of the variables within each class (a within

cluster perspective), and the second being an evaluation of one class (or cluster) relative to other classes in the model (a between cluster comparison). The within cluster approach examines properties that are defining of that particular class. In comparison, the between cluster approach compares each class relative to the other clusters in the overall model. This is important to note, as a within cluster examination may indicate that a specific cluster has a higher value on a certain variable; however, that value (which was high in a within cluster examination) may be lower when compared to other classes in the overall model (between cluster analysis). Thus, to have a more complete understanding of the latent classes and what they represent, interpretation (of latent classes) must be done from multiple perspectives. In this study, each cluster was labeled based on the individual and defining characteristics of that specific class (a within cluster). Therefore, cluster labels should be interpreted in such a way, as cluster properties may appear different (than their labels) when compared relative to other classes in the overall model (between cluster approach).

In this section the within cluster perspective (which better identifies or labels specific clusters) is discussed first, followed by the between cluster comparison (which illustrates relationships existing between the clusters).

To address the first research question of interest: whether externalizing versus internalizing or passive emotional reactions differentially influence the attributions children make regarding victimization, four Latent Class Analyses were conducted using Latent Gold 4.5, which is a software package that conducts latent class and finite mixture analyses (see Vermunt & Magidson, 2005). The first analysis was a mixed-mode data set of 317 cases, and included the self-reported victimization factor, the internalizing factor,

and the three attributional styles: behavioral (e.g., “I was bugging or annoying them.”), personal (e.g. “the color of my skin”), and environmental (“They are not as popular as me.”), with gender and grade level covariates. In this model, the internalizing factor and the attributional styles (personal, behavioral, and environmental) were continuous indicators, and the self-victimization factor was a nominal indicator. Models from one to four latent classes were estimated. The three-class solution provided a lower BIC with significant variables, demonstrating that this model was optimal (3-class BIC = 2063.16). The detailed analysis indicated that all the parameters were highly significant for differentiating the clusters and that the associated values are all below 0.05; see Tables 6 and 16.

An examination of each class separately revealed that cluster 1 was the largest class (44% of the sample analyzed; N=139). This group has been labeled “high internalizing, environmental, self-victims”. While only 19% (N=26) of this group identified themselves as victims, this was the largest group of victims found in any cluster due to the low number of self-identified victims in the study overall (N=43). Fifty-three percent of the respondents in this cluster were girls, 72% were in the sixth grade, and they expressed strong internalizing feelings. These individuals tended to report that they believed bullying happened due to environmental factors (e.g., “They want to be like me.”). This group had the lowest associations between victimization and personal factors; meaning, they were least likely to believe (or admit) that they were victimized due to personal factors (e.g., “I don’t look as cool as them.”).

The next largest class, cluster 2, has been labeled “moderate internalizing, personal, non-victims”. They represented 35% of respondents in the sample (N=110).

Ninety-six percent of the students in this class were identified as being “non-victims” (N=106), where 54% of the children in this group were girls, with equal numbers in fourth and sixth grade who expressed moderate levels of internalizing feelings. These respondents were most likely to attribute bullying to personal reasons (e.g., “I am not as good looking as other kids.”) and least likely to report that the bullying occurred due to environmental reasons (e.g., “They are jealous of the things I have.”).

Cluster 3 has been characterized as: “low internalizing, behavioral, non-victims”. They encompassed 21% of the sample (N=68). This class represented non-victims (96%; N=65) who had slightly more boys (53%) in the sixth grade (72%). These students expressed lower levels of internalizing feelings and tended to attribute bullying to behavioral causes (e.g., “I was bugging or annoying them.”).

Within Group Comparison of Bully, Internalizing, and Attributions

The second analysis that was performed to address the first research question was a mixed-mode data set of 302 cases, and included the peer-nominated bully factor, the internalizing factor, the “mad” and “funny” factors, and the three attributional styles with gender and grade level covariates. It should be noted that only 300 cases were utilized in this particular analysis due to the T7 “bully” measures being incomplete. In this model, the internalizing factor and attributional styles (personal, behavioral, and environmental) were continuous indicators, and the mad, funny, and bully factors were nominal indicators. Models from one to four latent classes were estimated. All model solutions revealed that the internalizing factor was not a significant variable, demonstrating that none of the models were optimal.

Within Group Comparison of Victim, Mad, and Attributions

The third analysis that was performed to address the first research question was a mixed-mode data set of 315 cases, and included the self-reported victimization factor, the mad factor, and the three attributional styles with gender and grade level covariates. It should be noted that only 315 cases (out of the total sample of 317) were utilized in this particular analysis due to two participants not providing responses for the “mad” factor. In this model, the attributional styles (personal, behavioral, and environmental) were continuous indicators, and the mad and self-victim factors were nominal indicators. Models from one to four latent classes were estimated. The four-class solution provided a lower BIC with significant variables, demonstrating that this model was optimal (4-class BIC = 2173.22). The detailed analysis including the victimization factor, the attributional styles, and the mad factor with the covariates of gender and grade indicated that all the parameters were highly significant for differentiating the clusters and that the associated values are all below 0.05; see Tables 8 and 16. It should also be noted that the “funny” factor was initially included in the model; however, it was found not to be a significant predictor and thus was not included in the analysis or in the results.

An examination of individual classes reveals that the largest class, cluster 1, encompassed 32% (N=101) of the sample used to examine this hypothesis. This group was defined as: low feelings of mad, behavioral, non-victims. Ninety-four percent of the respondents in this group identified as being non-victims (N=95), with 53% of the group being male and 66% in the sixth grade who reported that they would only be mad for a few moments (46%) or not at all (26%) if someone bullied them. When asked about times when they had been picked on, these individuals tended to attribute those instances to

behavioral reasons (“I would not leave them alone.”). Conversely, they were least likely to report that the bullying had happened due to environmental causes (e.g., “They are not as popular as me.”).

Cluster 2 was the next largest class and has been labeled: low feelings of being mad, personal, non-victims. It represented 27% of the sample (N=86). Ninety-four percent of participants in this group identified as “non-victims” (N=81), where 56% were female with even distributions of fourth and sixth grade students. These individuals tended to report that they would be mad for only a few moments (52%) or not at all (21%) post-victimization. Cluster 2 students were most likely to attribute times when they had been bullied to personal causes (e.g., “I don’t wear cool clothes.”), and least likely to report that they had been picked on because of behavioral factors (e.g., “I made them mad.”).

The third largest group, cluster 3, encompassed 25% of the sample (N=79). This class has been characterized as: longer time of being mad, personal, victims. Cluster 3 includes the largest percentage of self-reported victims, where twenty-eight percent of respondents in this group identified as victims (N=22), where 54% were girls and 71% were in the sixth grade. These students reported that post-bullying they would be mad for: a few minutes (34%), longer than a day (32%), or for most of the day (31%); they were least likely not to be mad (3%). Additionally, members in this group tended to believe (or report) that they were victimized because of personal reasons (e.g., “of my race”).

The remaining students in cluster 4 were labeled: longer time of being mad, environmental, non-victims. This class encompassed 16% of the sample (N=49), where

almost 100% of the group identified as non-victims (N=49), with 52% being female and 75% being in the sixth grade. These students reported that they tended to respond to bullying incidents by being mad for most of the day (34%), followed by being mad for a few minutes (32%), and being mad for longer than a day (27%); similar to the victim group, they would be least likely not to get mad post-victimization. Individuals in this group tended to attribute bullying to environmental causes (e.g., “They want to be like me.”), and were least likely to report that victimization happened due to personal reasons.

Within Group Comparison of Bully, Mad, and Attributions

The fourth analysis that was performed to address the first research question was a mixed-mode data set of 302 cases, and included the peer-nominated bully factor, the mad factor, the funny factor, and the three attributional styles with gender and grade level covariates. It should be noted that only 302 cases were utilized in this particular analysis due to T7 “bully” peer nomination measures not being completed. In this model, the attributional styles (personal, behavioral, and environmental) were continuous indicators, and the mad, funny, and bully factors were nominal indicators. Models from one to four latent classes were estimated. The “funny” factor was shown not to be significant in any of the resulting models and was thus dropped. Models from one to four solutions were run again without the funny factor, and the four-class solution provided a lower BIC with significant variables, demonstrating that this model was optimal (4-class BIC = 2219.426). The detailed analysis including the bully factor, the attributional styles, and the mad factor with the covariates of gender and grade indicated that all the parameters were highly significant for differentiating the clusters and that the associated values are all below 0.05; see Tables 10 and 16.

An examination of each class reveals that cluster1 was the largest class (33% of the sample analyzed; N=100). It has been defined “high mad, environmental bullies.” Thirty percent of the students in this group were identified as being “bullies” (N=30), where 51% of the children in this group were boys, with 78% percent in sixth grade who expressed high levels of being mad for longer than a day (after someone had picked on them). These respondents were most likely to attribute bullying to environmental reasons (e.g., “They want to be like me.”) and least likely to report that they were picked on because of personal reasons (e.g., “I don’t look as cool as them.”).

The next largest group, cluster 2, was labeled “lower mad, personal, 6th grade non-bullies”; this group included 27% of the total sample (N=82). Ninety-five percent of the children in this class were identified as being “non-bullies” (N=78), where 55% were girls, 57% were in the sixth grade, and they reported being mad for only a few minutes or not at all post victimization. These individuals tended to report that they believed bullying happened due to personal factors (e.g., “I am different from them.”). This group had the lowest associations between being picked on and behavioral factors; meaning, they were least likely to believe (or admit) that someone would be mean to them due to circumstances that were due to behaviors or actions (e.g., “I did something mean to them.”).

Cluster 3 has been characterized as: “low mad, behavioral non-bullies”. They encompassed 21% of the sample (N=63). This class represented non-bullies (87%; N=55) who had slightly more boys (56%), and the majority were in the sixth grade (77%). These students tended to report that if they were picked on, they would be mad for a few minutes. They generally attributed bullying to behavioral causes (e.g., “I did something

bad or wrong.”), and were least likely to report that someone was mean to them because of environmental reasons (e.g., “They are not as popular as me.”).

The remaining cluster, class 4, represented 19% of the sample (N=57); it has been defined as: low mad, personal 4th grade non-bullies. This group included non-bullies (88%; N=50) who had slightly more girls (59%) than boys, and the majority were in the fourth grade (53%). These individuals generally reported that post-teasing they would be mad for a few minutes. They typically expressed that they believed (or at least reported) that they had been teased due to personal reasons (e.g., I am bigger or smaller than most kids my age.”), and least likely to believe (or admit) that the teasing had occurred due to environmental reasons (e.g., “They are jealous of the things I have.”).

Results and Analysis for Question 2:

Within Group Comparison of Victim, Internalizing, and Coping Methods

To address the second research question of interest: whether internalizing or passive and externalizing or reactive types of emotional reactions differentially influence the coping methods victimized children utilize, two Latent Class Analyses were conducted using Latent Gold 4.5. The first analysis was a mixed-mode data set of 317 cases, and included the self-reported victimization factor, the internalizing factor, and the six coping methods with gender and grade level covariates. In this model, the internalizing factor and the coping methods (seeking a friend, seeking an adult, problem-solving, acting nonchalantly, being immobilized, and revenge seeking) were continuous indicators, that is their values could take on a range of values rather than a small discreet set of values; additionally, the self-victim factor was a nominal indicator. Several LCA models with one, two, three and four latent classes were estimated. The four-class

solution provided a lower BIC with significant variable p-values, demonstrating that this model was optimal (4-class BIC = 4283.64). The detailed analysis indicated that all the parameters were highly significant for differentiating the clusters and that the associated p-values are all below 0.05; see Table 12 and 16.

An analysis of individual clusters reveals that the largest one, cluster 1, represents 40% (N=116) of the sample that was used to address this hypothesis. This group has been defined as: moderate internalizing, assistance seeking (friend and adult), female non-victims. Ninety-one percent of respondents in this group identified as non-victims (N=116), with 72% being females and 52% in the sixth grade who expressed moderate levels of internalizing feelings. In regards to coping methods, these students reported that they would mainly cope by seeking an adult or seeking a friend; conversely, they were least likely to cope by engaging in revenge seeking tactics.

Cluster 2 is the next largest group, and it encompasses 24% of the sample (N=74). This cluster has been characterized as: moderate internalizing, problem-solving, male non-victims. Ninety-six percent of respondents in this class were non-victim (N=74), with 60% being males and 65% in the sixth grade who experienced moderately high internalizing feelings. These students would be most likely to cope by problem-solving; they would be least likely to employ revenge seeking strategies.

The third largest class, cluster 3, has been labeled: high internalizing, friend seeking, victims. It represents 23% of the sample (N=55). Twenty-five percent of respondents in this class identified as victims (N=18), with 54% being girls and 75% in the sixth grade who experienced moderately high internalizing feelings. These students

would be most likely to cope by seeking a friend; and they would be least likely to act nonchalantly or seek revenge.

Cluster 4 included the rest of the sample (12%; N=39). This group has been defined as: low internalizing, revenge seeking, male non-victims. Approximately 100% of respondents in this class were non-victims (N=39), with 88% being males and 81% being in the sixth grade who had low levels of internalizing feelings. Interestingly, this group reported that when bullied, they would be most likely to seek revenge, and least likely to be immobilized.

