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Victimization During the Middle School Years: Exploring the Relationship Between Emotion Regulation and Emotional/ Behavioral Outcomes

Jason E. Harlacher
Utah State University

VICTIMIZATION DURING THE MIDDLE SCHOOL YEARS: EXPLORING THE RELATIONSHIP BETWEEN EMOTION REGULATION AND EMOTIONAL/BEHAVIORAL OUTCOMES

by

Jason E. Harlacher

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ABSTRACT

Victimization During the Middle School Years: Exploring the Relationship Between Emotion Regulation and Emotional/Behavioral Outcomes

by

Jason E. Harlacher, Master of Science

Utah State University, 2005

Major Professor: Dr. Tamara J. Ferguson
Department: Psychology

The present thesis examined emotion regulation differences among victims and nonvictims of bullying and its role as a mediator in the link between victimization and internalizing or externalizing outcomes. Participants from Grades 6 to 8 (n = 240) completed measures that assessed level of victimization, emotions felt relative to emotions expressed during bullying situations, and internalizing and externalizing symptoms. Weak victim-related differences revealed that boy victims reported feeling more shame and expressing more fear than nonvictims, whereas girl victims reported expressing more shame and feeling and expressing more anger and sadness. A new measure of emotional regulation did not reveal any victim-related differences, nor was emotional regulation found to play a mediating role. Discussion focuses on how antecedent- and response-focused regulation can account for victim-related differences found, and how victims' emotional regulation difficulties may be more attributable to

antecedent-focused regulation and poor evaluation of consequences of expressing certain emotions than emotional inhibition during a bullying interaction.

(133 pages)

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Jason E. Harlacher

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CHAPTER I

PROBLEM STATEMENT

Bullying can be characterized in terms of three criteria: (a) a peer's intent to inflict harm upon another peer either directly (e.g., physically or verbally) or indirectly (e.g., rumors, social exclusion); (b) being a repeated target or victim of this intentional harm across time; and (c) the existence of a power imbalance between the victim and the bully (Olweus, 1993a; 1997). Bullying is relatively common among school-age children and is observed during lunch and on the playground (Glover, Gerry, Johnson, & Cartwright, 2000; Olweus, 1993b), on the way to and from school (Boulton & Underwood, 1992), and even in the classroom (Glover et al.; Mahady Wilton, Craig, & Pepler, 2000). Its estimated prevalence rates range from 8.5% (Kochenderfer & Ladd, 1996b; Olweus, 1997; Perry, Kusel, & Perry, 1988) to 27% (Grills & Ollendick, 2002).

Not surprisingly, bullying poses a tremendous threat to the welfare of its victims, as seen in its association with internalizing problems, such as anxiety (Hanish & Guerra, 2002; Hawker & Boulton, 2000), depression both during childhood and later in life (Hanish & Guerra; Hawker & Bouton; Olweus, 1993c), feelings of loneliness (Boulton & Underwood, 1992; Kochenderfer-Ladd & Skinner, 2002; Nansel et al., 2001), social withdrawal (Hanish & Guerra), and low self-worth and self-esteem (Grills & Ollendick, 2002; Hawker & Boulton). Victimization from bullying has also been connected with externalizing problems, such as aggressive behavior toward others, delinquency (e.g., smoking, truancy; Hanish & Guerra; Khatri, Kupersmidht, & Patterson, 2000; Nansel et al.), inattention (Hanish & Guerra; Schwartz, McFadyen-

Ketchum, Dodge, Pettit, & Bates, 1998), hyperactivity (Olweus, 1997), school avoidance (Kochenderfer & Ladd, 1996b), alcohol use (in high school victims; Nansel et al.), and poor relationships with peers (Boulton & Underwood, 1992; Hanish & Guerra; Kochenderfer-Ladd & Skinner; Nansel et al.; Schwartz et al.).

Considering the intentional and harmful nature of bullying, it seems surprising that some students actually report not being affected by it. Hoover, Oliver, and Hazler (1992), for example, found that although 75% of students ages 12-18 years reported being bullied at sometime while attending school, only 15% felt they had been adversely affected by it in terms of their social, academic, or emotional functioning. Furthermore, Hanish and Guerra (2002) found that victims differed regarding how negatively bullying affected them. Specifically, victims varied on whether they were affected socially (i.e., rejected by peers) or behaviorally (i.e., depression, disruptive behavior). This raises the question of why some victims are adversely affected by bullying while others are not, and suggests the need for research that explores whether there are different pathways linking the experience of victimization to its effects on the victimized individuals (cf., Juvonen & Graham, 2001).

Variation in outcomes among victims has been attributed to several different factors, such as temperament (Schwartz, 2000), stability and frequency of victimization (Kochenderfer-Ladd & Ladd, 2001; Perry et al., 1988), self-worth (Grills & Ollendick, 2002), the quality of a child's social relationships (Hodges, Boivin, Vitaro, & Bukowski, 1999), and a child's gender (Kochdenderfer-Ladd & Skinner, 2002). Recently, emotion regulation also has been identified as an influence on the degree and

nature of the outcomes a victim experiences (Mahady Wilton et al., 2000; Schwartz, 2000). Specifically, several authors have suggested that victims are less able to regulate the aversive emotions they experience in response to a bullying episode (Mahady Wilton et al.; Olweus, 1993a).

One problem with the recent literature concerns the questionable basis on which inferences are made regarding victim-related differences in emotion regulation. Inferences regarding emotion regulation drawn thus far in the literature are faulty because they are based on the *expressed* emotion only, as reflected in behavior, while ignoring the person's internal *feelings* (cf. Mahady Wilton et al., 2000; Olweus, 1993a; Schwartz, 2000). In particular, authors suggest that victims (i.e., those who experience frequent and persistent instances of bullying) and nonvictims (i.e., those who either are not bullied or experience only one or two instances of being bullied per school year) may experience similar intensities of emotions (e.g., anger or fear) when confronted by a bully, but that nonvictims are better able to inhibit expressing these emotions and instead use more constructive approaches (e.g., asserting one's self) to manage the episode (Olweus). Victims, on the other hand, are believed to have emotion inhibition breakdowns and are unable to avoid expressing any emotion they initially feel (Mahady Wilton et al.). Although these conclusions might be valid, they nonetheless need further study, because one cannot assume equivalence between the emotions a person expresses and the underlying subjective state (Frijda, 1986).

Fortunately, Gross's model of emotion regulation (1998a, 1998b) provides an appropriate framework to examine victim-related differences in emotions. Gross's

model is useful because it not only recognizes the distinction between the emotion felt and its actual expression, but also the role inhibitory processes can play in managing the expressions of emotions. Thus, the model nicely delineates the components of emotion regulation that have been studied directly (i.e., emotion expressed) relative to those that have not (i.e., emotion felt), as well as the components that victims are theorized to have deficits with (i.e., inhibition; cf. Mahady Wilton et al., 2000; Olweus, 1993a).

The present thesis seeks to determine whether victims differ from nonvictims in either the experience or expression of emotions, and whether either of these differences accounts for the known association between victimization and the outcomes of internalizing (i.e., depression, anxiety) or externalizing (i.e., behavioral difficulties, aggression). The specific research questions are:

1a. Is level of victimization unrelated to the intensity of emotions felt (e.g., anger, fear, sadness, and shame) during a bullying episode?

1b. Are higher levels of victimization associated with higher reported intensities of emotions (e.g., anger, fear, sadness, and shame) expressed during a bullying episode?

2. Is a higher level of victimization associated with poorer emotion regulation?

3. Does the ability to regulate emotions (i.e., not express certain emotions) decrease the severity of internalizing and externalizing outcomes a victim may experience?

Answering these questions regarding victimization and the emotion regulation process is crucial, because the expression of two emotions commonly felt while being bullied (i.e., anger and fear) are linked with repeated victimization (Mahady Wilton et

al., 2000; Salmivalli, Karhunen, & Lagerspetz, 1996). In addition to anger and fear, the expression of sadness and shame has recently been shown to be linked with victimization (Ahmed, 2005; Juvonen, Nishina, & Graham, 2001). If school administrators are to intervene effectively and at the appropriate juncture of the unfolding emotion process, it is important to know which specific emotions are contributors to children's risk of victimization and how their ability to regulate these affect children's reactions to a bully.

CHAPTER II

LITERATURE REVIEW

The first purpose of the literature review will be to provide a brief history of bullying, and to describe the different forms and definitions used to understand bullying. The second purpose will be to summarize the different outcomes (i.e., internalizing and externalizing problems) that victims experience and to address the question of why not all victims manifest the same set of outcomes. Finally, the third purpose of the literature review will be to discuss emotion regulation conclusions among victims and nonvictims of bullying. The validity of conclusions about victims' and nonvictims' emotion regulation abilities is discussed, along with a review models of emotion regulation and four emotions (anger, fear, sadness, and shame) that victims and nonvictims may differ on in terms of their emotion regulation abilities.

Definition of Bullying

The terms bullying, peer harassment, and peer victimization (cf., Juvonen & Graham, 2001) are used interchangeably to refer to the standard conceptualization of bullying introduced by Olweus (1993a, 1997). According to Olweus, the main defining feature of bullying is an act of aggression against another peer that is intended to be harmful. To be considered a pure instance of bullying, the act of aggression must also involve some form of power imbalance between the victim and bully, either with the victim being physically weaker than the bully and unable to defend him or herself properly (Juvonen & Graham; Olweus, 1993a) or, alternatively, with there being a

number imbalance, in that the victim is outnumbered by several people who are being bullies (Olweus, 1993a). A third component of bullying is that the victim is repeatedly a target of aggression over time. Though occasional acts of aggression against peers are a cause for concern, a child must frequently be a target of aggression in order to be considered a victim of bullying (Olweus, 1993a, 1997).

Bullying can be physical, verbal, or relational/social. Examples of physical bullying involve physical harm to the victim or to his or her property. Verbal bullying involves name-calling, teasing, and rumors being spread about the victim (Juvonen & Graham, 2001; Olweus, 1993a). Relational bullying (also referred to as social aggression) denotes the use of relationships among students to inflict harm upon another student (Crick et al., 2001). Victims of such aggression typically are socially excluded from a group of students or social events and often have conditions placed on their friendships, such as "You can't be my friend unless..." (Casey-Cannon, Hayward, & Gowen, 2001; Graham & Juvonen, 2001). In addition, all three types of bullying can be direct or indirect. With direct bullying, the victimization occurs face-to-face with the victim and the bully is easily identified. Indirect bullying is more covert and subtle than its counterpart, as the bully is difficult to identify, either because the acts of bullying are secretive or because the bullying is caused by a group of individuals (Casey-Cannon et al.; Graham & Juvonen; Olweus, 1993a). Table 1 illustrates examples of direct and indirect forms of all three types of bullying.