Within Group Comparison of Victim, Mad, and Coping Methods

Another analysis was conducted to examine the second research question; it utilized a mixed-mode data set of 315 cases (out of the overall sample of 317 cases because two participants did not respond to the mad factor) and included the self-reported victimization factor, the externalizing (mad) factor, and the six coping methods with gender and grade level covariates. In this model, the coping methods (seeking a friend, seeking an adult, problem-solving, acting nonchalantly, being immobilized, and revenge seeking) were continuous indicators, and the self-victim factor and externalizing factor (mad) were nominal indicators. Models from one to four latent classes were estimated. The four-class solution provided a lower BIC, demonstrating that this model was optimal (4-class BIC = 4572.32). The detailed analysis indicated that all the parameters were highly significant for differentiating the clusters and that the associated p-values are all below 0.05; see Tables 14 and 16. Similar to the “attribution” analysis, the “funny” factor was initially included in the model; however, it was found not to be a significant predictor and thus was not included in the analysis or in the results.

By examining each class separately, cluster 1 was the largest class, and it encompassed 38% (N=121) of the overall sample that was used to examine this hypothesis. This group was labeled: low feelings of being mad, assistance seeking, female non-victims. Ninety-one percent of students in this group were non-victims (N=110), with 72% being girls with similar levels of fourth and sixth grade students (48% and 52%, respectively). These respondents reported that post-victimization they would be mad for only a few minutes (49%); conversely, they would be least likely to remain mad for longer than a day (10%). In regards to coping styles, these individuals tended to cope by seeking assistance from an adult or friend (equal probabilities of both methods).

Cluster 2 was characterized by: moderate length of time being mad, assistance/ problem-solving, non-victims. It represented the second largest class (29%; N=92), and was comprised of 93% non-victims (N=85), with 54% being males and 66% in the sixth grade. If victimized, the participants in this group would be mad for a few minutes (62%) or for most of the day (24%); they would be least likely not to be mad at all (5%). These students would cope with bullying by seeking assistance from a friend or adult or by problem-solving (all methods had equivalent levels).

The next largest class, cluster 3, encompasses 20% of the sample (N=63), and has been defined as: longest time of being mad, friend or revenge seeking/ problem-solving, victims. Twenty-four percent of participants in this group identified as victims (N=15), with 54% being boys and 76% in the sixth grade. These students tended to stay mad for longer than a day (55%); and they were least likely to not be mad (4%). Additionally, these children coped with acts of victimization by seeking out a friend followed by

seeking revenge and problem-solving (equivalent levels); they were least likely to seek an adult for help.

The remaining students in cluster 4 represented 13% of the sample (N=39); this cluster has been labeled: low mad feelings, problem-solving, male non-victims. One hundred percent of the participants in this group were non-victims (N=0), where 84% were males and 79% were in the sixth grade who were most likely not to get mad (28%) in response to instances of bullying. In regards to victimization, these respondents tended to cope by problem-solving, followed by seeking a friend or revenge (even distributions); conversely, they were least likely to report feeling immobilized or not knowing what to do.

Further Results and Analysis for Question 1:

Between Group Comparison of Victim, Internalizing, and Attributions

When comparing classes within the three-class model, the chances of belonging to class 1 was 44.0%, class 2 was 34.6%, and class 3 was 21.5%; see Table 7 and Figure 1. In regards to examination between clusters, class 1: high internalizing, environmental, self-victims, had the largest probability of being a self-reported victim (79.4%), the largest probability of strong internalizing feelings (highest scores on the higher range of this factor's 4-point Likert scale) (61.8%), the largest probability of making the strongest or highest behavioral attributions (92.2%), the largest probability of making higher personal attributions (92.7%), the largest probability of making the strongest environmental attributions (98.6%), the largest probability of being a girl (44.7%), the second lowest probability of being in 4th grade (34.9%) and the largest probability of being in 6th grade (49.0%).

Comparatively, class 2: moderate internalizing, personal, non-victims, had the second highest probability of being a non-victim (37.2%), the highest probability of experiencing few internalizing feelings (35.3%), the second lowest probability of strongly attributing bullying to behavioral reasons (e.g., they had the lowest scores on the higher range of this factor's 4-point Likert scale) (57.44%), the second lowest probability of making strong personal attributions (7.3%), the second lowest probability of having higher environmental attributions (1.4%), the second lowest probability of being a girl (36.1%), and the highest probability of being in 4th grade (48.5%).

Lastly, class 3: low internalizing, behavioral, non-victims, had the lowest probability of being a self-reported victim (8.9%), the second largest probability of strong internalizing feelings (10.7%), the second lowest probability of making high behavioral attributions (6.1%), the lowest probability of making stronger personal attributions (0.0%), the highest probability of making lower or weak environmental attributions (62.0%), the lowest probability of being a boy (23.9%), the lowest probability of being in 4th grade (16.6%) and the lowest probability of being in 6th grade (24.2%).

Between Group Comparison of Victim, Mad, and Attributions

Comparison of the four-class model reveals that the chances of belonging to class 1 was 31.9%, class 2 was 27.4%, class 3 was 25.0%, and class 4 was 15.7%; see Table 9 and Figure 2. In regards to examination between classes, cluster 1: low feelings of mad, behavioral, non-victims, had the largest probability of being a non-victim (33.6%), the lowest probability of being mad for longer than a day (19.4%), the highest probability of few or "weak" behavioral attributions (e.g., the highest scores in the lowest range of this factor's 4-point Likert scale) (57.6%), the largest probability of making few personal

attributions (69.7%), the largest probability of weaker levels of environmental attributions (92.3%), the largest probability of being a boy (35.0%), the second lowest probability of being in 4th grade (30.4%) and the largest probability of being in 6th grade (32.8%).

Alternatively, Class 2: low feelings of being mad, personal, non-victims, had the second highest probability of being a non-victim (28.8%), the lowest probability of being mad for most of the day (15.5%), the lowest probability of making stronger behavioral attributions (e.g., the lowest scores in the highest range of this factor's 4-point Likert scale) (0.7%), the second lowest probability of having weak personal attributions (10.4%), the second lowest probability of making stronger environmental attributions (2.5%), the highest probability of being a girl (29.6%), and the highest probability of being in 4th grade (38.1%).

In comparison, class 3: longer time of being mad, personal, victims, had the highest probability of being a victim (66.6%), the highest probability of being mad for longer than a day (39.1%), the largest probability of making stronger behavioral attributions (e.g., the highest scores in the higher range of this factor's 4-point Likert scale) (59.9%), the highest probability of making stronger personal attributions (77.0%), the largest probability of having stronger environmental attributions (63.7%), similar probabilities of being a girl (24.1%) and boy (25.8%), and the second highest probability of being in 6th grade (27.5%).

Lastly, class 4: longer time of being mad, environmental, non-victims, had the lowest probability of being a self-reported victim (0.0%), the lowest probability of being mad for a few minutes (11.9%), the second highest probability of having stronger

behavioral attributions (30.1%), the lowest probability of making higher personal attributions (0.0%), the second highest probability of having stronger environmental attributions (34.0%), the lowest probability of making stronger personal attributions (0.0%), the highest probability of having stronger environmental attributions (34.0%), the lowest probability of being a boy (15.9%), and the lowest probability of being in the 4th grade (11.1%).

Between Group Comparison of Bully, Mad, and Attributions

Comparison of the four-class model reveals that the chances of belonging to class 1 was 33.2%, class 2 was 27.1%, class 3 was 20.9%, and class 4 was 18.9%; see Table 11 and Figure 3. In regards to examination between classes, cluster 1: high mad, environmental bullies, had the largest probability of being a bully (61.7%), the highest probability of being mad for longer than a day (56.8%), the largest probability of high or “strong” behavioral attributions (e.g., the highest scores in the highest range of this factor’s 4-point Likert scale) (91.2%), the highest probability of making strong personal attributions (e.g., the highest scores in the highest range of this factor’s 4-point Likert scale) (62.1%), the largest probability of higher levels of environmental attributions (86.4%), the largest probability of being a boy (34.9%), and the highest probability of being in 6th grade (39.1%).

Alternatively, class 2: lower mad, personal 6th grade non-bullies, had the highest probability of being a “non-bully” (30.8%), the highest probability of not being mad (38.5%), the highest probability of making moderate behavioral attributions (e.g., scores in the middle range of this factor’s 4-point Likert scale), the second largest probability of higher or stronger personal attributions (e.g., higher scores in the highest range of this

factor's 4-point Likert scale) (36.4%), the second highest probability of higher levels of environmental attributions (13.6%), the second largest probability of being a girl (29.0%), and the highest probability of being in 4th grade (34.6%).

In comparison, class 3: low mad, behavioral non-bullies, had the second highest probability of being a "bully" (16.6%), somewhat uniform distributions of being mad for a few minutes or not being mad, the second highest probability of making stronger behavioral attributions (e.g., the highest scores in the highest range of this factor's 4-point Likert scale) (4.8%), the highest probability of few or weak personal attributions (e.g., the highest scores in the lowest range of this factor's 4-point Likert scale) (71.9%), the highest probability of lower levels of environmental attributions (60.7%), the third largest probability of being a boy (24.1%), and the second highest probability of being in 6th grade (24.2%).

Lastly, class 4: low mad, personal 4th grade non-bullies, had the second lowest probability of being a "bully" (14.0%), the lowest probability of being mad for longer than a day (3.7%), the second highest probability of weak behavioral attributions (e.g., the highest scores in the lowest range of this factor's 4-point Likert scale) (26.4%), somewhat uniformly even scores in the moderate range on personal attributions (e.g., the scores in the middle range of this factor's 4-point Likert scale) (38.2%), the second highest probability of lower levels of environmental attributions (22.2%), the lowest probability of being a boy (15.8%), and the lowest probability of being in 6th grade (13.4%).

Further Results and Analysis for Question 2:

Between Group Comparison of Victim, Internalizing, and Coping Methods

When comparing the four-class model, the chances of belonging to class 1 was 40.1%, class 2 was 24.4%, class 3 was 23.1%, and class 4 was 12.3%; see Table 13 and Figure 4. In regards to examination between the clusters, class 1: moderate internalizing, assistance seeking (friend and adult), female non-victims had the largest probability of being a non-victim (40.7%), the largest probability of stronger internalizing feelings (46.5%), the largest probability of regularly seeking a friend to cope (e.g., higher scores on this factor's 4-point Likert scale) (61.2%), the lowest probability of frequently coping by using revenge seeking methods (0.0%), the largest probability of commonly acting nonchalantly as a means to cope (46.3%), the second largest probability of frequently coping by being immobilized (37.1%), the largest probability of regularly using problem-solving methods to cope (52.1%), the largest probability of commonly seeking an adult to cope (58.6%), the largest probability of being a girl (55.0%), and the largest probability of being in 4th grade (53.9%).

Comparatively, class 2: moderate internalizing, problem-solving, male non-victims, had the second largest probability of being a non-victim (26.1%), the third largest probability of reporting stronger internalizing feelings (11.3%), the second largest probability of commonly seeking a friend to cope (20.4%), the second lowest probability of regularly coping by using revenge seeking methods (0.7%), the second largest probability of reporting low levels of coping by acting nonchalantly (14.4%), the second lowest probability of reporting low levels of being immobilized (14.0%), the second largest probability of frequently coping with problem-solving methods (21.6%), the

second largest probability of regularly seeking an adult to cope (20.8%), the largest probability of being a boy (30.9%), and the second largest probability of being in 4th grade (23.8%).

Cluster 3: high internalizing, friend seeking, victims, had the largest probability of being a victim (54.9%), the second largest probability of reporting stronger internalizing feelings (42.1%), the second lowest probability of frequently coping by seeking a friend (12.4%), the largest probability of commonly seeking revenge as a means to cope (64.3%), the lowest probability of reporting low levels of acting nonchalantly (8.9%), the largest probability of frequently coping by being immobilized (56.2%), the second lowest probability of reporting higher levels of problem-solving strategies (20.1%), the second lowest probability of reporting higher adult seeking (18.9%), the lowest probability of being a boy (22.5%), and the second highest probability of being in 6th grade (27.2%).

Lastly, class 4: low internalizing, revenge seeking, male non-victims, had the lowest probability of being a victim (0.0%), the lowest probability of reporting stronger internalizing feelings (0.0%), the lowest probability of reporting higher levels of seeking a friend to cope (5.6%), the second highest probability of reporting higher levels of coping by using revenge seeking methods (35.0%), the lowest probability of reporting higher levels of acting nonchalantly (6.0%), the lowest probability of reporting higher levels of being immobilized (0.0%), the lowest probability of reporting higher problem-solving methods (6.3%), the highest probability of reporting lower levels of seeking an adult to cope (34.5%), the lowest probability of being a girl (2.9%), and the lowest probability of being in 6th grade (15.7%).

Between Group Comparison of Victim, Mad, and Coping Methods

Examination of the four-class model reveals that the chance of belonging to class 1 was 38.5%, class 2 was 29.0%, class 3 was 20.0%, and class 4 was 12.5%; see Table 15 and Figure 5. In regards to comparison between clusters, class 1: low feelings of being mad, assistance seeking, female non-victims, had the largest probability of being a non-victim (39.1%), the largest probability of reporting not being mad (63.7%), the largest probability of regularly seeking a friend to cope (e.g., higher scores on this factor's 4-point Likert scale) (59.9%), the lowest probability of coping frequently by using revenge seeking methods (0.0%), the largest probability of commonly acting nonchalantly as a means to cope (47.0%), the second largest probability of frequently coping by being immobilized (35.7%), the largest probability of commonly problem-solving to cope (51.1%), the largest probability of frequently coping by seeking an adult (59.2%), the largest probability of being a girl (53.2%), and the largest probability of being in 4th grade (51.9%).

In comparison, class 2: moderate length of time being mad, assistance/ problem-solving, non-victims, had the second largest probability of being a non-victim (30.0%), the largest probability of reporting being mad for most of the day (32.1%), the second largest probability of frequently coping by seeking a friend (21.0%), the second lowest probability of regularly coping by using revenge seeking methods (7.0%), the lowest probability of reporting low levels of coping by acting nonchalantly (13.6%), the second lowest probability of reporting low levels of being immobilized (8.9%), the second largest probability of frequently coping with problem-solving methods (27.7%), the second largest probability of regularly seeking an adult to cope (33.0%), the largest

probability of being a boy (32.9%), and the second largest probability of being in 6th grade (30.0%).

Class 3: longest time of being mad, friend or revenge seeking/ problem-solving, victims, had the largest probability of being a victim (46.2%), the largest probability of reporting being mad for longer than a day (54.8%), the second lowest probability of frequently coping by seeking a friend (12.8%), the largest probability of commonly seeking revenge as a means to cope (61.7%), the second largest probability of reporting regularly acting nonchalantly (31.0%), the largest probability of coping by frequently being immobilized (37.3%), the second lowest probability of reporting higher levels of problem-solving strategies (14.9.%), the second lowest probability of reporting higher adult seeking (6.1%), a 22.5% probability of being a boy, a 17.7% of being a girl, and the second lowest probability of being in 4th grade (13.4%).

Finally, class 4: low mad feelings, problem-solving, male non-victims, had the lowest probability of being a victim (0.1%), the second highest probability of reporting not being mad (21.9%), the lowest probability of reporting higher levels of seeking a friend to cope (6.3%), the second highest probability of reporting higher levels of coping by using revenge seeking methods (31.3%), the lowest probability of reporting higher levels of acting nonchalantly (0.0%), the largest probability of reporting lower levels of being immobilized (53.6%), the lowest probability of reporting higher levels of problem-solving (6.4%), the lowest probability of reporting higher levels coping by seeking an adult (1.7%), the lowest probability of being a girl (3.8%), and the lowest probability of being in 4th grade (7.4%).

Results and Analysis for Research Question 3:

Correlations were conducted to examine whether children identified as “bullies” (N=48) experience different types of emotional reactions than those identified as “victims” (N=33); see Table 1 for demographic information. As hypothesized, there was a significant positive correlation between self-reported victim and the internalizing factor (p-value = < 0.01). However, contrary to what was posited in the current investigation, a significant positive correlation was also found between self-victim and mad (p-value = < 0.05). Consistent with the other hypothesis for this question of interest, there was a significant correlation between bullying and the externalizing (mad) factor (p-value = < 0.01). Additionally, this study also found a significant positive correlation between bullying and externalizing (funny) factor (p-value = < 0.01). The correlation between bullying and the internalizing factor was not significant; see Table 17.

Chapter 4

DISCUSSION

The current investigation addressed questions that expanded upon previous research pertaining to children's involvement in peer victimization, as well as the attributions they make regarding acts of bullying, and the coping methods that they employ. In particular, the relations that exist between self-reported victimization, peer nominated bullying activities, externalizing (mad and funny) and the internalizing factor were explored. Specifically, the current research examined whether different types of feelings, those that are more passive or internalizing in nature versus those that are reactive or externalizing, differentially influence the attributions that children make in regards to victimization. Additionally, the study investigated whether internalizing or passive and externalizing or reactive types of emotional reactions differentially influenced the coping methods that victimized children utilize.

A number of interesting findings were revealed as mentioned in Chapter 3. As related to attributions children make regarding victimization, results suggest that a 3-cluster latent class analysis model was the best fit to explain manifest variables of self-reported victim, the internalizing factor, and the three attribution factors (environmental, personal and behavioral) with covariates of gender and grade. This finding indicates that a specific pattern exists between the group that identifies most as a "victim" and those that identify as being "non-involved." It was hypothesized that a relationship would exist between children who experienced passive or internalizing reactions, in regards to victimization, and personal (e.g., "I look different from others.") or behavioral (e.g., "I did something bad or wrong.") characteristic attributions. Results from the present

investigation reveal that the victim group demonstrated the highest levels of internalizing feelings, as well as the strongest levels of attributing the victimization to personal, behavioral, and environmental reasons in comparison to the two groups with a higher percentage of non-victims. Interestingly, the victim group identified “environmental” reasons as being the primary cause of their victimization. This may be the most effective way for the victim group to rationalize and deal with acts of bullying. That is, it is possible that children who most frequently feel that they are bullied justify the acts of victimization as happening due to circumstances that are unrelated to them and/ or beyond their control (external locus of control). It is also possible that these individuals may not be aware of their own behavioral characteristics or tendencies; further, it may also be the case that they do not want to admit to such (e.g., take responsibility). The victim group was also found to have a higher probability of females, which is consistent with existent research (Menesini et al., 1997; Nabuzoka et al., 2009). Additionally, the victim group was found to have the highest probability of being in the sixth grade. This finding is contradictory to other studies that have purported that rates of victimization tend to decrease as students get older (Ronen, Rahav, & Moldawsky, 2007); but research by Pelligrini and Long (2002) suggests that middle school is the height of bullying, so it is consistent with that research. It may not be due to attending a new school since our participants attended a K-8 school, but may be due to age and reaching puberty.

In comparison, the group that had the lowest levels of identifying as a “victim” had the lowest levels of strong internalizing feelings, the lowest probability of being a male, the lowest probability of being in the fourth grade, and had the lowest levels of attributing victimization to personal reasons; they also had the lowest levels of making

strong environmental attributions and high levels of making behavioral attributions. This indicates that when bullied, this group does not believe that it occurred due to reasons that were personal in nature (e.g., color of skin) or because of something that was out of their control (e.g., actions of others/ environmental reasons); rather, they more frequently believe that acts of victimization occurred due to their own behaviors.

These results may suggest that when one can attribute bullying to something that he or she may have direct control over (e.g., behavior), he or she may be able to deal more effectively with it; that is, they do not experience intense internalizing feelings (e.g., they are less likely to feel like crying, be upset, etc.). These findings uphold the notion that victimized individuals have stronger internalizing feelings (Bollimer et al., 2005); it supports the research by Reijntjes et al. (2010) that concluded that victims negatively self-evaluate. The present investigation also reveals that victims tend to rationalize (or report) that their involvement in bullying is something that is out of their control. This information may be useful in that it indicates anti-bullying intervention programs should include self-esteem building techniques (to address internalizing feelings), and focus on having students identify (or admit to) the reasons that victimization may happen.

Further analysis revealed that a 4-cluster latent class analysis model was the best fit for helping to explain the manifest variables of self-reported victims, an externalizing or reactive feeling (mad), and the three attribution factors (environmental, personal and behavioral) with covariates of gender and grade. It was hypothesized that a relationship would exist between reactive or externalizing responses and environmental characteristics (e.g., “They are jealous of the things I have.”). In the resulting model the

group that identified most frequently with being a victim had the highest levels of attributing victimization to personal reasons; they also reported higher levels of environmental and behavioral attributions. Additionally, the victim group reported the highest levels of feeling mad for the longest length of time (longer than a day). These findings suggest that individuals who report being victimized most often tend to blame themselves (e.g., personal attributions) for being bullied; this may in turn affect the length of time that they remain mad about the situation. Interestingly, in this model the non-victim cluster that also attributed instances of bullying to personal factors (cluster 2) was the least likely group to be mad or if they were mad, it would only be for a few minutes. Perhaps this non-victim group was more resilient or had other means of “getting over” being bullied than the victims. Thus, it seems important that schools (and parents) ensure that all students have access to a variety of activities, such as sports, after-school clubs, etc., which would not only provide social and adult support, but may also serve as a positive or prosocial outlet for children to get over negative events in their life (e.g., bullying).

Similarly, in an attempt to examine “externalizing” behavior and attributions among children identified as “bullies,” a 4-class latent model was the best fit to help explain these manifest variables (peer-nominated bully, the mad factor, and the three attribution factors) with covariates of gender and grade. As one might expect, the bully group had the highest levels of being mad for longer than a day, followed by being mad for most of the day, with very little chance of not being mad (4%). Consistent with what was hypothesized, these children, who expressed being mad for the longest lengths of time, were most likely to attribute being picked on to environmental reasons; that is, they

were likely to report that someone was mean to them because of the behavior(s), action(s), or thought(s) of someone else (e.g., “They are jealous of the things I have.”).

An examination between the similarities and differences between the “victim” and “bully” groups in regards to the way that they attribute being picked on and the length of time to which it affects them (post victimization) reveals that both groups report high levels of getting mad for longer lengths of time than most of the non-involved children. However, while the internalizing factor was found to be a significant predictor in the victim model, it was not in the bully one. Thus, there was no meaningful relationship between bullying and the internalizing variable; that is, the internalizing factor was not useful in any of the cluster assignments (i.e., it was not helpful in discriminating between the clusters). Another major difference that was noted between the bully and victim group in regards to attributions, was that the victim group tended to believe (or report) that they were bullied because of something that was more personal in nature (e.g., “I look different from others.”); whereas the bully group tended to rationalize being picked by placing the blame on others (environmental causes, such as: “They are jealous of the things I have.”).

In regards to coping, it was hypothesized that a relationship would exist between children who react to being bullied with internalizing types of reactions and the following coping methods: passive or “immobilized” coping and/or cognitive distancing coping by “acting nonchalantly.” Analysis of this hypothesis revealed that a 4-cluster latent class model was the best fit for helping to explain the manifest variables of the self-reported victim, the internalizing factor, and the six coping factors (seeking a friend, seeking revenge, acting nonchalantly, problem-solving, immobilized, and seeking an adult) with

covariates of gender and grade. Consistent with what was hypothesized, in this model, the group that identified most frequently with being a victim had higher levels of internalizing feelings and reported the highest levels of being “immobilized” in response to victimization. Analogous to other research, in a comparison between clusters, the victim group identified with lower levels of seeking a friend, problem-solving, and seeking an adult for help. However, it should be noted that when doing a within group analysis, the victim group reported that they would most frequently cope by seeking a friend. This was inconsistent with previous research that indicates that victims tend to feel socially isolated or dissatisfied with their social relationships (Hoover, Oliver, & Hazler, 1992; Kochenderfer-Ladd & Wardrop, 2001.)

Another interesting finding reveals that contradictory to what was hypothesized, the victim group also reported the highest levels of revenge seeking as a means to cope. This group also had a higher probability of being a girl and of being in the sixth grade. On the contrary, the group who identified most frequently with being a “non-victim” had the highest levels of coping by acting nonchalantly, problem-solving and seeking assistance (friend and adult). Additionally, the cluster that reported the lowest levels of internalizing feelings was also the group that reported high levels of revenge seeking; perhaps this is the group that is more regularly involved in carrying out the victimization (e.g., the bullies); however, there was no self-reported “bully” measure in the current study, thus we are unable to confirm this.

Surprisingly, in a between cluster examination, cluster 1: moderate internalizing, assistance seeking, non-victims, also had the highest levels of the strongest internalizing feelings. These findings suggest that victim and non-victim groups may be similar in

terms of the way that they feel (internalizing behaviors/ emotions) after acts of bullying; however, it appears as though they differ in the ways in which they deal with it.

It was further hypothesized that a relationship would exist between externalizing responses and the following coping methods: seeking revenge, seeking a friend, seeking assistance (friend and adult), and/or problem-solving. Analysis of this hypothesis indicated that a 4-cluster latent class model was the best fit for helping to explain the manifest variables of self-reported victim, an externalizing or reactive feeling (mad), and the six coping factors (friend seeking, revenge seeking, act nonchalantly, problem-solving, immobilized, and seek an adult) with covariates of gender and grade. Consistent with what was hypothesized, a comparison of clusters in this model reveals that Cluster 3: longest time of being mad, friend seeking/ revenge seeking/ problem-solving victims reported the highest levels of being mad for longer than a day, and the highest levels of seeking revenge.

Comparatively, cluster 1: low feelings of being mad, assistance seeking, non-victims, identified most commonly with being a non-victim reported the highest levels of not getting mad in response to hypothesized acts of victimization; they also had the highest levels of seeking a friend and seeking an adult. Additionally, this group had the highest probability of being a girl and in the fourth grade (when comparing between clusters). These results could suggest that more effective or socially accepted forms of coping (e.g., problem-solving and seeking assistance) may in turn be related to the length of time that a person remains mad about the situation. It would appear as though children who are able to cope by utilizing more positive approaches (e.g., seeking an adult) tend to be involved in less acts of victimization and are also not as negatively impacted in terms

of their emotional responses (e.g., less intense internalizing feelings and shorter amount of time being mad).

Lastly, it was hypothesized that positive correlations would exist between bullying behavior and externalizing behavior. Similarly, it was predicted that there would be a positive correlation between victimization and internalizing behaviors. Data from this study supports these predications, in that positive correlations of peer nominated bullying activities with feelings of being mad or thinking it's funny in conjunction, and positive correlations of self-reported victimization with the internalizing factor were found. Interestingly, however, there was also a positive correlation between self-reported victimization and with being mad (but not funny and also not with bullying). These findings support the notion that some underlying class or classes (latent classes) might be of some better use in furthering our understanding of these observed correlation. As reported in the previous questions addressed, the complex relationships we observe do indeed require more sophisticated methods of analysis in helping us to uncover some of the patterns (latent classes) that help us better understand them.