Table 1

Examples of Direct and Indirect Forms of Bullying

Bullying type	Physical	Verbal	Relational
Direct	Hitting, kicking, pushing	Name-calling, teasing	"You can't be my friend unless...," silent treatment
Indirect	Damage to one's property, stealing	Rumors, graffiti about the victim	Not being invited to a social activity, being avoided by others

Prevalence of Bullying

The experience of being bullied is fairly common. Hoover and colleagues (1992) found that 75% of students ages 12-18 years reported experiencing bullying at least one time during their school careers. Perry and colleagues (1988) reported that one in 10 children in the U.S. are victims of bullying, and Nansel and colleagues (2001) reported a prevalence rate (i.e., the number of children who are victimized by bullying, at any given time) of 10.6% in the U.S. In general, a more lenient criterion for bullying (e.g., bullied "sometimes," once a month) shows an even greater prevalence of 17% to 20% (Kochenderfer & Ladd, 1996a; Olafsen & Viemero, 2000), whereas stricter criteria (e.g., reporting being bullied at least once a week or several times a week) show a prevalence rate of 5% to 10% (Juvonen & Graham, 2001; Olweus, 1993a). Overall, prevalence estimates of bullying range from 8.5% (Nansel et al.) to 27% (Grills & Ollendick, 2002).

In general, direct bullying is more prevalent among younger than older children (Boulton & Underwood, 1992; Kochenderfer & Ladd, 1996a) and declines sharply after

the fifth grade (Olweus, 1993a, 1997). However, this decline is accompanied by an increase in indirect bullying as a child enters middle school and adolescence (Casey-Cannon et al., 2001; Craig, 1998; Crick et al., 2001; Hoover et al., 1992; Olafsen & Viemero, 2000). Although still problematic, rates of direct and indirect bullying decrease to between 5% to 10% once children enter high school (Nansel et al., 2001; Olweus, 1993a).

Outcomes of Bullying

Researchers consider being bullied a source of stress that leads to emotional and behavioral problems (Bond, Carlin, Thomas, & Rubin, 2001; Hawker & Boulton, 2000; Olweus, 1993a). Because victims had been shown to manifest certain symptoms of maladjustment more than nonvictims (i.e., more anxious, insecure, and less popular; cf. Olweus, 1978, 1993a), researchers began to explore whether maladjustment led to victimization, or whether victimization led to maladjustment (Bond et al.; Kochenderfer & Ladd, 1996a; Olweus, 1993b). Although certain child characteristics may increase children's risk for being bullied (see Olweus, 1993a), there is considerable support for the notion that being bullied leads to maladjustment (Hodges & Perry, 1999; Kochenderfer & Ladd, 1996a, 1996b; Olweus, 1993a, 1993b).

The studies summarized in the next section will review the evidence that being bullied leads to problems of maladjustment of either an internalizing or externalizing nature. Some of the studies to be reviewed involved concurrent or correlational designs. Because concurrent designs do not allow causal conclusions, findings from

these studies will be briefly summarized only. More detail is provided regarding the results of the studies using longitudinal designs, because these somewhat better enable inferences regarding whether bullying actually leads to maladjustment.

Concurrent Studies Linking Bullying to Internalizing or Externalizing Problems

Internalizing problems include feelings of depression, anxiety, low self-worth, or self-esteem, and feelings of loneliness. Olweus (1978, 1993a, 1993b) found that a high percentage of victims were more anxious, more insecure, and typically had lower self-esteem than nonvictims. In their meta-analysis, Hawker and Boulton (2000) found positive correlations between being bullied and symptoms of depression, anxiety, feelings of loneliness, and low self-esteem in victims. Studies published since those reviewed by Hawker and Boulton have produced similar findings, as victims of bullying have been shown to report higher rates of anxiety and depression (Craig, 1998), and lower self-worth (Grills & Ollendick, 2002). Victims of bullying who show this pattern of responding are referred to as "passive victims" (Olweus, 1978, 1993a, 1997).

Externalizing problems are defined as aggression toward others, poor peer relationships, trouble establishing friendships, drug and alcohol use, and hyperactivity (Hanish & Guerra, 2000; Khatri et al., 2000). Olweus (1978, 1993a, 1993b) identified a small percentage of victims (dubbed "provocative victims") because of their aggressive behavior toward others, hyperactivity, and irritable behaviors that led to trouble with making friends. Several studies have shown a link between being bullied and the use of physical and verbal aggression toward others (Craig, 1998; Perry et al., 1988) and an

inability to make and form lasting friendships (Nansel et al., 2001). Nansel and colleagues also reported that those children who were both victims of bullying and bullies themselves reported using alcohol and cigarettes.

The data based on studies using a concurrent design show a clear association between being victimized and higher rates of depression, anxiety, lower self-worth, aggression toward others, poor peer relationships, and occasionally, the use of alcohol and cigarettes. However, because concurrent studies cannot make conclusions regarding whether or not victimization actually leads to maladjustment, longitudinal studies are summarized next to address this directionality issue.

Longitudinal Studies Linking Bullying to Internalizing or Externalizing Problems

Internalizing problems. Kochenderfer and Ladd (1996a) sampled 200 children in kindergarten, having them complete questionnaires during the fall and spring of the school year that measured victimization status, feelings of loneliness, how much they enjoyed school, and school avoidance. Those children who were not victims of bullying in the fall, but became victims in the spring, showed increases in feelings of loneliness and a decrease in school liking, suggesting that the onset of victimization was a precursor to a change in their adjustment.

Whereas the Kochenderfer and Ladd (1996a) study spanned only a 3- to 4-month interval, Hodges and Perry's (1999) study spanned a 1-year period with data collected from over 200 children in Grades 3 to 7. Children completed peer nominations to identify those children who were victims of bullying; those who had

poor peer relationships; and those were aggressive, withdrawn, or depressed. Findings revealed that although peer rejection, internalizing problems, and physical weakness did contribute to victimization, the onset of victimization also predicted increases in internalizing problems (i.e., anxiety/depression, and being withdrawn and isolated from peers). The authors concluded that although victimization is a part of a vicious cycle in which being bullied and maladjustment influence each other, the onset of victimization led to an increase in internalizing problems.

Hodges and colleagues (1999) conducted a 1-year longitudinal study with a sample of 533 children in the fourth and fifth grades that examined friendship as a moderator between victimization and maladjustment. Children completed self-report measures of victimization and how many friends they had, whereas their teachers evaluated the extent to which the children manifested internalizing behaviors. Victimization at baseline predicted increases in internalizing problems at the 1-year follow-up; however, those children who had a mutual best friend did not show an increase in behavioral problems. Khatri and colleagues (2000) also conducted a 1-year longitudinal study with 471 fourth through sixth graders that examined the connection between peer victimization and children's internalizing and externalizing problems. Although peer victimization did not predict increases in internalizing behaviors, greater victimization was associated with increases in externalizing behaviors.

Bond and colleagues (2001), as well as Hanish and Guerra (2002), provided further support that victimization may exacerbate symptoms of problems. Bond and colleagues assessed eighth graders at baseline and again 2 years later. Results showed

that those students who reported being victimized at baseline exhibited stronger symptoms of anxiety and depression at the 2-year follow-up than nonvictims. Hanish and Guerra also conducted a 2-year longitudinal study that examined patterns of adjustment following peer victimization with a sample of first, second, and fourth graders. Results revealed that victimization at baseline predicted increases in anxious and depressed symptoms, suggesting that earlier bullying victimization contributed to the development of internalizing symptoms.

Olweus (1993c) conducted a longitudinal study involving the longest time span of all studies in this area. A sample of 23-year-old men who were classified as either "former nonvictims" or "former victims" of bullying in the ninth grade, were compared on several measures of internalizing symptoms. At age 23, former victims did not differ from former nonvictims in their reported ratings of shyness, anxiety, or inhibition of aggression (i.e., passivity). However, former victims more than former nonvictims reported greater symptoms of depression and more negative self-views. Even though the former victims were no longer being bullied or harassed, Olweus concluded the effects of victimization persisted into adulthood.

Externalizing problems. In Khatri and colleagues' (2000) longitudinal study, they found that girls, but not the boys, who were identified as victims based on peer reports also reported more delinquency one year later. The authors concluded that females may experience victimization in a different manner than boys, leading them to be more prone to particular forms of maladjustment. However, caution must be used in interpreting these results, as the study suffered from attrition, with 34% of the initial

participants being unavailable at the follow-up period, because they had moved out of the school system and could not be located due to financial constraints of the study.

Schwartz and colleagues (1998) conducted a 2-year longitudinal study that examined the relationship of peer victimization to symptoms of problems, as well as peer relationships, in a sample of 330 third and fourth graders. Being bullied predicted both concurrent and subsequent increases in attention difficulties, social problems (i.e., immature, dependent, and socially unskilled behavior), and externalizing (but not internalizing) problems.

The Hanish and Guerra (2002) study mentioned above also found victimization to predict increases in externalizing problems. Children who had been nominated as victims of bullying at baseline showed increases in aggression, attention difficulties, and delinquency at follow-up. Based on their longitudinal study of fourth- and fifth-grade children, Hodges and colleagues (1999) reported similar results regarding earlier victimization and the 12-month follow-up measure of externalizing, but only for those children without a best friend. Hodges et al. concluded that a mutual friendship can help alleviate some of victimization's aftermath.

Variation in Victims' Maladjustment

Based on the studies discussed above, it is clear that victims are at risk to develop problems of either an internalizing or externalizing nature, or both. Although there are few findings to the contrary, collectively, a pattern emerges from both concurrent and longitudinal designs that suggest the experience of victimization

exacerbates problems in the realms of externalization and internalization. Surprisingly, not every child who experiences bullying suffers later problems stemming from their earlier victimization. For instance, Hoover and colleagues (1992) sampled 207 adolescents aged 12 to 18 years and found that over 75% of them reported being bullied during their school careers. However, when asked about the impact of the bullying in the social, emotional, somatic, familial, and academic realms, only 15% reported being adversely affected. It seems surprising that so few students reported being affected by bullying when compared to the large number of students who reported being bullied.

Even when children experience maladjustment following victimization, not all of the victims experience the same set of outcomes. Hanish and Guerra (2002) assessed children over a 2-year period and measured the frequency of their victimization (i.e., victimized during baseline, follow-up, or both) and a myriad of outcomes: internalizing and externalizing problems, academic progress, and quality of peer relationships. Hanish and Guerra's study identified eight "clusters" of functioning that described the changes in outcomes from baseline to follow-up, most relevant to this discussion are those clusters dubbed "externalizing" (increases in only aggression and attention difficulties), "symptomatic" (increases in both internalizing and externalizing symptoms), and "disliked" (few behavioral problems but increases in rejection by peers). They found that these clusters were differentially associated with victimization based on gender and onset and continuity of victimization. Specifically, victimization at "baseline only" predicted membership into the "externalizing" cluster, "follow-up only" victimization predicted the "disliked" cluster, and victimization at both baseline

and follow-up predicted the "symptomatic" cluster. Additionally, whereas victimization at any time for boys was associated with at least one cluster of symptoms, victimization at follow-up only for girls was associated with only one of the clusters (i.e., "symptomatic"). It appears that the onset and continuity of victimization impacts the severity and type of outcomes victims experience, but even this finding is moderated by gender.

Emotion Regulation as a Mediating Factor

In light of evidence that children are affected differently by bullying (including evidence that some children are not affected adversely at all), researchers have called for greater exploration of the exact pathways between victimization and outcomes (Hawker & Boulton, 2000; Juvonen & Graham, 2001). Evidence is starting to accumulate that children may or may not be affected by bullying because of certain child characteristics or other moderating variables (Juvonen & Graham). Most notably, how a child responds to a bully may have implications for the severity of outcomes he or she may experience, as a child's reaction to a bully can either prolong or de-escalate the bullying episode, and affect the chances of future victimization (Mahady Wilton et al., 2000; Salmivalli et al., 1996). Additionally, temperament (Schwartz, 2000), frequency of victimization (Hanish & Guerra, 2002; Kochenderfer-Ladd & Ladd, 2001), level of self-worth (Grills & Ollendick, 2002), nature of victimization (i.e., direct or indirect bullying; Bond et al., 2001; Crick et al., 2001), and even gender (Grills & Ollendick; Kochenderfer-Ladd & Skinner, 2002) have all been explored as intervening

variables in the association between victimization and outcomes.

One recently explored factor that may influence the type of outcomes a person may experience from being bullied is emotion regulation (Mahady Wilton et al., 2000; Schwartz, 2000; Schwartz, Proctor, & Chien, 2001). Olweus (1993a) implied that certain types of victims are unable to regulate and manage their emotions while being victimized, with "passive victims" becoming overwhelmed by fear and anxiety, and "provocative victims" by anger and frustration (cf. Schwartz et al., 2001). Mahady Wilton and colleagues examined emotion regulation directly in a sample of 120 children in Grades 1 through 6 by observing the facial displays and behavioral responses of victims while they were being bullied. The authors concluded that victims have poor emotion regulation based on two main findings: (a) victims displayed facial expressions that were detrimental to themselves yet reinforcing to the bully (e.g., the emotion of sadness displayed reinforced the bully's goal of dominance while also increasing the chance of future victimization; cf. Olweus, 1993a), and (b) victims' responses to bullies were linked with prolonged victimization interactions (e.g., aggression was linked to prolonging the bullying interaction). In addition, Schwartz supported Olweus' assertions regarding subtypes of victims, as he found aggressive victims scored poorer on an emotion regulation measure than did nonaggressive victims.

Collectively, the literature asserts that victims have deficits with the "inhibition" component of emotion regulation. Whereas victims and nonvictims may experience similar emotions while being bullied (assuming that nonvictims may experience bullying at one point or another), victims are reportedly unable to inhibit the expression

of those emotions (such as anger). Nonvictims, on the other hand, might feel angry but are able to avoid expressing that emotion and instead select a more effective and beneficial response, such as seeking teacher intervention (cf. Mahady Wilton et al., 2000; Olweus, 1993a). Consequently, the ability to inhibit the expression of certain emotions "protects" nonvictims from either ever becoming a victim or allows them to deal with the bully in such a manner that prevents future attacks. Conversely, the inability of victims to inhibit emotional expression inadvertently contributes to subsequent victimization (cf. Mahady Wilton et al.).

Unfortunately, assertions regarding emotions and emotion regulation among victims and nonvictims are dubious, as the current literature has made these conclusions based on direct observations alone (Mahady Wilton et al., 2000; Olweus, 1993a) or on teacher reports (Schwartz, 2000). By focusing only on the overt behavior of children, researchers have neglected to take into account the internal experience a child may have of the emotion. This is a critical component because people's overt behaviors (i.e., expressed emotion) are not always predictive of their internal state (i.e., emotion felt; see Frijda, 1986 and Gross, 1998a).

It is possible that these researchers are correct in their conclusions that nonvictims do have better emotion regulation (i.e., inhibition) skills than victims. However, the methodology used in previous studies makes it is just as likely that victims are expressing certain emotions simply because they are feeling those emotions more intensely than nonvictims to begin with (which implies that it may not be an inhibition problem at all). In order to make solid conclusions about emotion regulation

in victims, both the internal (i.e., the emotion felt) and external state (i.e., the emotion expressed) of the victim must be measured. Fortunately, current models of emotion regulation provide the appropriate framework within which to address each of these components (see Gross, 1998a, 1998b). Using an emotion regulation model, the current study will be able to determine whether assertions regarding emotion regulation between victims and nonvictims are valid and also determine where exactly victims may have regulation difficulties. The next section discusses current models of emotion regulation before discussing certain emotions victims may have difficulty regulating.

Model of Emotion Regulation

Emotion regulation is defined as the "...processes by which individuals influence which emotions they have, when they have them, and how they experience and express [them]" (Gross, 1998b, p. 275). People have the ability to alter and change not only the initial emotion they feel (which includes altering the type of emotion felt and/or the intensity felt), but also how they express emotions once they are aroused (Cicchetti, Ackerman, & Izard, 1995; Gross, 1998a, 1998b; Southam-Gerow & Kendall, 2002; Thompson, 1991).

One of the best studied models of emotion regulation was proposed by Gross (1998a, 1998b). Gross conceptualizes emotion regulation in terms of two main processes: antecedent-focused emotion regulation, which are processes that lead up to the person feeling the emotion, and response-focused emotion regulation, which are processes unfolding after the emotion is felt and that affect the emotion's inhibition or

expression. With antecedent-focused emotion regulation, individuals may avoid the onset of a particular emotion through several means, such as by avoiding a certain situation, redirecting their attention away from an emotion-eliciting stimulus, or by changing the cognitive interpretation of a stimulus. For example, a bully victim may avoid certain places in which he or she is bullied (such as the playground), choose to ignore negative comments in order to prevent an emotion from being felt, or interpret the bully's threats as benign or nonthreatening. Obviously, antecedent-focused regulation can occur prior to being in an emotion-eliciting situation as the person anticipates feeling a certain emotion (e.g., regulating fear by avoiding a fearful place) or during an emotion-eliciting situation as people find themselves in new situations daily (e.g., giving a speech and regulating one's anxiety) or are unable to avoid certain situations (e.g., avoiding feeling embarrassment after tripping in front of others).

Once an emotion is felt in an individual, however, response-focused emotion regulation can occur, during which how an emotion is expressed behaviorally, physiologically, and/or experientially can be modified. It is during this stage that "action tendencies" are triggered, which are defined as a set of impulses associated with a particular emotion, such as the tendency to strike out when angry or withdraw when afraid (Frijda, 1986). These action tendencies are able to be modified so that, for example, just because a victim of bullying feels angry, he or she may not actually express the action tendency for anger. Instead, that victim may hide his or her feelings of anger, choose to assert his or herself, or act nonchalant. In fact, Beaver (1997) found support of response-focused emotion regulation by children during a bullying episode.

In her sample of first-, third-, and fifth-grade children, some of the children who reported feeling sad did not actually express sadness. Instead, the children inhibited the tendency to withdraw when feeling sad and chose a more active response to the situation (e.g., sought social support, problem solved the situation). The concept of response-focused emotion regulation thus involves a distinction between two components of emotion: one component of *experiencing* or *feeling* an action tendency versus the actual *expression* of that tendency; therefore, providing an appropriate framework to test the literature's assertions regarding victim-related regulation differences.

Emotional Responses of Victims During a Bullying Interaction

After establishing the need to better examine emotion regulation within the bullying paradigm, the next logical step is to determine which specific emotions victims more than nonvictims may have trouble regulating. Thus far in the literature, the most common emotions victims are believed to have regulation difficulties with have been anger and fear (Juvonen & Graham, 2001; Mahady Wilton et al., 2000; Olweus, 1993a), but recent evidence has suggested that victims may have trouble regulating shame and sadness (cf. Ahmed, 2005; Juvonen et al., 2001). In the following sections, a brief review is provided regarding the types of emotions victims seem to experience and/or express, focusing on anger and fear first, followed by studies examining sadness and shame.

Anger and Fear

Olweus (1993a, 1997) first introduced the notion that victims experienced anger and fear while being bullied when he examined the reactions of victims while bullied. He concluded that "provocative" victims act aggressively toward bullies out of anger and frustration (cf., Perry, Williard, & Perry, 1990; Schwartz, 2000; Schwartz et al., 2001), whereas "passive" victims withdraw out of fear and anxiety. Realizing the need to directly assess victims' emotional experiences in regards to victimization (as Olweus' conclusions regarding emotions are largely speculative), Borg (1998) measured the emotional reactions of victims. His results confirmed the expected notion that victims feel anger while bullied, as slightly more than one third of his sample of 9- to 14-year-old victims reported feeling vengeful and angry, respectively. Borg did not directly assess if children felt afraid from bullying, but he did find that 37% of his sample reported feeling self-pity and 24% reported feeling helpless, two emotions that fit Olweus' profile of the anxious and fearful "passive" victims. Borg also reported the behavioral reactions of victims (31% reported "doing nothing"), but unfortunately did not correlate these responses with the emotion data, thus preventing any conclusions about emotion regulation to be drawn.