Limitations

Limitations of this investigation include an assortment of factors that would help to further serve analysis in this field. In particular, the number of “victims” (N=33) and “bullies” (N=48) that were identified in this study was rather small. While it is obviously a good thing that few children were identified as being perpetrators of bullying (bullies), and few felt that they were victimized at school, it limited that specific population; thus comparison between the “victim” and “bully” groups, and “non-victim” groups must be done with caution, as the non-victim groups percentages included a much larger sample.

Additionally, the factor (mad) that was utilized to examine an emotion that was more “externalizing” in nature would have been better supported with similar feelings and behaviors. It should be noted that reacting to bullying by thinking it was “funny” was initially included in all models to do just that; however, that specific externalizing or reactive feeling did not turn out to be significant in any of the latent class models. Future investigations should aim at exploring the effects of other externalizing emotions. As with any limited study, findings and their generalizations to other school systems and grades must be done with reservations as this study is limited in geographical coverage (K-8 public elementary schools in the Southwest United States) and to grades (4th and 6th grades).

Another issue to consider in generalizing these findings is that latent class analysis is just starting to become a more accepted analysis than several competing statistical methods, and the resulting latent models are somewhat more conceptually difficult to explain.

Implications

Findings from this study help us to understand that certain patterns that may exist between children who feel as though they are victimized in school, those who do not feel that they are victimized, and those who tend to feel as though they are not involved at all. Consistent with much of the existent research on peer victimization, the children who identified as victims in this study tended to report higher levels of internalizing feelings. However, contradictory to what was hypothesized, the victim group also reported higher levels of being mad. Specific patterns arose between the types of attributions that bullies, victimized, and non-victimized children made, where victims tended to have higher

levels of attributing the victimization to reasons that were more personal in nature and more stable, and bullies tended to place the blame on others or things that were out of their direct control. Lastly, findings also reveal similarities in the ways victimized children cope with bullying, where they frequently reported higher levels of being immobilized. Interestingly, the victim group also reported higher levels of revenge seeking.

This study was conducted in an attempt to uncover information that would assist in the design of intervention and therapeutic programs that target bullying and peer victimization, both in the classroom and at the school-wide level. Additionally, another aim of the investigation was that results would better inform professionals providing treatment and guidance to students who are seeking support regarding peer victimization. Perhaps of key importance, the results of the current study revealed that victims experienced stronger emotional reactions to acts of bullying, and thus anti-bullying programs might focus on teaching effective ways of dealing with a variety of maladaptive/ negative emotions (e.g., mad, scared, etc.) that may be brought on by bullying. This upholds existent research that indicates school-based bullying prevention and intervention programs prove to be most successful when they focus on enhancing students' personal and social assets, in addition to the quality of the environment (Greenberg, Weissberg, Utne O'Brien, Zins, Fredericks, Resnik et al., 2003).

Further, victims and bullies differed in the attributions they made regarding victimization. Specifically, when they were asked why others might pick on them, victims were found to primarily place the blame on themselves or on something that was more personal in nature; on the contrary, however, bullies were found to mainly place the

blame on others or on factors that were out of their direct control. These findings suggest that for anti-bullying programs to be effective, identification of “roles” that individuals have in acts of peer victimization (e.g., bully, victim, and non-involved) is vital; it appears as though bullies do not take responsibility or recognize (admit) that they may be the cause (of someone picking on them), whereas victims may feel completely helpless, in that they attribute being bullied to personal reasons.

Additionally, victims in this study tended to report being immobilized post-victimization or worse yet, they reported higher levels of seeking revenge, which may serve to enable and even promote continued involvement in bullying; consequently, intervention programs that target and teach effective or prosocial coping methods would be especially vital. These findings support other research which suggests that teaching individuals conflict resolution strategies is more effective in reducing bullying and peer victimization than classroom curriculum programs and social skills training (Vreeman & Carroll, 2007).

REFERENCES

- Bauman, S., & Del Rio, A. (2005). Knowledge and beliefs about bullying in schools: Comparing pre-service teachers in the United States and the United Kingdom. *School Psychology International, 26*, 428-442.
- Baldry, A.C., & Farrington, D.P. (1999). Types of bullying among Italian school children. *Journal of Adolescence, 22*, 423-426.
- Björkqvist, K. (1994). Sex differences in physical, verbal, and indirect aggression: A review of recent research. *Sex Roles, 30*, 177-188.
- Bond, L., Carlin, J.B., Thomas, L., Rubin, K., Patton, G. (2001). Does bullying cause emotional problems? A prospective study of young teenagers. *British Medical Journal, 323*, 480-484.
- Bollimer, J. M., Milich, R., Harris, M. J., & Maras, M. A. (2005). A friend in need: The role of friendship quality as a protective factor in peer victimization and bullying. *Journal of Interpersonal Violence, 20*, 701-712.
- Bond, L., Carlin, J.B., Thomas, L., Rubin, K., Patton, G. (2001). Does bullying cause emotional problems? A prospective study of young teenagers. *British Medical Journal, 323*, 480-484.
- Borg, M.G. (1998). The emotional reactions of school bullies and their victims. *Educational Psychology, 18*(4), 433-445.
- Bradshaw, C.P., Sawyer, A.L., & O'Brennan, L.M. (2007). Bullying and peer victimization at school: Perceptual differences between students and school staff. *School Psychology Review, 36*, 361-382.
- Bouman, T., Van Der Meulen, M., Goossens, F.A., Olthof, T., Vermande, M.M. Aleva, E.A. Peer and self-reports of victimization and bullying: Their differential association with internalizing problems and social adjustment. (2010). *Journal of School Psychology, 50*(6), 759-774.
- Camodeca, M. and Goossens, F. A. (2005) 'Children's Opinions on Effective Strategies to Cope with Bullying: The Importance of Bullying Role and Perspective', *Educational Research, 47*, 93-105.
- Card, N.A., Isaacs, J., & Hodges, E.V.E. (2008). Multiple contextual levels of risk for peer victimization: A review with recommendations for prevention and intervention. In T. W. Miller (ed.), *School violence and primary prevention* (pp. 125-154). Springer. Card, N.A.

- Carney, A.G., & Merrell, K.W. (2001). Bullying in schools: Perspectives on understanding and preventing an international problem. *School Psychology International, 22*, 364-382.
- Casey-Cannon, S., Hayward, C., Gowen, K. (2001). Middle-school girls' reports of peer victimization: Concerns, consequences, and implications. *Professional School Counseling, 5*(2), 138-148.
- Champion, K., Vernberg, E., & Shipman, K. (2003). Nonbullying victims of bullies: Aggression, social skills, and friendship characteristics. *Applied Developmental Psychology 24*, 535 – 551.
- Collins, K., McAleavy, G., & Adamson, G. (2004). Bullying in schools: A Northern Ireland study. *Educational Research, 46*, 55-71.
- Cook, C., Williams, K., Guerra, N., Kim, T. & Sadek, K. (2010) Predictors of childhood bullying and victimization: A meta-analytic review. *School Psychology Quarterly, 25*, 65-83.
- Craig, W., Pepler, D., & Blais, J. (2007). Responding to Bullying: What Works? *School Psychology International, 28*(4), 465-477.
- Davidson, L. M., & Demaray, M. K. (2007). Social support as a moderator between victimization and internalizing-externalizing behaviors from bullying. *School Psychology Review, 36*, 383-405. Retrieved from Academic Search Premier database.
- Delfabbro, P., Winefield, T., Trainor, S., Dollard, M., Anderson, S., Metzger, J., & Hammarstrom, A. (2006). Peer and teacher bullying/ victimization of South Australian secondary school students: Prevalence and psychosocial profiles. *British Journal of Educational Psychology, 76*, 71-90.
- Eliot, M., Cornell, D., Gregory, A., & Fan, X. (2010). Supportive school climate and student willingness to seek help for bullying and threats of violence. *Journal of School Psychology, 48*, 533-553.
- Erikson, E. H. (1950). *Childhood and society*. New York: Norton.
- Espelage, D., & Holt, M. (2007). Dating violence and sexual harassment across the bully-victim continuum among middle and high school students. *Journal of Youth and Adolescence, 36*, 799-811.
- Espelage, D.L., & Swearer, S. M. (2003). Research on school bullying and victimization: what have we learned and where do we go from here? *School Psychology Review, 32* (3), 365-383.

- Estell, D. B., Farmer, T. W., Pearl, R., Van Acker, R., & Rodkin, P. C. (2008). Social status and aggressive and disruptive behavior in girls: Individual, group, and classroom influences. *Journal of School Psychology, 46*, 193-212.
- Fekkes, M., Pijpers, F.I.M., & Verloove-Venhorick, S.P. (2005). Bullying: Who does what, when, and where? Involvement of children, teachers, and parents in bullying behavior. *Health Education Research Theory and Practice, 20*, 81-91.
- Fox, C., & Bouton, M. (2006). Friendship as a moderator of the peer relationship between social skills problems and peer victimisation. *Aggressive Behavior, 32*, 110-121.
- Francis, B. *What is Latent Class analysis?* [PDF document]. Retrieved from ESCR: National Centre for Research Methods: <http://www.ccsr.ac.uk/methods/festival/programme/wiwp/francis.pdf>
- Furlong, M.J., Sharkey, J.D., Felix, E., Tanigawa, D., & Green, J.G. (2007). Bullying assessment: A call for increased precision of self-reporting procedures. Jimerson, S.R., Swearer, S.M., & Espelage, D.L. (Eds.), *The International Handbook of School Bullying* (2-34). New York: Routledge.
- Gladstone, G.L., Parker, G.B., & Malhi, G.S. (2006). Do bullied children become anxious and depressed adults?: A cross-sectional investigation of the correlates of bullying and anxious depression. *Journal of Nervous and Mental Disease, 194*, 201-208.
- Glew, G.M, Fan M.Y, Katon W., & Rivara, F.P. (2008). Bullying and school safety. *Journal of Pediatrics, 152*, 123-8.
- Glover, D., Gough, G., Johnson, M., & Cartwright, N. (2000). Bullying in 25 secondary schools: Incidence, impact and intervention. *Educational Research 42*, 141-156.
- Goethem, A., Scholte, R., & Wiers, R. (2010). Explicit and implicit bullying attitudes in relation to bullying behavior. *Journal of Abnormal Child Psychology, 38*, 829-842.
- Greenberg, M. T., Weissberg, R. P., Utne O'Brien, M., Zins, J. E., Fredericks, L., Resnik, H., & Elias, M. J. (2003). Enhancing school-based prevention and youth development through coordinated social, emotional, and academic learning. *American Psychologist, 58*, 466-474.
- Hagenaars, J.A & McCutcheon, A. (2002). *Applied latent class analysis*. Cambridge, UK: Cambridge University Press.
- Hanish, L. D., & Guerra, N.G. (2000). Children who get victimized at school: What is known? What can be done? *Professional School Counseling, 4*, 113-119.

- Hardigan, P.C. (2009). An application of latent class analysis in the measurement of falling among a community elderly population. *The Open Geriatric Medicine Journal, 2*, 12-17.
- Hayne, D. L Nansel, T., Eitel, P., Crump, H. D., Saylor, K., Yu, K., & Simmons-Mortens, S., (2001): Bullies, Victims, and Bully/victims: Distinct groups of at-risk youth, *Journal of Early Adolescence 21*, 29-50
- Hoover, J. H., Oliver, R., & Hazler, R. J. (1992). What kids say about bullying. *The Executive Educator, 20-22*.
- Hunter, S. C., & Borg, M. (2006). The influence of emotional reaction on help seeking by victims of school bullying. *Educational Psychology, 26*, 813-826.
- Janoff-Bulman, R. and Frieze, I. H. (1983), A Theoretical Perspective for Understanding Reactions to Victimization. *Journal of Social Issues, 39*, 1-17.
- Joscelyne, T. & Holttum, S. (2006). Children's explanations of aggressive incidents at school within an attributional framework. *Child and Adolescent Mental Health, 11*, 104-110.
- Juvonen J., Graham, S., & Schuster, M. A. (2003). Bullying among young adolescents: The strong, the weak, and the troubled. *Pediatrics, 112*, 1231-1237.
- Kochenderfer, B.J., & Ladd, G.W. (1996). Peer victimization: Cause or consequence of school maladjustment? *Child Development, 67*, 1305-1317.
- Kochenderfer, B. J., & Ladd, G. W. (1997). Victimized children's responses to peer's aggression: Behaviors associated with reduced versus continued victimization. *Development and Psychopathology, 9*, 59-73.
- Kochenderfer-Ladd, B.J., & Pelletier, M.E. (2008). Teachers' views and beliefs about bullying: Influences on classroom management strategies and students' coping with peer victimization. *Journal of School Psychology, 46*, 431-453.
- Kochenderfer-Ladd, B., & Skinner, K. (2002). Children's coping strategies: Moderators of the effects of peer victimization? *Developmental Psychology, 38*, 267-278. doi:10.1037//0012-1649.38.2.267
- Kochenderfer, B.J., & Wardrop, J.L. (2001). Chronicity and instability of children's peer victimization experiences as predictors of loneliness and social satisfaction trajectories. *Child Development, 72*, 134-151.

- Kristensen, S. M., & Smith, P. K. (2003). The use of coping strategies by Danish children classed as bullies, victims, bully/victims, and not involved, in response to different (hypothetical) types of bullying. *Scandinavian Journal of Psychology, 44*, 479-488.
- Kuperminc, G. P., Leadbeater, B. J., Emmons, C., & Blatt, S. J. (1997). Perceived school climate and difficulties in the social adjustment of middle school students. *Applied Developmental Science, 1*(2), 76-88.
- Maccoby, E.E. (1998). *The two sexes: Growing up apart, coming together*. Cambridge, MA: Harvard University Press.
- Marini, Z. A., Dane, A. V., Bosacki, S. L., & YLC-CURA. (2006). Direct and indirect bully -victims: Differential psychosocial risk factors associated with adolescents involved in bullying and victimization. *Aggressive Behavior, 32*, 551-569.
- Menesini, E., Eslea, M., Smith, P.K., Genta, M.L., Giannetti, E., Fonzi, A.,...Costabile, A. (1997). Cross-national comparison of children's attitudes towards bully/ victim problems in school. *Aggressive Behavior, 23*, 245-257.
- Mercer, S.H., McMillen, J.S., DeRosier, M.E. (2009). Predicting change in children's aggression and victimization using classroom-level descriptive norms of aggression and pro-social behavior. *Journal of School Psychology, 47*, 267-289.
- Mirowsky, J., & Ross C. E. (2006). Social structure and psychological functioning: Distress, perceived control, and trust. In J. Delamater (Ed.), *Handbook of Social Psychology* (pp. 411-450). New York, NY: Springer.
- Morita, Y., Soeda, H., Soeda, K., & Taki, M. (1999). Japan. In P. K. Smith, Y. Morita, J. Junger- Tas, D. Olweus, R. Catalano, & P. Slee (Eds.), *The nature of school bullying: A cross-national perspective* (pp. 309-323). New York: Routledge.
- Nabuzoka, D., Ronning, J.A., & Handegard, B.H. (2009). Exposure to bullying, reactions and psychological adjustment of secondary school students. *Educational Psychology, 29*, 849-866.
- Nansel, T.R., Overpeck, M., Pilla, R.S., Ruan, J., Simons-Morton, B., & Scheidt, P. (2001). Bullying behaviors among US youth: Prevalence and association with psychosocial adjustment. *Journal of American Medical Association, 285*, 2094-2100.
- Nation, M., Vieno, A., Perkins, D. D., & Santinello, M. (2008). Bullying in school and adolescent sense of empowerment: An analysis of relationships with parents,

- friends, and teachers. *Journal of Community and Applied Social Psychology*, 18, 211-232.
- Naylor, P., Cowie, H., & del Ray, R. (2001). Coping strategies of secondary school children in response to being bullied. *Child and Adolescent Mental Health*, 6, 114-120.
- Nesdale, D., & Scarlett, M. (2004). Effects of group and contextual factors on pre-adolescent children's attitudes to school bullying. *International Journal of Behavioral Development*, 28, 28-434.
- O'laflson, R.F., & Jo'hannsdottir, H.L. (2004). Coping with bullying in the workplace: the effect of gender, age and type of bullying. *British Journal of Guidance & Counselling*, 32, 319-333
- Olweus, D. (1993). *Bullying at School: What We Know and What We Can Do*. Cambridge, MA: Basil Blackwell.
- Olweus, D. (1989). "Prevalence and incidence in the study of antisocial behavior: Definition and measurement." in M. Klein (Ed.). *Cross-national Research in Self-reported Crime and Delinquency*. Dordrecht, The Netherlands: Kluwer.
- Onder, C., & Yurtal, F. (2008). An investigation of the family characteristics of bullies, victims, and positively behaving adolescents. *Educational Sciences: Theory and Practice*, 8, 821-832.
- Pellegrini, A.D., & Long, J.D. (2002). A longitudinal study of bullying, dominance, and victimization during the transition from primary school through secondary school. *British Journal of Developmental Psychology*, 20, 259-280.
- Perren, S., & Alsaker, F.D. (2006). Social behavior and peer relationships of victims, bully-victims, and bullies in kindergarten. *Journal of Child Psychology and Psychiatry*, 47, 45-57.
- Polasky, S. (2010). *Coping with school bullying: An examination of longitudinal effects of coping on peer victimization and adjustment*. (Unpublished doctoral dissertation). Arizona State University, Tempe, Arizona.
- Prewitt, P.W. (1988). Dealing with Ijime (bullying) among Japanese students: Current approaches to the problem. *School Psychology International*, 9, 189-195.
- Reid, P., Mosen, J., & Rivers, I. (2004). Psychology's contribution to understanding and managing bullying within schools. *Educational Psychology in Practice*, 20, 241-258.

- Rigby K. The relationship between reported health and involvement in bully/victim problems among male and female secondary schoolchildren. *Journal of Health Psychology* 1998, 3, 465-476.
- Remillard, A. M., Lamb, S. (2005). Adolescent girl's coping with relational aggression. *Sex Roles*, 53, 21-228.
- Rigby, K. (2005). Why do some children bully at school? The contributions of negative attitudes towards victims and the perceived expectations of friends, parents and teachers. *School Psychology International*, 26, 147-161.
- Ronen, T., Rahav, G. & Moldawsky, A. (2007) 'Aggressive behavior among Israeli elementary school students and associated emotional/behavioral problems and self-control', *School Psychology Quarterly*, 22, 407-431.
- Rosenblum, G. D., & Lewis, M. (2005). Emotional development in adolescence. In G. R. Adams & M. D. Berzonsky (Eds.), *Blackwell Handbook of Adolescence* (269-289). Malden, MA: Wiley-Blackwell.
- Roseth, C.J., Pelligrini, A.D., Bohn, C.M., Van Ryzin, M., & Vance, N. (2007). Preschoolers' aggression, affiliation, and social dominance relationships: An observational, longitudinal study. *Journal of School Psychology*, 45, 479-497.
- Schwartz, D., Dodge, K.A., & Coie, J.D. (1993). The emergence of chronic peer victimization in boys' play groups. *Child Development*, 64, 1755-1772.
- Sears, H. A., Graham, J., & Campbell, A. (2009). Adolescent boys' intentions of seeking help from male friends and female friends. *Journal of Applied Developmental Psychology*, 30, 738-748.
- Sentse, M., Scholte, R., Salmivalli, C., & Voeten, M. (2007). Person-group dissimilarity in involvement in bullying and its relation with social status. *Journal of Abnormal Child Psychology*, 35, 1009-1019.
- Sharp S. 1995. How much does bullying hurt? The effects of bullying on the personal well being and educational progress of secondary aged students. *Educational Child Psychology*, 12, 81-88.
- Shelley, S., & Craig, W.M. (March). Children's coping styles and use of strategies to reduce their experiences of bullying and victimization: Poster presented at the Society for Child Development, Boston, Massachusetts, U.S.A., 2007.
- Silver, R.B., Measelle, J.R., Armstrong, J.M., & Essex, M.J. (2010). The impact of parents, child care providers, teachers, and peers on early externalizing trajectories. *Journal of School Psychology*, 48, 555-583.

- Smith, P.K, Morita, Y., Junger-Tas, J., Olweus, D., Catalano, R., & Slee, P. (1999). *The nature of school bullying: A cross- cultural perspective*. London: Routledge.
- Smith, P. K., Shu, S., & Madsen, K. (2001). Characteristics of victims of school bullying: Developmental changes in coping strategies and skills. In J. Juvonen & S. Graham (Eds.), *Peer harassment in school: The plight of the vulnerable and victimized* (pp. 332-351). New York: Guilford Press.
- Smith, P. K., Pepler, D., & Rigby, K. (Eds.). (2004). *Bullying in schools: How successful can interventions be?* Cambridge: Cambridge, UK, University Press.
- Sourander, A., L. Helstela, H. Helenius & J. Piha. (2000). "Persistence of bullying from childhood to adolescence- A longitudinal 8 year follow-up study." *Child Abuse and Neglect*, 24, 873-881.
- Spence SH, De Young A, Toon C, Bond, S. (2009). Longitudinal examination of the associations between emotional dysregulation, coping responses to peer provocation, and victimisation in children. *Journal of Psychology*, 61, 145–155.
- Strayer, F. F., & Noel, J. M. (1986). The prosocial and antisocial functions of aggression: An ethological study of triadic conflict among young children. In C. Zahn-Waxler, E. M. Cummings, & R. Iannotti (Eds.), *Altruism and Aggression* (pp. 107-131). New York: Academic Press.
- Stockdale, M. S., Hangaduambo, S., Duys, D., Larson, K., & Sarvela, P.D. (2002). Rural elementary students', patients', and teachers' perceptions of bullying. *American Journal of Health Behavior*, 26, 266-277.
- Student Reports of Bullying and Cyber-Bullying: Results from the 2009 School Crime Supplement to the National Crime Victimization Survey.
- Templin, J. (2006). Latent profile analysis: Clustering and classification. [PowerPoint slides]. Retrieved from http://jtemplin.coe.uga.edu/files/clustering/psyc993_15.pdf
- Theriot, M.T., Dulmus, C.N., Sowers, K.M., & Johnson, T.K. (2005). Factors relating to self-identification among bullying victims. *Children and Youth Services Review*, 27, 979-994.
- Thornberg, R., & Knutsen, S. (2011). Teenagers' explanations of bullying. *Child & Youth Care Forum*, 40, 177-192.
- Vreeman, R. C., & Carroll, A. E. (2007). A systematic review of school-based interventions to prevent bullying. *Archives of Pediatric Adolescent Medicine*, 161, 78–88.

Whitney, I., & Smith, P. K. (1993). A survey of the nature and extent of bully/victim problems in junior/middle and secondary schools. *Educational Research, 35*, 3-25.

Yeager, D.S., Trzesniewski, K., Tirri, K., Nokelainen, P., & Dweck, C.S. (2011). Adolescents' implicit theories predict desire for vengeance: Correlational and experimental evidence. *Developmental Psychology, 47*, 1090-1107.

Zimmer-Gembeck, M. J., & Skinner, E. A. (2008). Adolescents' coping with stress: Development and diversity. *Prevention Researcher, 15*, 3-7. Retrieved from http://www.psy.pdx.edu/faculty/skinner/5-ZimmerGembeck_Skinner_AdolCoping_PreventionResearcher.pdf.

APPENDIX A
PEER NOMINATED BULLIES

THINGS THAT OTHER KIDS DO

Instructions: Find your name and put a line through it. Then, think about each kid listed below and indicate if she or he does each of the three things described.

Does _____ pick on others?		
Student X	<input type="radio"/> Yes	<input type="radio"/> No
Student Y	<input type="radio"/> Yes	<input type="radio"/> No

APPENDIX B

SELF-REPORTED VICTIMIZATION

THE WAY KIDS ARE

These questions are about what kids in your class are like. How often do kids do these things?

How much do kids in your class...	Never	A Little	Sometimes	A Lot
1. Pick on you, or tease you?				
2. Share things with you?				
3. Choose you for a partner to play with?				
4. Tell you that you are not good at doing things?				
5. Call you names or say other hurtful things to you?				
6. Let you play with them?				
7. Act friendly to you?				
8. Help you if you are being picked on by other kids?				
9. Hit or push you?				
10. Break or ruin your things?				
11. Help you when you ask?				
12. Say mean things, or lies, about you to other kids?				
13. Cheer you up if you feel sad?				

APPENDIX C

INTERNALIZING/ PASSIVE AND EXTERNALIZING/ REACTIVE

HOW I WOULD FEEL

Imagine how you would feel if a kid were being mean to you either by calling you bad names or hitting or pushing you. Put a mark in the box that best shows how you would feel.

If someone were mean to you...	No	Yes, for a few minutes	Yes, for most of the day	Yes, for longer than a day
1. Would you be mad?				
2. Would you be scared?				
3. Would you feel like crying?				
4. Would it hurt your feelings?				
5. Would you be embarrassed?				
6. Would you be upset?				
7. Would you think it was funny?				

APPENDIX D

COPING

WHAT I WOULD DO

Please mark the box that shows how often you would do these things.

When kids are being mean to me....	Never	Some- times	Most of the time	Every- time
1. I act like nothing happened				
2. I try to think of ways to stop it				
3. I tell a friend what happened				
4. I do something mean right back to them				
5. I get help from a teacher				
6. I forget the whole thing				
7. I ask a friend what I should do				
8. I tell my mom or dad (or other adult at home) what happened				
9. I hurt the kid who was being mean to me				
10. I become so upset I can't talk to anyone				
11. I tell myself it doesn't matter				
12. I would think about what I would do next time				
13. I would work it out on my own				
14. I would get mad and throw or hit something				
15. I feel like crying				
16. I get help from a friend				
17. I try to find out why it happened, so it won't happen again.				
18. I tell the teacher what happened				
19. I yell at the kid who is being mean to me				
20. I don't know what to do				
21. I tell the mean kids I don't care				
22. I change things to keep it from happening				
23. I ask my mom or dad (or another adult at home) what to do				
24. I hurt the kid right back				
25. I get help from my mom or dad				
26. I ask the teacher what I should do				

27. I talk to a friend about it				
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APPENDIX E
ATTRIBUTIONS

WHEN BAD THINGS HAPPEN AT SCHOOL

Put a mark in the box that shows how often you think each one is a reason for why someone has picked on YOU.