Mahady Wilton and colleagues (2000) examined the actual emotional displays of victims while they were being bullied. Using a direct observation method, they found that the emotions of interest, joy, and anger were the three most often displayed, accounting for 67% of all displays by victims. Not surprisingly, anger was the third most observed emotional display by victims, but fear was observed less than 5% of the

time. It was also surprising that the most frequently observed emotions were interest and joy, as bullying is obviously not intended to be an enjoyable experience for the victim. Although the methodology of the study may account for these obtuse results, the identification of interest and joy may be reflective of victims seeking social interaction (albeit harmful) that they typically do not receive, as victims are often rejected by peers and isolated from others (cf. Ahmed, 2005; Olweus, 1993a). In addition, the lack of display of fear highlights the need to understand emotions and emotion regulation with victims.

Although the research that directly assesses feelings of anger and fear is sparse, it is assumed that victims have regulation difficulties with these emotions (cf., Perry et al., 1990). As such, these two emotions are explored in the current study. The next section discusses sadness and shame, which will also be examined in the current study, as victims may have regulation difficulties with these emotions (cf., Graham & Juvonen, 1998; Juvonen et al., 2001).

Sadness and Shame

Ahmed (2005) examined feelings of shame among victims and bullies as she sampled 198 fourth through seventh graders and followed their victim status for three years. Ahmed found that victims more than nonvictims and bullies felt more shame and took more responsibility for wrongdoings done to them, a finding that was stronger for those children that were victimized at both baseline and follow-up (i.e., "stable victims") than those victimized only at baseline (i.e., "changed victims"). In addition, "stable" more than "changed" victims reported fewer friends at follow-up, suggesting

that victims may blame themselves for being a victim, which leads to isolating themselves from peers in hopes of avoiding shameful experiences (e.g., being bullied). Ahmed's study suggested that victims may have difficulty inhibiting feelings of shame, as they dwell on their victimization status and avoid interaction with others, thus lending some support that victims have difficulty with response-focused regulation.

Camodeca and Goossens (2005) examined sadness and anger in victims within the context of a social information processing model. They found that victims more than nonvictims reported higher levels of sadness to first-person vignettes that described an unpleasant interaction (e.g., a peer interrupts you while you're doing well in a video game and causes you to lose the game). Unfortunately, the authors did not tease apart the action tendency of sadness from its actual expression, thus making any conclusions regarding response-focused emotion regulation impossible. However, their conclusion that victims' higher intensity of sadness contributes to social information processing (SIP) deficits suggests that victims may have regulation difficulties in addition to (or instead of) inhibition, as both SIP and emotion regulation models involve evaluating aspects of a situation in order to select an appropriate goal. In addition, Mahady Wilton and colleagues (2000) found that close to 10% of all emotional displays by victims while being bullied involved sadness. They concluded that the expression of sadness is indicative of regulation difficulties with victims, although their conclusions may not be valid because of methodological issues that were previously mentioned.

Collectively, the studies reviewed illustrate that victims and nonvictims may experience emotions differently. With anger, fear, sadness, and shame possibly

impacting the risk of a child being victimized (see Graham & Juvonen, 1998; Juvonen & Graham, 2001), the present thesis will examine these four emotions within the context of emotion regulation models.

The Present Study

The present thesis endeavors to determine the accuracy of assertions in the present literature that victims more than nonvictims have inhibition deficits in regards to emotion regulation with the emotions of anger, fear, sadness, and shame. This will be examined by measuring and comparing (a) the intensity with which an emotion's action tendency is reported to be experienced or felt, to (b) the intensity with which the action tendency is actually expressed. In addition, the thesis will examine the role emotion regulation plays in the connection between victim status and internalizing and externalizing outcomes.

The specific research questions and hypotheses examined in the thesis are listed below.

Research question 1a: Is level of victimization unrelated to the intensity of emotions felt (e.g., anger, fear, sadness, and shame) during a bullying episode?

Hypothesis 1a: Level of victimization will not be associated with higher intensities of emotions *felt* (i.e., anger, fear, sadness, shame) during a bullying episode.

Research question 1b: Are higher levels of victimization associated with higher reported intensities of emotions *expressed* (e.g., anger, fear, sadness, and shame) during a bullying episode?

Hypothesis 1b: Higher levels of victimization will be associated with higher intensities of emotions *expressed* (anger, fear, sadness, and shame) during a bullying episode.

Research question 2: Is a higher level of victimization associated with poorer emotion regulation?

Hypothesis 2: Higher levels of victimization will be associated with poorer emotion regulation abilities during a bullying episode.

Research question 3: Does the ability to regulate emotions (i.e., not express certain emotions) decrease the severity of internalizing and externalizing outcomes a victim may experience?

Hypothesis 3: Emotion regulation will act as a buffer and, therefore, a mediator of the association between victimization and internalizing/externalizing outcomes.

CHAPTER III

METHODS

Participants

Recruitment

Three schools within Davis School District (DSD) in Farmington, Utah were targeted to participate in the study after permission from Utah State University's Institutional Review Board (IRB) and from DSD's research office were obtained. Principals from 53 elementary and 21 middle schools were notified of the experiment and asked for their participation. From the six elementary and two middle schools that consented, two elementary and one junior high school were randomly selected to participate in the study. Informed consent forms were then sent home to parents of all of the students in Grades 6 to 8 among the three schools (see Appendix A). To encourage the return of the consent forms, a pizza party was offered to the classroom with the highest return rate (the classrooms were based on either the student's sixth grade teacher or on the student's English teacher for the seventh and eighth grades).

Consent forms were sent home with 270 seventh- and eighth-grade students at one junior high school and 120 sixth-grade students at two elementary schools. The return rate for the seventh- and eighth-grade participants was 81% (5% of those returned declined participation). Of the two schools used for the sixth-grade data collection, one school's return rate was less than 6%, whereas the other school's return rate was over 90% (8% of those returned from all sixth graders declined participation).

The researcher was unable to discern why the return rate was so low, as the same procedure was followed for recruitment for both schools. Because of the one school's low return rate, the study was not conducted at that school.

Final Sample

The final sample consisted of 240 participants in Grades 6 through 8 from the DSD in central Utah. Fifty-two percent of the sample was girls and 48% was boys. Not all participants answered the questions regarding their self-identified ethnicity and religious affiliation, either because the researcher presented these questions as optional and/or participants may not have wanted to report that information. As summarized in Table 2, 85% of the participants who did answer these questions self-identified as Caucasian, 1% as African-American, 2% as Asian-American, 6% as Hispanic, and 4% as "Other" (i.e., responses that did not fit into the four previously mentioned ethnic categories, such as Polynesian and Native American). Fifty-two percent of the total participants who did report their religious affiliation self-identified as members of The Church of Jesus Christ of Latter-day Saints (LDS), 3% as Catholic, 1% as Baptist and

Table 2

Ethnicity and Religious Background Data of Sample Population

Race/ethnicity	*N*	%	Religious background	*N*	%
Caucasian	204	85	LDS	125	52
African-American	2	1	Catholic	7	3
Asian-American	5	2	Baptist	3	1
Hispanic	14	6	Protestant	3	1
Other	8	4	Other	11	5
Missing	7	3	Missing	91	38

Note. The values in the *N* column represent the total number of cases for either race or religious background. The % column indicates the percent of the total sample.

Protestant, respectively, and 5% as "Other" (i.e., responses that did not clearly fit into any of the aforementioned categories, such as "Christian"). Three percent and 39% percent of participants did not report their race or any religious affiliation, respectively, and were marked as a "missing value." The mean age for all the boys in the sample was 13.4 and 13.2 for girls (see Table 3).

Procedure

The data were collected over the course of 3 days using a total of thirteen 50-minute time blocks. Two researchers from the research team entered the classroom and obtained assent forms from those students who had been granted written permission by their parent(s) (Appendix B). Students unable to participate in the study left the room

Table 3

Descriptive Statistics on the Total Sample (N = 240)

Sample	*N*	%	Mean age
6th Grade			
Boys	16	14	12.2
Girls	31	25	12.2
7th Grade			
Boys	59	51	13.2
Girls	46	37	13.0
8th Grade			
Boys	41	35	14.1
Girls	47	38	14.2
Total sample			
Boys	116	48	13.4
Girls	124	52	13.2

Note.: The N column represents total number of cases for each grade and gender. The % column indicates the percent of the total sample. Mean ages are displayed in years and months.

for a recreational activity determined by the classroom teacher. All students were assigned a number used to identify themselves on the measures and were not asked their names. Then, one of the three measures used in the study was administered and instructions on how to complete that measure were given before all participants completed the measure at their own pace. Once everyone was finished, the remaining two measures used were presented in the same fashion as the first measure. After all of the measures were completed, each child chose a small reward (e.g., pencil, eraser). Not all participants received the measures in the same order, as the order of presentation for the measures was varied between time-blocks (e.g., the first "block" of students received the victimization measure first, whereas the second time-block received the outcomes measures first, and so forth).

Overview of Predictor and Dependent Variables

In the present study a correlational design was used in order to examine the relationship among victim status, the intensity of emotions felt and emotions expressed during a bullying episode, emotion regulation, and outcomes representing tendencies to internalizing and externalizing problem behaviors. Victim status was measured by the Olweus Bully/Victim Questionnaire (Olweus, 2001). The intensity of emotions felt and emotions expressed were measured by reported ratings on the Bully Regulation of and by Emotion Measure (REM). From these ratings, a measure of emotion regulation ability was constructed. Finally, the level of internalizing and externalizing outcomes was measured using the Youth Self-Report (Achenbach, 1991). The following section

clarifies certain particulars about the variables and describes how they were constructed and/or obtained.

Predictor Variables

Exclusion of grade level as a variable. The population of interest in the thesis was middle school-aged students as opposed to students in each of the middle school grades (sixth, seventh, and eighth grades). Middle school was targeted as a unique and important population because victims within this age range are known to experience a wider range and diversity of bullying incidents compared to students in elementary and high school (cf., Casey-Cannon et al., 2001; Crick et al., 2001; Olweus, 1993a). Because bullying in elementary school is primarily direct physical bullying, and bullying drops off considerably in high school (Hoover et al., 1992), it was determined to test middle school grade levels as a whole instead of examining each grade level independently. Consequently, the study was not designed to provide powerful tests of grade level differences.

Olweus Questionnaire: Measuring victimization. A modified version of the Revised Olweus Bully/Victim Questionnaire was used to determine a child's current victim status (Olweus, 2001; cf. Appendix C). The Olweus Questionnaire is a 39-item self-report questionnaire that measures the severity and type of victimization a child may experience and can be used with children in Grades 3 and up. The questionnaire has high internal consistency, with Cronbach's alpha in the .80s and higher (Olweus, 2001), and has shown strong correlations with peer reports of bullying (in the .40-.60 range, cf. Olweus, 1997; Perry et al., 1988). The questionnaire also demonstrated good

construct validity, as children who score high on victimization using this questionnaire also tend to report problems such as depression, poor self-esteem, and peer rejection, which are associated with victimization. Furthermore, scores on this measure distinguish between victims and nonvictims as judged by teachers and peers (Olafsen & Viemero, 2000; Olweus, 1993a, 1993b, 1993c; Perry et al., 1988).

The modified version used included fewer questions than the original Revised Questionnaire. Eight total questions from the original Revised Questionnaire were used; the first three questions familiarized the student with the measure, the last five questions assessed the child's victimization status and the exact type of victimization (i.e., indirect vs. direct, physical vs. verbal vs. relational; cf. Appendix C). Although only one of these questions was actually employed to determine each child's victimization status, it was nonetheless important to ascertain whether children in this sample were responding reliably to the reduced set of items from Olweus' measure. Cronbach's alpha was calculated for the five questions that assessed victimization to determine if the measure produced acceptable ranges of reliability. Cronbach's alpha coefficients fell within the exemplary range for girls ($\alpha = .83$), but within an unacceptable range for boys ($\alpha = .30$; cf. Cohen, 1988). However, the low reliability for boys does not pose a threat to the study's methodology because only one question was used to assess a participant's frequency of victimization. Incidentally, the vast difference in alpha levels is likely a reflection of the different types of bullying that boys and girls typically experience. Whereas girls typically experience both indirect and direct forms of bullying (Crick et al., 2001), boys more often experience direct

forms of bullying (Olweus, 1993a). In light of the girls' greater experience than boys with all forms of bullying, it is not surprising that the present sample of girls responded similarly to the five victimization questions.

The Olweus Questionnaire was designed to dichotomize victimization status based on youths' answers to the question "How often have you been bullied at school in the past couple of months?" (cf. Appendix C, question 4). Participants responded on a 6-point rating scale (0 to 5) and those who answered "2" and below were classified as nonvictims, whereas those who answered "3" and above were classified as victims. This method of scoring provided a dichotomized measure of victimization, with participants labeled as either nonvictims or victims.

After the data were collected and inspected, the author discovered that dichotomizing the victimization scores discarded arbitrarily more refined information regarding the extent to which participants were subjected to bullying. It is clear from the frequencies illustrated in Figure 1 that using Olweus' dichotomization criteria discards information regarding the *degree* of victimization. A continuous scoring of victimization was therefore retained for analyses because it is more sensitive to the gradual changes in level of victimization. However, the use of a dichotomized scoring for victimization is still presented when discussing the prevalence of bullying, displaying the results in graphical form (e.g., Figures 5 to 10 shown later in this paper), and when drawing conclusions from the results dichotomized victimization (e.g., Mahady Wilton et al., 2000; Olweus, 1993a). Thus, whereas the hypotheses were tested

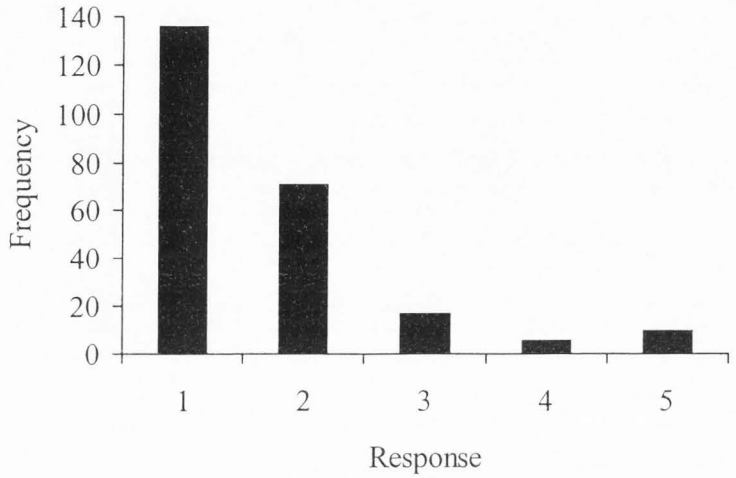


Figure 1. Number of participants endorsing each of the five rating scale options in response to the frequency of victimization question in Olweus' Bully/Victim Questionnaire.

based on a continuous measure of victimization, the results and conclusions are, at times, presented in more dichotomized terms of victims compared to nonvictims.

Instruments and Dependent Variables

Youth self-report: Measuring internalizing and externalizing. Each participant's level of internalizing and externalizing outcomes was measured by the Youth Self-Report (YSR; Achenbach, 1991; Achenbach & Rescorla, 2001). The YSR is a 112-item self-report questionnaire designed for use with children ages 11 to 18 years. The YSR measures a child's overall functioning level as measured by Competence Scales and Problem Scales. The Problem Scales measure a child's level of internalizing (e.g., "I am unhappy, sad, or depressed"), externalizing (e.g., "I cut classes or skip school," "I disobey my parents"), social (e.g., "I argue a lot"), attention (e.g., "I have trouble concentrating or paying attention") and thought problems (e.g., "I feel worthless or inferior"). Internalizing problems are defined as withdrawing from peers, somatic

complaints, and anxious or depressed behaviors and feelings. Externalizing problems are defined as delinquent and aggressive behavior. The YSR provides *t* scores for each of the aforementioned domains, with a *t* score of 50 being average and a score above 70 considered problematic (i.e., in the clinical range). The present study used the broadband Internalizing and Externalizing Scales scores from the YSR to represent each participant's level of internalizing and externalizing behaviors.

The YSR has demonstrated good test-retest reliability over a 7-day test period and over a 7-month test period. Though the reliability for children aged 11 to 14 was lower than the 15- to 18-year-olds, the reliability was still above the .60 level. The YSR is also considered to have good content validity and criterion-related validity as demonstrated by its ability to distinguish between clinically referred youth and nonreferred youth. The clinical cutoff points marked in the YSR are able to distinguish between "normal" or average levels of functioning and a more severe or detrimental level of functioning (Achenbach, 1991).

Bully REM: Measuring emotions felt and expressed. Children in this study completed a modified version of the Regulation of and by Emotion Measure (REM, cf. Ferguson & Barrett, 2003) to assess the emotions they felt and would express during a bullying episode. The REM is a self-report measure that, unlike other measures of emotion, differentiates individuals' experienced impulses to act in ways reflecting an emotion from the expression of those impulses in actual behavior. Using a series of vignettes, participants are presented as the main protagonist and are asked to imagine themselves in each situation. They then rate (using 6-point scales, from 0 to 5) the

extent to which they would *feel like (impulsively)* expressing a series of emotion-related action tendencies in each situation as well as the extent to which they would *actually* express those action tendencies. Thus, the REM nicely differentiates the two key components ("emotion felt" and "emotion expressed") discussed in the literature review pertaining to Gross' model of emotion regulation (1998a, 1998b).

Although still in the pilot stages, responses to the REM have been shown to correlate as would be expected with indices of emotion regulation, other measures of emotional reactions, and measures of internalizing and externalizing behavior problems. The original REM also discriminates well between children who are known to manifest problems of an externalizing nature in comparison to children with no clinically significant problems in this realm. The internal consistency reliabilities of the pilot version of the REM are acceptable, ranging from .65 to .73 after correction for attenuation (Ferguson & Barrett, 2003). In addition, research has established the ability of adolescents to accurately report their emotions and differentiate among varying types of emotions using self-report measures (Clarbour & Roger, 2004).

The situations in the original REM all concern either transgressions or achievement failures, some of which are intentionally ambiguous as to the child's responsibility for the transgression or failure. Because the purpose of the present thesis is to assess the emotions children feel and how they regulate them specifically in response to unambiguous victimization incidents, new bullying situations and responses were created and incorporated into the REM. Situations the author created were based on questions from the Revised Olweus Bully/Victim Questionnaire (Olweus, 2001).

Because children in middle school who are bullied experienced different forms of bullying, ranging from direct physical bullying to indirect relational bullying (cf. Crick et al., 2001; Olweus, 1993a), four different bullying types were incorporated into the new REM situations in order to capture the variety of victimization participants may experience. For each situation, the author created descriptions of a series of action tendencies designed to capture the following emotions: anger, fear, sadness, and shame.

Participants were presented with the four bullying situations from which they responded on a 6-point scale (from 0 to 5) indicating how much they would *feel like* expressing an action tendency versus how much they would *actual* express the tendency. Each emotion response for each bullying situation conveyed a particular action tendency (e.g., "yelling at the student" represented anger's action tendency; cf. Appendix D). The score for each emotion was averaged across the four bullying situations within the Bully REM, thus producing a total score for ratings of "emotion felt" and "emotion expressed" for each of the emotions anger, fear, sadness, and shame.

Prior to conducting the study, the Bully REM was piloted with a sample of 19 sixth graders in order to assess the relevance of the bullying situations and the responses representing action tendencies to what students typically experience. Based on the anecdotal evidence provided by the sample, the four bullying situations were deemed "realistic" and therefore not changed. Also, minor revisions were made to the shame and sadness action tendencies to make them representative of what students may feel in such a situation. No gender differences were reported from the pilot sample.

Psychometric analyses were conducted to determine the reliability of the new

Bully REM. Cronbach's alphas were examined for the four bullying situations from the Bully REM that comprised each emotion felt score ("anger felt," "fear felt," "sadness felt," and "shame felt") and emotion expressed score ("anger expressed," "fear expressed," "sadness expressed," and "shame expressed"). The alpha coefficients all fell within an acceptable range ($\geq .60$; cf. Robinson, Shaver, & Wrightsman, 1991), with the exception of "anger felt" for boys ($\alpha = .56$) and "sad felt" and "sad expressed" for both boys ($\alpha = .41, .34$) and girls ($\alpha = 50, .50$). These lower homogeneity coefficients prompted inspection of the emotion item intercorrelations and variances for the different situations to determine whether particular situations contributed to their lower value (see Appendix E).