When someone picks on me, it is because...	Never	Sometimes	Usually	Always
1. They are jealous of the things I have				
2. We don't get along				
3. I don't look as cool as them				
4. I did something mean to them				
5. We don't like each other				
6. Of the color of my skin				
7. They are jealous of me				
8. I am different from others				
9. I am smaller or bigger than most kids my				
10. I did something bad or wrong				
11. We argue with each other				
12. They want to be like me				
13. I was bugging or annoying them				
14. I look different from others				
15. I don't wear cool clothes				
16. I don't speak English well				
17. We have different friends				
18. They are not as popular as me				
19. I am not as cool as them				
20. I am not as good looking as other kids				
21. I did something they did not like				
22. We like different kinds of people				
23. We can't stand to be around each other				
24. I made them mad				
25. They don't think I'm cool				
26. We bug or annoy each other				
27. Of my race				
28. I would not leave them alone				

Table 1

Demographics

Self-Reported Victim and Non-Involved (Research Question 1: Analysis 1 and Research Question 2: Analysis 1)

Total=317	Victims (Number & Percentage)	Non-Involved (Number & Percentage)
Total Grade 4 Girls	5; 1.6% (of total)	56; 17.7% (of total)
Total Grade 4 Boys	5; 1.6% (of total)	48; 15.1% (of total)
Total Grade 6 Girls	15; 4.7% (of total)	90; 28.4% (of total)
Total Grade 6 Boys	8; 2.5% (of total)	90; 28.4% (of total)
Total	33; 10.4% (of total)	284; 89.6% (of total)

Self-Reported Victim and Non-Involved Involved (Research Question 1: Analysis 3 and Research Question 2: Analysis 2)

Total=315	Victims (Number & Percentage)	Non-Involved (Number & Percentage)
Total Grade 4 Girls	5; 1.6% (of total)	55; 17.4% (of total)
Total Grade 4 Boys	5; 1.6% (of total)	48; 15.2% (of total)
Total Grade 6 Girls	15; 4.8% (of total)	89; 28.3% (of total)
Total Grade 6 Boys	8; 2.5% (of total)	90; 28.6% (of total)
Total	33; 10.5% (of total)	282; 89.5% (of total)

Peer-Nominated Bully and Non-Involved Involved (Research Question 1: Analysis 4)

Total=302	Bullies (Number & Percentage)	Non-Involved (Number & Percentage)
Total Grade 4 Girls	2; 0.7% (of total)	50; 16.6% (of total)
Total Grade 4 Boys	3; 1% (of total)	47; 15.6% (of total)
Total Grade 6 Girls	13; 4.3% (of total)	91; 30.1% (of total)
Total Grade 6 Boys	30; 9.9% (of total)	66; 21.9% (of total)
Total	48; 16% (of total)	254; 84% (of total)

*The demographics for the Bully group and Victim group are presented in separate tables due to the two different measures being utilized to create these factors (Victim: “The Way Kids Are”; Bully: “Picks On Others”).

Table 2

Exploratory Factor Analysis of Attribution Measure

When Bad Things Happen	I	II	III
Environmental ($\alpha = 0.79$)			
1. They are jealous of the things I have			-.77
7. They are jealous of me			-.81
12. They want to be like me			-.71
18. They are not as popular as me			-.70
Personal ($\alpha = 0.83$)			
3. I don't look as cool as them		.66	
6. Of the color of my skin		.43	
8. I am different from others		.55	
9. I am smaller or bigger than most kids my age		.43	
14. I look different from others		.63	
15. I don't wear cool clothes		.64	
16. I don't speak English well		.29	
17. We have different friends		.36	
19. I am not as cool as them		.73	
20. I am not as good looking as other kids		.71	
22. We like different kinds of people		.34	
25. They don't think I'm cool		.69	
27. Of my race		.52	
Behavioral ($\alpha = 0.83$)			
2. We don't get along	.40		
4. I did something mean to them	.74		
5. We don't like each other	.59		
10. I did something bad or wrong	.61		
11. We argue with each other	.67		
13. I was bugging or annoying them	.62		
21. I did something they did not like	.68		
23. We can't stand to be around each other	.47		
24. I made them mad	.79		
26. We bug or annoy each other	.63		
28. I would not leave them alone	.40		

Table 3

Exploratory Factor Analysis of Self-Reported Victimization Measure

The Way Kids Are	I
<hr/>	
Self-Reported Victim ($\alpha = 0.84$)	
1. Pick on you, or tease you	.81
5. Call you bad names or say other hurtful things to you	.88
9. Hit or push you	.80
12. Say mean things, or lies, about you to other kids	.80

Table 4

Exploratory Factor Analysis of Coping Measure

What I Would Do	I	II	III	IV	V	VI
Seek Adult ($\alpha = 0.88$)						
5. I get help from a teacher	.57					
8. I tell my mom or dad (or another adult at home) what happened	.79					
18. I tell the teacher what happened	.72					
23. I ask my mom or dad (or another adult at home) what to do	.86					
25. I get help from my mom or dad	.85					
26. I ask the teacher what I should do	.76					
Seek Friend ($\alpha = 0.81$)						
3. I tell a friend what happened		-				
7. I ask a friend what I should do		-				
16. I get help from a friend		-				
27. I talk to a friend about it		-				
Problem-Solve ($\alpha = 0.59$)						
2. I try to think of ways to stop it			.56			
12. I would think about what I would do next time			.61			
13. I would work it out on my own			.68			
22. I change things to keep it from happening again			.43			
Act Nonchalantly ($\alpha = 0.67$)						
1. I act like nothing happened				.64		
6. I forget the whole thing				.69		
11. I tell myself it doesn't matter				.78		
21. I tell the mean kids I don't care				.66		
Immobilize ($\alpha = 0.58$)						
10. I become so upset I can't talk to anyone					.77	
15. I feel like crying					.81	
20. I don't know what to do					.55	
Revenge ($\alpha = 0.87$)						
4. I do something mean right back to them						.79
9. I hurt the mean kid right back						.85
14. I would get mad and throw or hit something						.69
19. I yell at the kid who is being mean						.78
24. I hurt the kid back						.90

Table 5

Exploratory Factor Analysis of Internalizing Measure

How I Would Feel	I
<hr/>	
Internalize ($\alpha = 0.83$)	
2. Would you be scared	.78
3. Would you feel like crying	.79
4. Would it hurt your feelings	.81
5. Would you be embarrassed	.71
6. Would you be upset	.60

Table 6

Profile Means for 3 Cluster Model with Self-Reported Victim, Internalizing and Attributions with Covariates of Sex and Grade

	Cluster1	Cluster2	Cluster3
Cluster Size	44%; N=139	35%; N=110	21%; N=68
Non-Victim (1)	81%; N=113	96%; N=106	96%; N=65
Victim (2)	19%; N=26	4%; N=4	4%; N=3
T7 Internalizing Mean	2.1332	1.8233	1.576
T7 Behavioral Mean	1.9983	1.4427	1.3698
T7 Personal Mean	1.9007	1.5465	1.1122
T7 Environmental Mean	2.076	1.343	1
Covariate – Boys	47%; N=65	46%; N=51	53%; N=36
Covariate – Girls	53%; N=74	54%; N=59	47%; N= 32
Cov Gender Mean	1.5289	1.5432	1.4672
Cov Grade 4	28%; N=39	50%; N=55	28%; N=19
Cov Grade 6	72%; N=100	50%; N=55	72%; N=49
Cov Grade Mean	5.4304	4.9941	5.4442

Table 7

Probabilities for 3 Cluster Model with Self-Reported Victim, Internalizing and Attributions with Covariates of Sex and Grade

	Cluster1	Cluster2	Cluster3
Overall	44.0%	34.6%	21.5%
Variables			
Self-Reported Non-Victim	39.8%	37.2%	22.9%
Self-Reported Victim	79.4%	11.7%	8.9%
Internalizing Score Ranges			
1 - 1.2	29.7%	35.3%	35.0%
1.21 - 1.6	35.8%	38.0%	26.2%
1.61 - 2.19	40.7%	39.5%	19.8%
2.2 - 2.59	56.5%	32.6%	10.9%
2.6 - 4	61.8%	27.5%	10.7%
Behavioral Score Ranges			
1 - 1.272	11.7%	40.9%	47.4%
1.273 - 1.454	24.0%	56.7%	19.3%
1.455 - 1.817	31.9%	47.3%	20.8%
1.818 - 2.181	66.8%	23.5%	9.7%
2.182 - 4	92.2%	1.7%	6.1%
Personal Score Ranges			
1 - 1.153	15.4%	12.9%	71.7%
1.154 - 1.384	21.5%	35.8%	42.7%
1.385 - 1.691	38.2%	59.0%	2.8%
1.692 - 2.076	51.0%	49.1%	0.0%
2.077 - 4	92.7%	7.3%	0.0%
Environmental Score Ranges			
1 - 1.249	10.8%	27.2%	62.0%
1.25 - 1.74	29.4%	70.6%	0.0%
1.75 - 2	68.7%	31.3%	0.0%
2.01 - 4	98.6%	1.4%	0.0%
Covariates			
Boys	43.2%	32.9%	23.9%
Girls	44.7%	36.1%	19.3%
4th Grade	34.9%	48.5%	16.6%
6th Grade	49.0%	26.8%	24.2%

Ranges were broken into five distinct groups for readability

Table 8

Profile Means for 4 Cluster Model with Self-Reported Victim, Mad, and Attributions with Covariates of Sex and Grade

	Cluster1	Cluster2	Cluster3	Cluster4
Cluster Size	32%; N=101	27%; N=86	25%; N=79	16%; N=49
Non-Victim (1)	94%; N=95	94%; N=81	72%; N=57	100%; N=49
Victim (2)	6%; N=6	6%; N=5	28%; N=22	0%; N=0
T7 Not Mad	26%	21%	3%	7%
T7 Mad Minutes	46%	52%	34%	32%
T7 Mad Day	16%	12%	31%	34%
T7 Mad Longer than Day	12%	15%	32%	27%
T7 Behavioral Mean	1.4168	1.4256	2.0635	1.9974
T7 Personal Mean	1.3378	1.622	2.1535	1.2738
T7 Environmental Mean	1	1.4973	2.1145	2.1333
Covariate – Boys	53%; N=54	44%; N=38	46%; N=36	48%; N=24
Covariate – Girls	47%; N=47	56%; N=48	54%; N=43	52%; N=25
Cov Gender Mean	1.4742	1.562	1.5376	1.5158
Cov Grade 4	34%; N=34	50%; N=43	29%; N=23	25%; N=12
Cov Grade 6	66%; N=67	50%; N=43	71%; N=56	75%; N=37
Cov Grade Mean	5.3173	5.0021	5.4134	5.494

Table 9

Probabilities for 4 Cluster Model with Self-Reported Victim, Mad, and Attributions with Covariates of Sex and Grade

	Cluster1	Cluster2	Cluster3	Cluster4
Overall	31.9%	27.4%	25.0%	15.7%
Variables				
Self-Reported Non-Victim	33.6%	28.8%	20.1%	17.5%
Self-Reported Victim	17.5%	16.0%	66.6%	0.0%
Get Mad				
Not mad	51.8%	35.9%	5.0%	7.2%
Mad Minutes	34.8%	33.6%	19.8%	11.9%
Mad Day	23.6%	15.5%	36.4%	24.6%
Mad Longer than Day	19.4%	20.7%	39.1%	20.8%
Behavioral Score Ranges				
1 - 1.272	57.6%	33.5%	1.4%	7.5%
1.273 - 1.454	34.4%	49.3%	8.8%	7.5%
1.455 - 1.817	33.9%	35.7%	18.2%	12.3%
1.818 - 2.181	20.2%	16.8%	40.5%	22.5%
2.182 - 4	9.2%	0.7%	59.9%	30.1%
Personal Score Ranges				
1 - 1.153	69.7%	10.4%	0.6%	19.3%
1.154 - 1.384	41.9%	24.8%	1.4%	31.9%
1.385 - 1.691	23.5%	38.9%	11.2%	26.4%
1.692 - 2.076	24.5%	39.9%	34.7%	0.9%
2.077 - 4	5.4%	17.7%	77.0%	0.0%
Environmental Score Ranges				
1 - 1.249	92.3%	2.5%	2.9%	2.3%
1.25 - 1.74	0.0%	67.5%	16.9%	15.6%
1.75 - 2	0.0%	41.8%	36.7%	21.5%
2.01 - 4	0.0%	2.4%	63.7%	34.0%
Covariates				
Boys	35.0%	25.1%	24.1%	15.9%
Girls	29.1%	29.6%	25.8%	15.6%
4th Grade	30.4%	38.1%	20.4%	11.1%
6th Grade	32.8%	21.4%	27.5%	18.3%

Ranges were broken into five distinct groups for readability

Table 10

Profile Means for 4 Cluster Model with Peer-Nominated Bully, Mad, and Attributions with Covariates of Sex and Grade