The emotion scores for one of the bully situations (the indirect relational bullying situation) did not correlate well with emotion scores for the other bullying situations. Upon further inspection, and in hindsight, this situation also did not appear to be a very good example of relational bullying. The situation involved not being invited to a party, but the intentional nature of the exclusion was ambiguous (see Appendix D, "Situation 4"). Olweus (1993a, 1993b) defines bullying as an intentional act and if participants did not interpret the situation as intentional, they may not have reacted to it in the same manner they did to the other bullying situations. For these reasons, the author decided to eliminate scores for this situation from the analysis and a new Cronbach's alpha was calculated for the three bullying situations contributing to each emotion score.

The alpha coefficients based on the remaining three bullying situations are

summarized in Table 4. As seen in this table, all of the alpha coefficients fall within an acceptable range, with the exception of "sadness felt" and "sadness expressed" for boys. Although the new alpha coefficients for boys for both "sadness felt" and "sadness expressed" fall below the moderate range, scores for ratings of this emotion were nonetheless retained for hypothesis testing because of the importance that examining sadness in victims of bullying has for the present research.

While examining the reliability of the scale scores from the new Bully REM, it became clear that the participants' ratings of the four emotions were highly intercorrelated. At the same time, children seemed to be implicitly clustering the four emotions. Table 5 presents the Pearson product moment correlation coefficients among

Table 4

Cronbach's Alpha Index of Reliability for Each Bully REM Emotion Scale

Scale[a]	Items[b]	Boys	Girls
Anger felt	3	.60	.71
Anger expressed	3	.69	.77
Fear felt	3	.65	.75
Fear expressed	3	.70	.61
Sadness felt	3	.53	.62
Sadness expressed	3	.43	.63
Shame felt	3	.65	.75
Shame expressed	3	.61	.68
Passive felt	9	.85	.88
Passive expressed	9	.82	.84
Total Items—felt	12	.77	.84
Total Items—expressed	12	.69	.73
Total Items	24	.85	.89

[a] Alphas are based on the cleaned sample of 231.

[b] The number of items contributing to each alpha coefficient included in the reliability analysis.

Table 5

Correlations among Emotions Felt and Emotions Expressed Scores

Emotion	1	2	3	4	5	6	7
Boys							
1. Anger felt	-						
2. Fear felt	.02	-					
3. Sadness felt	-.01	.66**	-				
4. Shame felt	.01	.76**	.69**	-			
5. Anger expressed	.70**	-.29**	-.23*	-.28**	-		
6. Fear expressed	-.07	.78**	.56**	.58**	-.25**	-	
7. Sadness expressed	-.01	.48**	.68**	.45**	-.00	.61**	-
8. Shame expressed	.00	.55**	.52**	.72**	-.14	.68**	.56**
Girls							
1. Anger felt	-						
2. Fear felt	.13	-					
3. Sadness felt	.23*	.63**	-				
4. Shame felt	.20*	.74**	.69**	-			
5. Anger expressed	.66**	-.25	.01	-.16	-		
6. Fear expressed	-.21*	.83**	.54**	.62**	-.21*	-	
7. Sadness expressed	.03	.49**	.80**	.53**	.03	.54**	-
8. Shame expressed	-.18	.70**	.64**	.79**	-.18	.68**	.65**

* $p < .05$.
** $p < .01$.

the four emotion scores for each "felt" and "expressed" score. Inspection of the coefficients presented in Table 5 indicated that two subclasses of emotion could be distinguished: passive (fear, sadness, and shame) and active (anger). These two subclasses make sense in light of the distinction between internalization and externalization. Consequently, the scores involving children's emotion ratings were combined to form the two categories of "passive" and "active." The passive emotion cluster was formed by calculating the mean of each participant's fear, sadness, and shame score; thus "passive felt" comprised the mean of "fear felt," "sadness felt," and

"shame felt," and "passive expressed" comprised the mean of "fear expressed," "sadness expressed," and "shame expressed." These new variables represented an internalizing response (i.e., feeling like crying, getting away from the situation) to the bully, whereas the active cluster represented a more externalizing response to the bully (e.g., yelling, hitting, fighting). The active cluster is simply each participant's anger score, such that "active felt" is the "anger felt" score and "active expressed" is the "anger expressed" score. Reliability results pertaining to "passive felt" and "passive expressed" are presented in Table 4; the obtained alphas for both genders fell within the exemplary range and are higher than the individual emotion "felt" and "expressed" scores for either fear, sadness, and shame.

Unfortunately, some participants did not answer all of the items for each bullying situation. For instance, some participants responded to feeling and expressing anger, but did not report on feeling and expressing shame. Due to this, some participants' emotion scores for a given emotion were the mean of two or, in some cases one, bullying situation instead of three. However, this occurrence was very infrequent (totaling less than an estimated 3% of the responses), leading the author to believe that this occurrence did not threaten the validity of the results.

Bully REM: Measuring emotion regulation. The hypothesis testing requires a measure of emotion regulation ability. In order to measure emotion regulation abilities, an index of "better versus poorer" emotion regulation scale was constructed using the Bully REM. To capture the presumed inhibition deficit between victims and nonvictims, students who report lower intensities of emotions expressed relative to a

higher degree of emotion felt will score as "better" in emotion regulation than those students who report high degrees of emotions expressed relative to lower degrees of emotions felt. For example, a participant who marks a felt anger rating of "5" with a expressed anger rating of "2" reflects better regulation (inhibition) than a different participant with a felt anger rating of "2" and an expressed anger score of "5."

The following formula was used to obtain each youth's emotion regulation score for each bullying situation for each of the emotions anger, fear, sadness, and shame:

[(emotion felt – emotion expressed) * 6 – emotion felt]

The formula was used because it best represented the inhibition component that was theorized to reflect regulation difficulties with victimization and it allowed the full range of regulation scores to be represented (i.e., it "unfolded" the different scores participants could obtain and did not cancel out any sensitivity of the measure that other scoring methods may have, such as taking the difference of the emotion felt and expressed scores).

The mean of all individual emotion regulation scores was then used to calculate a total emotional regulation score for each emotion. The mean of the three emotional regulation scores for fear, sadness, and shame was then used to calculate a participant's emotional regulation score for the passive emotions (i.e., fear, sadness, shame). Each participant had an "active emotion regulation" score ("Active emotional regulation," comprised of the anger emotional regulation score) and a "passive emotion regulation score" (Passive emotional regulation; comprised of the fear, sadness, and shame

emotion regulation scores). Reliability coefficients for the "Passive emotional regulation" scale were acceptable, falling within the extensive range for boys (p = .76) and within the moderate range for girls (p = .63). Table 6 displays the possible ranges for the emotional regulation scores.

Table 6

Scale and Range for the "Active Emotion Regulation" and "Passive Emotion Regulation" Variables

Emotion regulation scale							
Felt	Expressed	Difference	ER score	Felt	Expressed	Difference	ER score
5	0	*5*	25	3	3	*0*	-3
4	0	*4*	20	4	4	*0*	-4
5	1	*4*	19	5	5	*0*	-5
3	0	*3*	15	0	1	*-1*	-6
4	1	*3*	14	1	2	*-1*	-7
5	2	*3*	13	2	3	*-1*	-8
2	0	*2*	10	3	4	*-1*	-9
3	1	*2*	9	4	5	*-1*	-10
4	2	*2*	8	0	2	*-2*	-12
5	3	*2*	7	1	3	*-2*	-13
1	0	*1*	5	2	4	*-2*	-14
2	1	*1*	4	3	5	*-2*	-15
3	2	*1*	3	0	3	*-3*	-18
4	3	*1*	2	1	4	*-3*	-19
5	4	*1*	1	2	5	*-3*	-20
0	0	*0*	0	0	4	*-4*	-24
1	1	*0*	-1	1	5	*-4*	-25
2	2	*0*	-2	0	5	*-5*	-30

CHAPTER IV

RESULTS

Results of this study are presented in four major sections. In the first section, descriptive statistics are presented regarding victimization, including any gender differences in its prevalence. The second section focuses on gender-related differences in the emotion scores and the YSR outcome scores. A power analysis conducted to determine whether the study contained enough power to effectively test the main hypotheses is presented in the third section. Finally, results pertinent to the tests of hypotheses 1 and 2 are presented in the fourth section. For the traditional tests of statistical significance, the alpha level was set at .05. Effect size estimates, appropriate to each type of analysis, also were calculated and are reported (effect size will be abbreviated as *ES*).

Data Cleaning

The data set was cleaned according to guidelines set by Tabachnick and Fidell (2001). The data was checked for accuracy of responses and to ensure that the data were within the correct range. No variable was deleted from the data set, but the scores of nine participants were deleted as either outliers or multivariate outliers, as judged by standard deviation and Mahalanobis distance scores (i.e., their scores were more than 3 standard deviations above the mean). The data set was reduced from 240 to 231.

Victimization: Prevalence, Gender-Related Differences, and Scoring

Prevalence of Bully Victims

Based on the dichotomous scoring of the victimization variable discussed in the Methods section, 198 (85.7%) of the participants were identified as nonvictims and 33 (14.3%) as victims. Table 7 summarizes the number and percent of victims and nonvictims.

Victimization: Gender or Grade Differences

Because previous research with participants in the same age range as this study has sometimes reported age-related and gender-related differences in the prevalence of victimization (Crick et al., 2001; Olweus, 1993a), it was important to inspect whether

Table 7

Number and Percentage of Bully Victims and Nonvictims as a Function of Grade Level and Gender

	6th grade		7th grade		8th grade			
Gender	*n*	%	*n*	%	*n*	%	Total	%
Boys								
Nonvictims	13	6	47	20	36	16	96	42
Victims	2	1	12	5	5	2	19	8
Girls								
Nonvictims	22	10	39	17	41	18	102	45
Victims	4	1.7	4	1.7	6	2.5	14	5

n =Number of victims or nonvictims in total sample.
%= Percent of total sample

gender or grade were related to victimization in the current sample. A two-way ANOVA (gender x grade) was conducted treating the dichotomized victim status variable (e.g., 0 = nonvictims, 1 = victims) as the dependent variable. There were no significant main effects or interaction, indicating that the proportion of victims was similar across grades, gender, and their cross-classification. In Appendix F, one finds summary statistic tables of the two-way ANOVA, including the mean scores, standard deviations, and the *F*, *df*, and *p* values.

Gender-Related Differences in Emotion, Emotion Regulation, and Outcome Scores

Gender-related victimization differences were not particularly stressed in the current study's literature review. However, as the collected data were inspected, it became apparent that the participants' gender could not be overlooked as a contributing factor. The decision was made, therefore, to carefully examine whether gender of participants needed to be factored in to the main analyses.

Gender differences: Emotion and its regulation. As a preliminary step, several one-way ANOVAs were executed to determine whether boys' emotion scores differed from those for girls. One-way ANOVAs were conducted treating gender as the independent variable. Entered as the dependent variable in these ANOVAs were one of the following scores: anger, sadness, shame, or fear rated as "emotion felt"; anger, sadness, shame, or fear rated as "emotion expressed"; and the composite indices of passive (sadness, fear, shame) or active (anger) emotion regulation. Table 8 summarizes the *F*, *df*, and *p* values obtained in these analyses. Table 9 summarizes the means,

Table 8

Intensity of the "Emotions Felt," "Emotions Expressed," Emotion Regulation Scores, and Outcomes Scores: Summary of F, df, and p Values for the Gender Main Effect

Emotion	*F*	*df*	*p*
Anger felt	4.76	(1, 230)	.03
Fear felt	47.51	(1, 230)	.00
Sad felt	24.85	(1, 230)	.00
Shame felt	36.98	(1, 230)	.00
Anger expressed	31.73	(1, 230)	.00
Fear expressed	28.45	(1, 230)	.00
Sad expressed	7.84	(1, 230)	.01
Shame expressed	13.21	(1, 230)	.00
Active emotion regulation	21.13	(1, 230)	.00
Passive emotion regulation	13.86	(1, 230)	.00
Internalizing outcomes	1.33	(1, 230)	.25
Externalizing outcomes	4.85	(1, 230)	.03

standard deviations (*SD*s), and the standard mean differences ($SMD = Mean_1 - Mean_2/SD$) for these ANOVAs, the latter of which are estimates of effect size.

As seen in Tables 8 and 9, results of the ANOVAs indicated that boys compared to girls endorsed feeling and expressing greater anger but lesser fear, sadness, and shame, with all being statistically significant and three of the eight effect sizes being at least "moderate" in size. Statements evaluating the magnitude of the *ES*s are based on Cohen's (1988) recommendations to consider *SMD*s of .20, .50, and .80 as small, medium, and large effect sizes, respectively. These gender differences are depicted in Figure 2. Boys' average emotion ratings of the three passive emotions (fear, sadness, shame) seem to show a "floor effect." These scores were low in general and also lower than those for girls. Apparently, boys were less likely than girls to endorse feeling and

Table 9

Intensity of the "Emotions Felt," "Emotions Expressed," Emotion Regulation Scores, and Outcomes Scores: Summary of M, SD, and SMD for the Gender Main Effect

Variables measured							
Variable	Mean	*SD*	*SMD*	Variable	Mean	*SD*	*SMD*
Anger felt[a]				Anger expressed[a]			
Boys	3.37	1.32	.28	Boys	2.56	1.41	.71
Girls	2.94	1.66		Girls	1.47	1.49	
Fear felt				Fear expressed			
Boys	1.55	1.41	-.83	Boys	1.27	1.14	-.67
Girls	2.85	1.49		Girls	2.14	1.30	
Sadness felt				Sadness expressed			
Boys	1.29	1.12	-.63	Boys	.98	.94	-.36
Girls	2.14	1.45		Girls	1.38	1.21	
Shame felt				Shame expressed			
Boys	1.29	1.23	-.75	Boys	1.11	1.11	-.46
Girls	2.47	1.66		Girls	1.70	1.34	
Active ER[b]				Passive ER[b]			
Boys	1.76	6.14	-.58	Boys	0.20	3.68	-.48
Girls	5.85	7.34		Girls	2.00	3.66	
Internalizing[c]				Externalizing[d]			
Boys	56.17	10.83	.15	Boys	53.67	10.19	.29
Girls	54.54	10.59		Girls	50.60	11.08	

Note. SMD compares the means for boys and girls.

[a] Score range from 0 to 5.
[b] Score range from -30 to 25.
[c] Score range from 31 to 100.
[d] Score range from 30 to 100.

expressing emotions of a passive or "internalizing" nature, which—in hindsight—was found to be consistent with previous findings in the literature (e.g., Zeman & Garber, 1996). In addition, the finding that boys reported expressing higher intensity anger than girls is consistent with others' findings regarding gender-differentiated display rules for emotion (Pollack, 1998; Zeman & Garber; Zeman & Shipman, 1998).

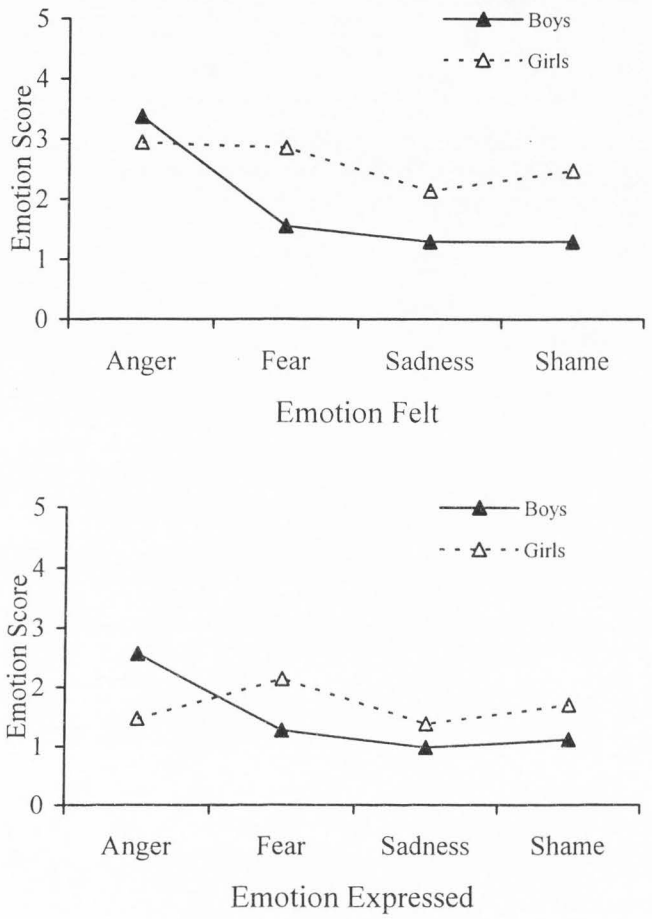


Figure 2. Means of the "emotion felt" and "emotion expressed" ratings as a function of gender.

Tables 8 and 9 confirm that girls compared to boys obtained statistically significant higher scores for "active emotion regulation" (moderate in magnitude) and "passive emotion regulation" (small in magnitude; see Figure 3). Concretely, this indicates that the girls were more likely than the boys to report the dual tendency of (a) inhibiting these emotions' expression, especially when (b) they intensely experienced those feelings. Girls more than boys simply regulated better the feeling of anger as well as the combined feelings of fear, sadness, and shame.

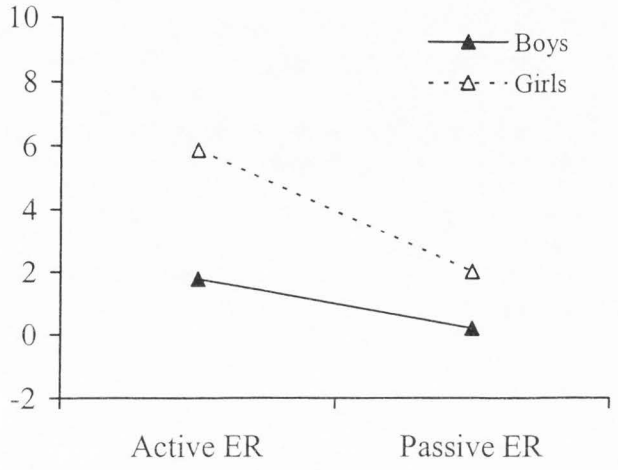


Figure 3. Means of the "active emotion regulation" and "passive emotion regulation" ratings as a function of gender.

Gender differences in outcome scores. YSR-based scores of internalizing and externalizing scores were also examined using one-way ANOVAs because previous research has demonstrated a gender difference in regard to the magnitude of the problem scores (i.e., boys report more externalizing behaviors, whereas girls report more internalizing; Frank, 2000). No gender main effect was found for the ANOVA involving internalizing outcomes, but boys compared to girls scored statistically significantly higher ($p = .03$) on the externalizing outcomes scale; however, this difference was small in magnitude (see Table 9). The higher externalizing scores reported by boys than girls is consistent with previous findings (Cohen, 1989; Frank). However, the similar internalizing scores found were not consistent with previous research, as girls more than boys often are found to report greater internalizing symptoms (Cohen). Figure 4 illustrates the mean scores for the outcome scores for both boys and girls.

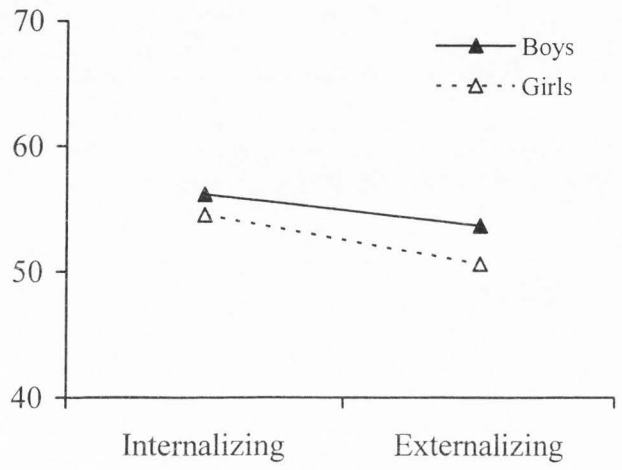


Figure 4. Means of the internalizing and externalizing scores as a function of gender.

Results of these preliminary analyses revealed consistent gender differences for the emotion and outcome scores. These differences had not been anticipated in the current literature view or design of the study. Nonetheless, these robust gender differences could play an important role in the present study, with gender moderating the extent to which victim-related effects are found and these effects differing depending upon the emotion examined (e.g., anger or sadness). Because of these findings, the decision was made to test the hypotheses concerning emotions, emotion regulation, and outcomes separately for boys and girls.