	Cluster1	Cluster2	Cluster3	Cluster4
Cluster Size	33%; N=100	27%; N=82	21%; N=63	19%; N=57
Peer Nominated Non-Bully	70%; N=70	95%; N=78	87%; N=55	88%; N=50
Peer Nominated Bully	30%; N=30	5%; N=4	13%; N=8	12%; N=7
T7 Behavioral Mean	2.1471	1.5711	1.3631	1.3626
T7 Personal Mean	1.8515	1.7802	1.1063	1.5103
T7 Environmental Mean	2.2025	1.6062	1	1.1708
T7 Not Mad	4%	21%	16%	24%
T7 Mad Minutes	27%	49%	48%	56%
T7 Mad Day	35%	15%	18%	16%
T7 Mad Longer than Day	34%	15%	18%	4%
Covariate - Boys	51%; N=51	45%; N=37	56%; N=35	41%; N=23
Covariate - Girls	49%; N=49	55%; N=45	44%; N=28	59%; N=34
Mean	1.4876	1.5483	1.4382	1.5916
Cov Grade 4	22%; N=22	43%; N=35	23%; N=14	53%; N=30
Cov Grade 6	78%; N=78	57%; N=47	77%; N=49	47%; N=27
Cov Grade Mean	5.5654	5.1397	5.5368	4.9424

Table 11

Probabilities for 4 Cluster Model with Peer-Nominated Bully, Mad, and Attributions with Covariates of Sex and Grade

	Cluster1	Cluster2	Cluster3	Cluster4
Overall	33.17%	27.11%	20.86%	18.86%
Variables				
Peer Nominated Non-Bully	27.73%	30.82%	21.67%	19.78%
Peer Nominated Bully	61.73%	7.65%	16.62%	14.00%
T7 Behavioral Score Ranges				
1 - 1.182	2.86%	21.75%	48.95%	26.44%
1.273 - 1.364	10.78%	32.14%	17.88%	39.20%
1.455 - 1.727	17.34%	36.05%	19.94%	26.67%
1.818 - 2.091	49.80%	38.89%	9.92%	1.38%
2.182 - 4	91.23%	3.93%	4.83%	0.00%
T7 Personal Score Range				
1 - 1.077	12.92%	7.46%	71.92%	7.70%
1.154 - 1.308	19.23%	19.65%	42.28%	18.84%
1.385 - 1.615	31.85%	28.58%	1.41%	38.16%
1.692 - 2	37.55%	39.34%	0.00%	23.11%
2.077 - 4	62.14%	36.38%	0.00%	1.48%
T7 Environmental Score Ranges				
1-1.249	6.63%	10.47%	60.72%	22.19%
1.250 - 1.500	18.02%	40.44%	0.00%	41.54%
1.750 - 2	47.62%	52.30%	0.00%	0.08%
2.250 - 4	86.43%	13.57%	0.00%	0.00%
Get Mad				
T7 Not Mad	9.08%	38.52%	22.61%	29.78%
T7 Mad Minutes	20.90%	30.87%	23.35%	24.89%
T7 Mad Day	51.63%	18.38%	16.42%	13.56%
T7 Mad Longer than Day	56.84%	20.29%	19.18%	3.69%
Covariates				
Boys	34.93%	25.17%	24.08%	15.82%
Girls	31.51%	28.96%	17.80%	21.73%
4 th Grade	21.41%	34.64%	14.35%	29.61%
6 th Grade	39.14%	23.30%	24.17%	13.39%

Ranges were broken into five distinct groups for readability

Table 12

Profile Means for 4 Cluster Model with Self-Reported Victim, Internalizing and Coping Methods with Covariates of Sex and Grade

	Cluster1	Cluster2	Cluster3	Cluster4
Cluster Size	40%; N=128	24%; N=77	23%; N=73	12%; N=39
Non-Victim (1)	91%; N=116	96%; N=74	75%; N=55	100%; N=39
Victim (2)	9%; N=12	4%; N=3	25%; N=18	0%; N=0
T7 Internalizing Mean	1.984	1.8174	2.2739	1.1253
T7 Friend Mean	2.5987	2.4333	2.5748	2.0285
T7 Revenge Mean	1	1.3724	2.1747	2.1264
T7 Nonchalant Mean	1.9544	2.0578	2.1292	1.5863
T7 Pblm-Solving Mean	2.4049	2.4783	2.3744	2.0186
T7 Immobilize Mean	1.6974	1.6132	2.2439	1.0578
T7 Seek Adult Mean	2.5728	2.3081	2.3455	1.557
Covariate - Boys	28%; N=36	60%; N=46	46%; N=34	88%; N=34
Covariate - Girls	72%; N=92	40%; N=31	54%; N=39	12%; N=5
Cov Gender Mean	1.7168	1.3963	1.5368	1.1208
Cov Grade 4	48%; N=61	35%; N=27	25%; N=18	19%; N=7
Cov Grade 6	52%; N=67	65%; N=50	75%; N=55	81%; N=32
Cov Grade Mean	5.0335	5.3008	5.5049	5.6273

Table 13

Probabilities for 4 Cluster Model with Self-Reported Victim, Internalizing and Coping Methods with Covariates of Sex and Grade

	Cluster1	Cluster2	Cluster3	Cluster4
Overall	40.1%	24.4%	23.1%	12.3%
Variables				
Self-Reported Non-Victim	40.7%	26.1%	19.4%	13.8%
Self-Reported Victim	35.4%	9.7%	54.9%	0.0%
Internalizing Score Ranges				
1 - 1.39	32.5%	12.8%	8.8%	46.0%
1.4 - 1.6	37.7%	36.2%	19.8%	6.3%
1.8 - 1.19	43.9%	36.1%	20.0%	0.0%
2.2 - 2.59	42.1%	29.7%	28.2%	0.0%
2.6 - 4	46.5%	11.3%	42.1%	0.0%
Seek a Friend				
1 - 1.749	38.3%	28.5%	8.9%	24.3%
1.750 - 2.49	37.0%	21.8%	24.4%	16.8%
2.500 - 2.74	33.3%	27.2%	28.6%	10.9%
2.750 - 3.49	34.4%	25.9%	34.3%	5.4%
3.500 - 4	61.6%	20.4%	12.4%	5.6%
Get Revenge				
1 - 1.19	95.7%	2.0%	0.7%	1.6%
1.2 - 1.454	0.0%	76.0%	13.0%	11.0%
1.455 - 1.99	0.0%	55.2%	32.6%	12.2%
2 - 4	0.0%	0.7%	64.3%	35.0%
Act Nonchalant				
1 - 1.49	47.7%	14.4%	8.9%	29.0%
1.500 - 1.749	41.7%	24.4%	20.4%	13.5%
1.750 - 2.249	36.8%	25.6%	29.1%	8.5%
2.250 - 2.749	31.4%	35.9%	27.3%	5.4%
2.750 - 4	46.3%	20.3%	27.5%	6.0%

Table 13 (con't.)

	Cluster1	Cluster2	Cluster3	Cluster4
Variables				
Be Immobilized				
1 - 1.332	39.8%	14.0%	2.5%	43.6%
1.333 - 1.666	38.0%	39.2%	10.7%	12.1%
1.667 - 1.99	45.1%	31.6%	23.3%	0.0%
2 - 2.332	40.4%	37.2%	22.4%	0.0%
2.333 - 4	37.1%	6.7%	56.2%	0.0%
Problem-Solving				
1 - 1.99	42.5%	11.4%	22.5%	23.6%
2 - 2.249	39.8%	23.2%	16.7%	20.3%
2.250 - 2.749	34.6%	29.9%	27.1%	8.4%
2.750 - 2.99	35.5%	34.2%	23.1%	7.2%
3 - 4	52.1%	21.6%	20.1%	6.3%
Seek an Adult				
1 - 1.666	27.5%	17.0%	21.0%	34.5%
1.667 - 2.166	27.1%	34.7%	23.0%	15.3%
2.167 - 2.49	54.8%	25.1%	15.0%	5.1%
2.500 - 3.332	39.7%	24.5%	33.1%	2.7%
3.333 - 4	58.6%	20.8%	18.9%	1.7%
Covariates				
Boys	23.8%	30.9%	22.5%	22.8%
Girls	55.0%	18.5%	23.7%	2.9%
4th Grade	53.9%	23.8%	15.9%	6.4%
6th Grade	32.4%	24.8%	27.2%	15.7%

Ranges were broken into distinct groups for readability

Table 14

Profile Means for 4 Cluster Model with Self-Reported Victim, Mad, and Coping Methods with Covariates of Sex and Grade

	Cluster1	Cluster2	Cluster3	Cluster4
Cluster Size	38%; N=121	29%; N=92	20%; N=63	13%; N=39
Non-Victim (1)	91%; N=110	93%; N=85	76%; N=48	100%; N=39
Victim (2)	9%; N=11	7%; N=7	24%; N=15	0%; N=0
T7 Friend Mean	2.5978	2.5078	2.5213	2.0069
T7 Revenge Mean	1	1.4223	2.2726	1.9938
T7 Nonchalant Mean	1.9862	2.0965	2.1001	1.456
T7 Pblm-Solving Mean	2.4162	2.4533	2.3418	2.0654
T7 Immobilize Mean	1.7092	1.8009	2.0954	1
T7 Seek Adult Mean	2.6142	2.452	2.0333	1.6504
T7 Not Mad	26%	5%	4%	28%
T7 Mad Minutes	49%	62%	10%	26%
T7 Mad Day	15%	24%	31%	22%
T7 Mad Longer than Day	10%	8%	55%	24%
Covariate - Boys	28%; N=34	54%; N=50	54%; N=34	84%; N=33
Covariate - Girls	72%; N=87	46%; N=42	46%; N=29	16%; N=6
Cov Gender Mean	1.7228	1.4588	1.4632	1.1565
Cov Grade 4	48%; N=58	34%; N=31	24%; N=15	21%; N=8
Cov Grade 6	52%; N=63	66%; N=61	76%; N=48	79%; N=31
Cov Grade Mean	5.0311	5.3224	5.5182	5.5745

Table 15

Probabilities for 4 Cluster Model with Self-Reported Victim, Mad, and Coping Methods with Covariates of Sex and Grade

	Cluster1	Cluster2	Cluster3	Cluster4
Overall	38.5%	29.0%	20.0%	12.5%
Variables				
Self-Reported Non-Victim	39.1%	30.0%	17.0%	14.0%
Self-Reported Victim	33.2%	20.5%	46.2%	0.1%
Get Mad				
Not Mad	63.7%	10.0%	4.4%	21.9%
Mad Minutes	44.9%	42.7%	4.8%	7.6%
Mad Day	26.4%	32.1%	28.7%	12.9%
Mad Longer than Day	18.5%	11.6%	54.8%	15.1%
Seek a Friend				
1 - 1.749	37.0%	21.5%	14.2%	27.3%
1.750 - 2.49	35.3%	29.1%	20.6%	14.9%
2.500 - 2.74	31.9%	34.3%	18.1%	15.7%
2.750 - 3.49	32.6%	35.7%	28.0%	3.7%
3.500 - 4	59.9%	21.0%	12.8%	6.3%
Get Revenge				
1 - 1.19	91.8%	2.4%	1.0%	4.8%
1.2 - 1.454	0.0%	79.8%	12.2%	8.0%
1.455 - 1.99	0.0%	66.0%	21.7%	12.3%
2 - 4	0.0%	7.0%	61.7%	31.3%
Act Nonchalant				
1 - 1.49	42.4%	13.6%	14.3%	29.7%
1.500 - 1.749	41.2%	18.7%	20.3%	19.9%
1.750 - 2.249	35.1%	34.2%	21.3%	9.4%
2.250 - 2.749	31.0%	48.9%	15.2%	4.9%
2.750 - 4	47.0%	21.9%	31.0%	0.0%

Table 15 (con't.)

	Cluster1	Cluster2	Cluster3	Cluster4
Overall	38.5%	29.0%	20.0%	12.5%
Be Immobilized				
1 - 1.332	34.0%	8.9%	3.6%	53.6%
1.333 - 1.666	38.4%	45.4%	16.2%	0.0%
1.667 - 1.99	45.5%	32.4%	22.1%	0.0%
2 - 2.332	39.8%	37.9%	22.3%	0.0%
2.333 - 4	35.7%	27.1%	37.3%	0.0%
Problem-Solving				
1 - 1.99	40.5%	20.3%	19.7%	19.5%
2 - 2.249	38.0%	22.3%	15.5%	24.2%
2.250 - 2.749	32.5%	33.6%	25.0%	8.8%
2.750 - 2.99	35.2%	37.5%	17.5%	9.7%
3 - 4	51.1%	27.7%	14.8%	6.4%
Seek an Adult				
1 - 1.666	23.2%	15.7%	30.8%	30.3%
1.667 - 2.166	25.1%	35.8%	20.3%	18.8%
2.167 - 2.49	53.3%	28.5%	13.3%	4.9%
2.500 - 3.332	38.8%	31.9%	25.0%	4.3%
3.333 - 4	59.2%	33.0%	6.1%	1.7%
Covariates				
Boys	22.4%	32.9%	22.5%	22.2%
Girls	53.2%	25.4%	17.7%	3.8%
4th Grade	51.9%	27.3%	13.4%	7.4%
6th Grade	31.0%	29.9%	23.7%	15.4%

Ranges were broken into distinct groups for readability

Table 16

Comparison of Bayesian Information Criterion and Log Likelihood Comparison of 1 to 4 Cluster Models.

All Models Include Self-Reported Victim and Covariates of Gender and Grade.

Attributions and Internalizing Factor

Model	LL	BIC (LL)
1-Cluster	-1145.3102	2376.909
2-Cluster	-1029.8332	2168.9653
3-Cluster	-913.6543	2063.1641
4-Cluster	-851.8336	2066.0793

Attributions and Externalizing (Mad)

Model	LL	BIC (LL)
1-Cluster	-1276.8709	2617.02
2-Cluster	-1109.0063	2350.3219
3-Cluster	-992.1051	2185.5502
4-Cluster	-951.4251	2173.2211

Coping and Internalizing Factor

Model	LL	BIC (LL)
1-Cluster	-2304.5759	4735.8476
2-Cluster	-2121.6972	4502.5451
3-Cluster	-1977.5396	4346.6845
4-Cluster	-1879.7875	4283.6350

Table 16 (con't.)

Coping and Externalizing (Mad)

Model	LL	BIC (LL)
1-Cluster	-2474.8725	5087.9586
2-Cluster	-2257.9668	4798.1199
3-Cluster	-2106.6887	4639.5362
4-Cluster	-2001.0951	4572.3214

Table 17

Correlations between Bully, Self-Reported Victim, Mad, Funny, and Internalizing

		Self-Reported Victim
Internalizing	Pearson Correlation	0.258 ^b
	Sig. (2-tailed)	.000
	Covariance	.056
	N	317
Mad	Pearson Correlation	.123 ^a
	Sig. (2-tailed)	.029
	Covariance	.037
	N	317
Funny	Pearson Correlation	-.102
	Sig. (2-tailed)	.070
	Covariance	-.021
	N	317
Bully	Pearson Correlation	0.002173801
	Sig. (2-tailed)	.970
	Covariance	0
	N	302

^a Correlation is significant at the 0.01 level (2-tailed).

^b Correlation is significant at the 0.05 level (2-tailed).

Figure 1

3 Cluster Model with Self-Reported Victim, Internalizing, and Attributions with Covariates of Sex and Grade

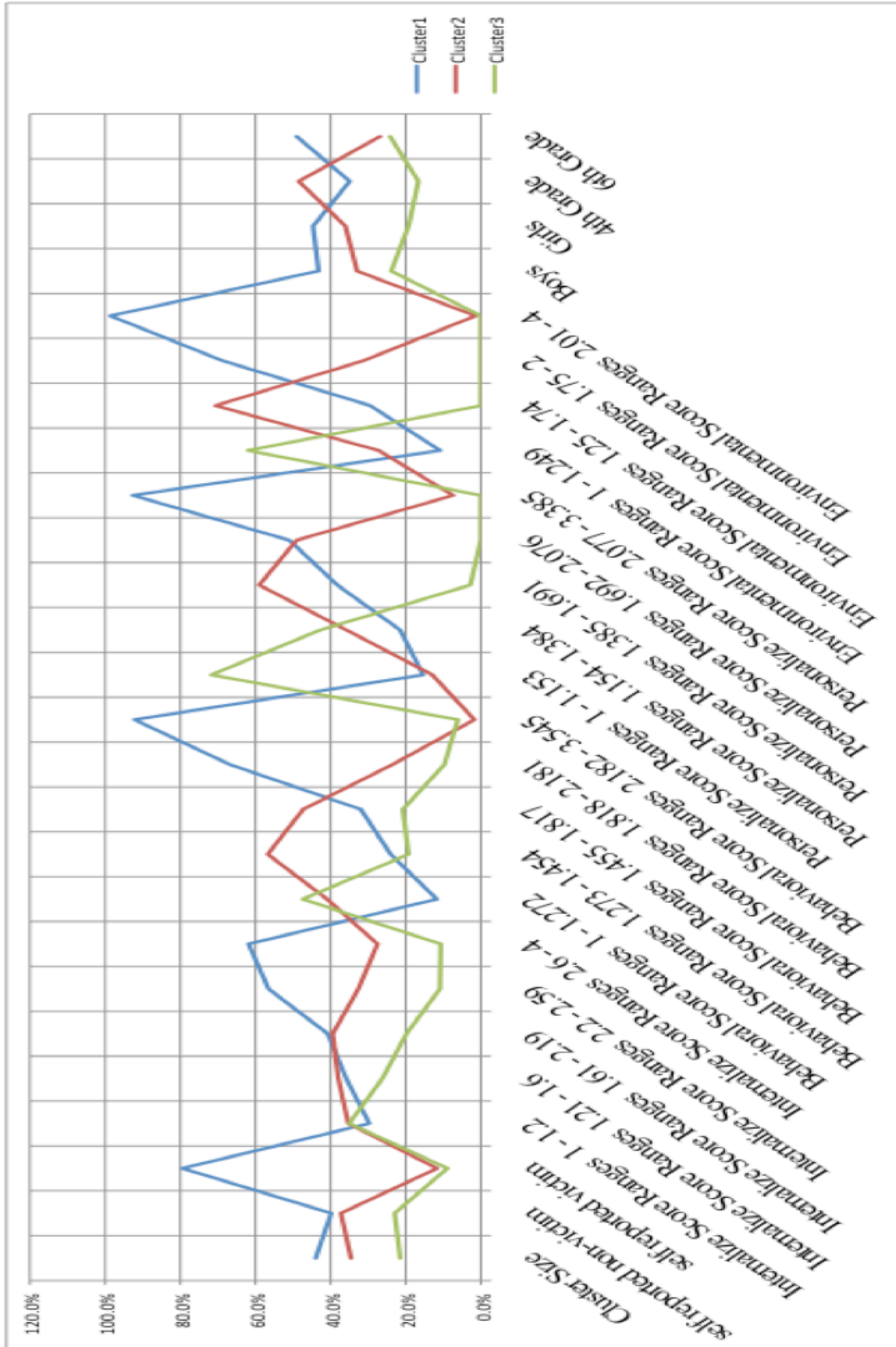


Figure 2

4 Cluster Model with Self-Reported Victim, Internalizing and Coping Methods with Covariates of Sex and Grade

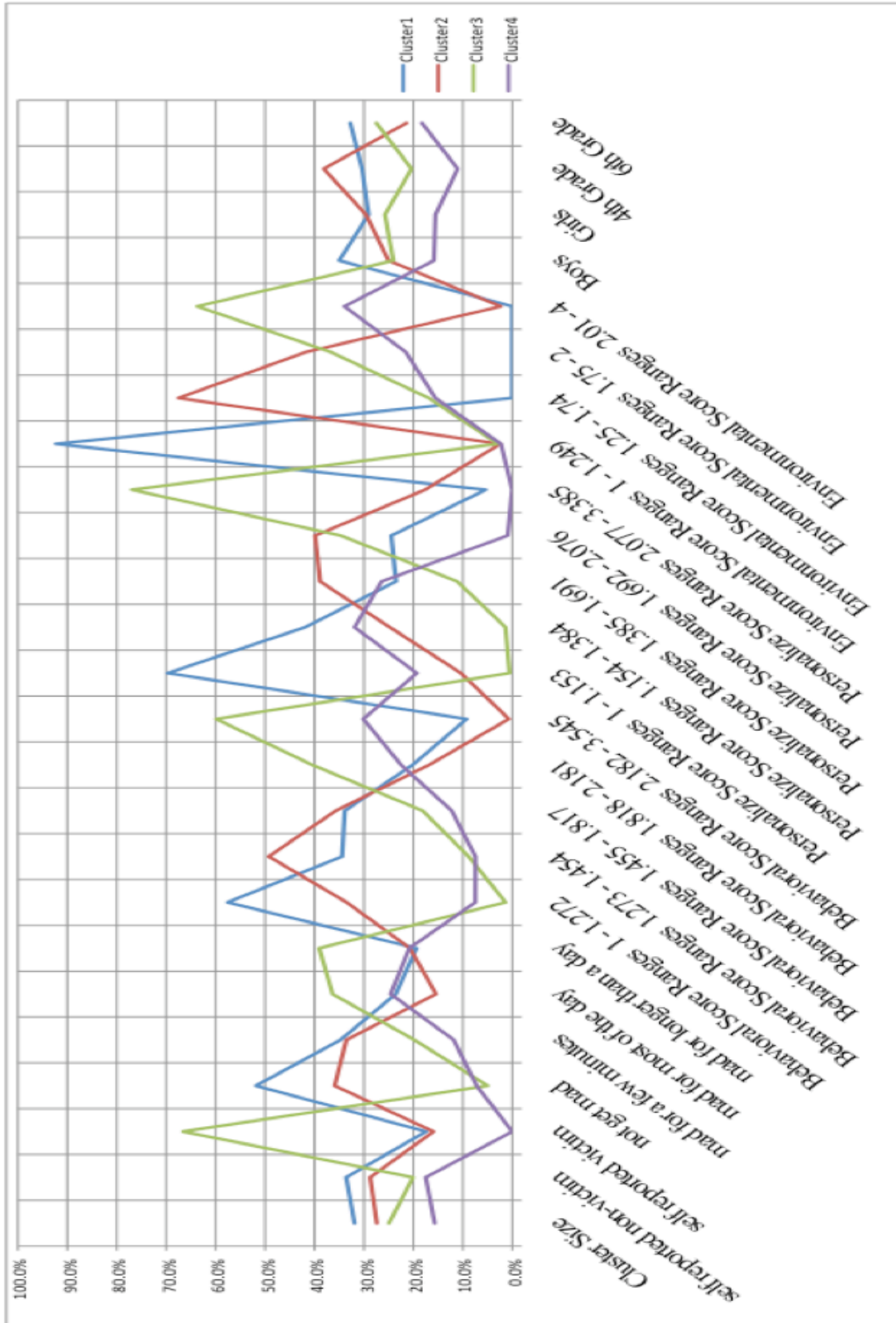


Figure 3

4 Cluster Model with Peer-Nominated Bully, Mad, and Attributions with Covariates of Sex and Grade

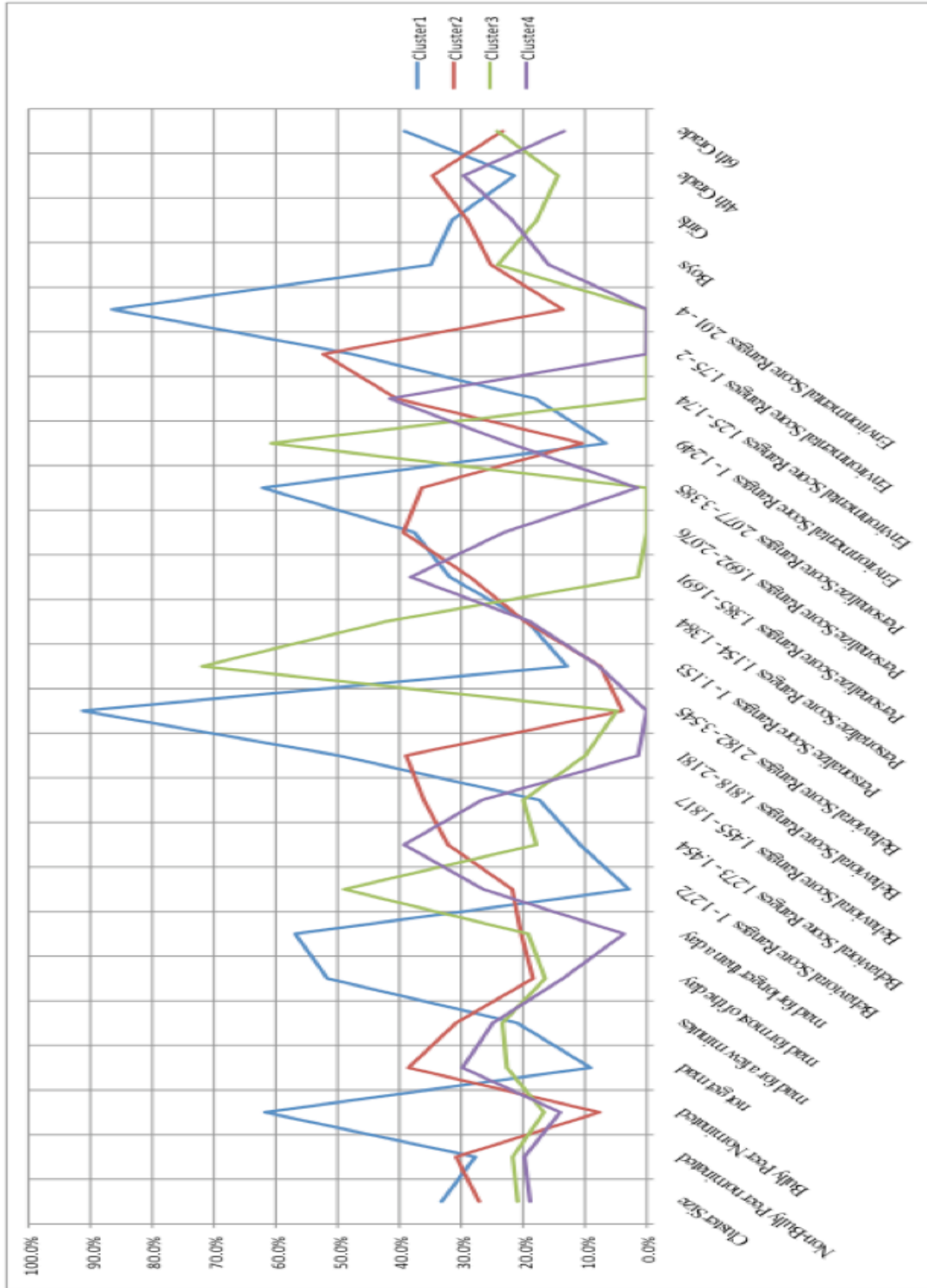


Figure 4
 4 Cluster Model with Self-Reported Victim, Internalizing and Coping Methods
 with Covariates of Sex and Grade



Figure 5

4 Cluster Model with Self-Reported Victim, Mad, and Coping Methods with Covariates of Sex and Grade