Power Analysis for the Regression Analyses

Because of the need to test hypotheses separately for each gender, it was imperative to examine whether the regression analyses involved in the main hypothesis testing would be sufficiently powerful. Using guidelines described by Tabachnick and

Fidell (2001), a power analysis was conducted to determine whether the study had sufficient power to detect an effect in each gender sample.

The formula $N \geq 50 + 8\ m$ (m = number of IVs) was used to determine the sample size needed for multiple regression testing and the formula $N \geq 104 + m$ was used for testing individual predictors (the formulas assume a medium magnitude relationship between the independent and dependent variable). The current study employs two independent variables for its multiple regression testing; therefore, 66 [= 50 + (8)(2)] participants are needed. However, 106 [= (104 + 2)] participants are needed for the linear regressions. The current sample size of 115 boys and 116 girls, respectively, provided enough power to ascertain whether the hypotheses could or could not be rejected for each gender.

Distinctions Among Passive Emotions

The reader will note that the distinctions among the "passive" emotions were retained for testing of hypothesis 1 in order to evaluate conclusions in previous research regarding victim-related differences in each emotion as well as its regulation. Regarding hypotheses 2 and 3, however, it was more logical to test this using the emotion composite for the passive emotions (fear, sadness, shame) and the one active emotion score (anger), so that the emotion scores would parallel the internalizing and externalizing outcomes scores.

Hypothesis 1: Victimization-Relevant Differences in the Feelings Felt or Expressed

Hypothesis 1 consists of two specific subhypotheses that should be viewed as comparisons regarding trends expected in the results. Subhypothesis 1a predicts that differences should be *negligible* between the level of victimization and the intensity of reported *experiences* (i.e., feeling) of anger, fear, sadness, and shame. However, higher rates of victimization should be related to higher reported intensity *expressions* of the four feelings (subhypothesis 1b). Figure 5 illustrates the ideal hypothesized relationships for emotion felt compared to emotion expressed scores using the dichotomized classification of victims and nonvictims.

The procedures used to examine the validity of hypothesis 1 were to conduct regression analyses treating victim status as a continuous variable. The statistical significance and effect size magnitude of each of the effects were then summarized in tabular form, including information regarding the values of R^2, alpha, beta, confidence

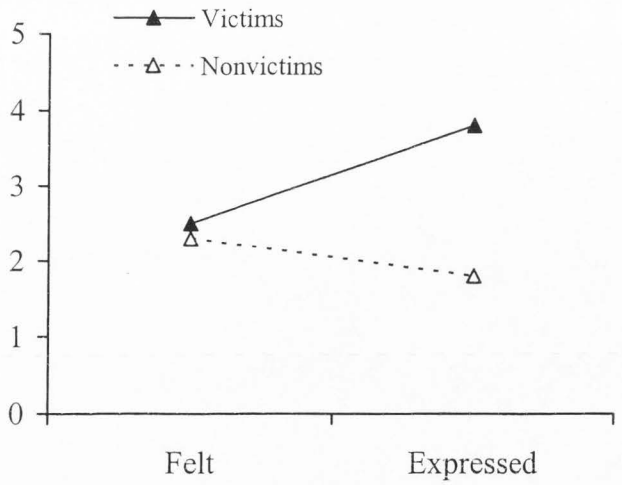


Figure 5. Ideal hypothesized scores for "emotion felt" and "emotion expressed" ratings as a function of victimization.

intervals for beta, and effect size. Effects in these analyses were declared "statistically significant" when the corresponding alpha level was equal to, or less than, .05. Because a statistically significant effect is not necessarily a "practically" or "clinically" significant effect, Cohen's (1988) guidelines were used to calculate and evaluate effect sizes for each type of analysis conducted. For regression testing, the value of R^2 is the measure of the effect size, with .02, .15, and .35 as a small, medium, and large effect size. Unstandardized beta values and their corresponding confidence intervals (set at 95%) are included within Table 10. The table also includes a qualitative evaluation (labeled "Qual") indicating whether the regression analysis yielded results consistent with the hypothesis. A "Y" indicates a finding consistent with the hypothesis, and an "N" indicates a finding inconsistent with the hypothesis.

Subhypothesis 1a. For boys and girls separately, regression analyses were used to assess the extent to which level of victimization was associated with reported feelings of anger, fear, sadness, and shame. The continuous scores for each emotion felt variable were the dependent variables in the regression analyses, and the continuous victimization score represented the predictor variable. Subhypothesis 1a will be declared to have received "support" in the regression analyses when the effect size for R^2 is $\leq .14$.

Subhypothesis 1a: Regression result for the boys. Four linear regression analyses were conducted to test the prediction that there were no significant associations in the emotion felt scores with level of victimization for boys. Table 10 summarizes the results of the analyses for boys. Victim status did not significantly predict boys'

Table 10

Linear Regressions Predicting Emotions Felt for Boys: Summary of R, R^2, p, B, and Confidence Interval (CI) Values

Emotions	*R*	R^2	*P*	*B*	CI	Qual
Anger felt	.01	.00	.94	-8.92	-.24 - .22	Y
Fear felt	.05	.00	.60	5.79	-.16 - .28	Y
Sad felt	.05	.00	.58	5.45	-.14 - .25	Y
Shame felt	.13	.02	.17	-.15	-.37 - .07	Y

reports of "anger felt" or "fear felt." For the newer emotions studied, victim status did not significantly predict boys' endorsements of "sadness felt" or "shame felt." All of the R^2 estimates of ESs approached zero (see Figure 6). The results for boys are, therefore, consistent with subhypothesis 1a, although they should be interpreted cautiously because of the floor effect reported earlier.

Subhypothesis 1a: Regression result for the girls. Four linear regression analyses were conducted to test the hypothesis that there were no significant associations of the reported emotion felt scores with level of victimization for girls. For girls, victimization significantly predicted reported feelings of anger, but as seen in Table 11, the R^2 value for "anger felt" (.08) was not large enough to reject the null for subhypothesis 1a. Victimization did not significantly predict "fear felt" ($ES = .00$); therefore, subhypothesis 1a did receive support for girls' reports of feeling afraid or angry.

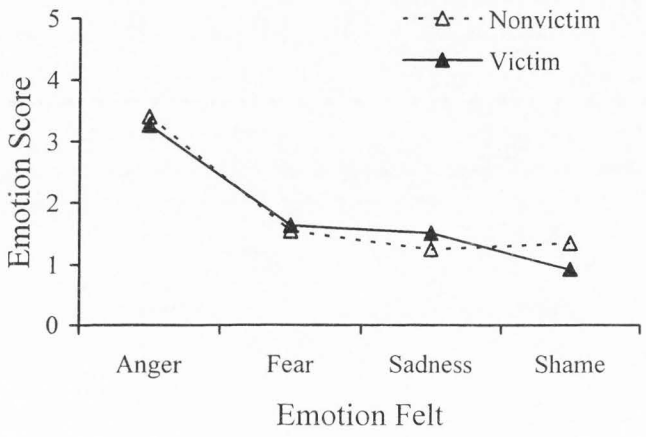


Figure 6. Mean "emotion felt" scores of boys as a function of victimization.

Girls' victim status did significantly predict the intensity of their reported sad feelings, but, on the other hand, it did not predict the reported intensity of shame. However, the *ES*s both for "sadness felt" (.05) and "shame felt" (.01) were smaller than the $R^2 \geq .15$ needed to consider these differences at least moderate in size (see Table 11). Subhypothesis 1a is thus also supported in girls for sadness and shame, as no meaningful differences were found between nonvictims and victims (see Figure 7).

Subhypothesis 1b. For boys and girls separately, regression analyses were used to assess the extent to higher levels of victimization predicted expressing higher intensities each of anger, fear, sadness, and shame. The continuous scores for each emotion expressed variable were the dependent variables in these analyses, with the continuous victimization variable being treated as the predictor. Subhypothesis 1b will be declared to have received support in the regression analyses when the R^2 is $\geq .15$.

Table 11

Linear Regressions Predicting Emotions Felt for Girls: Summary of R, R^2, p, B, and Confidence Interval (CI) Values

Emotions	*R*	R^2	*p*	*B*	CI	Qual
Anger felt	.28	.08	.00	.47	.17 - .78	Y
Fear felt	.00	.00	.98	-4.16	-.31 - .30	Y
Sadness felt	.22	.05	.02	.34	.06 - .61	Y
Shame felt	.08	.01	.37	.14	-.17 - .46	Y

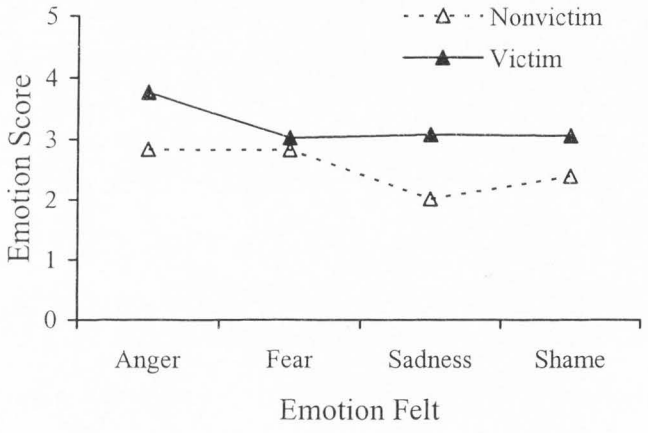


Figure 7. Mean "emotion felt" scores of girls as a function of victimization status.

Subhypothesis 1b: Regression result for the boys. Four linear regressions were conducted to test the prediction that higher rates of victimization for boys was associated with reported higher intensities for each of the four emotion expressed scores (anger, fear, sadness, and shame). Table 12 summarizes the results of the four linear regressions conducted for boys. Victim status did not significantly predict boys' expression of anger, fear, sadness, or shame, and the R^2 estimates of *ES* approached 0 for each of these emotion scores (see Figure 8). The results for boys are, therefore,

Table 12

Linear Regressions Predicting Emotions Expressed for Boys: Summary of R, R^2, p, B, and Confidence Interval (CI) Values

Emotions	*R*	R^2	*p*	*B*	CI	Qual
Anger expressed	.07	.01	.47	9.29	-.16 - .34	N
Fear expressed	.17	.03	.08	.18	-.02 - .36	N
Sad expressed	.02	.00	.86	1.34	-.15 - .18	N
Shame expressed	.03	.00	.74	-3.33	-.23 - .17	N

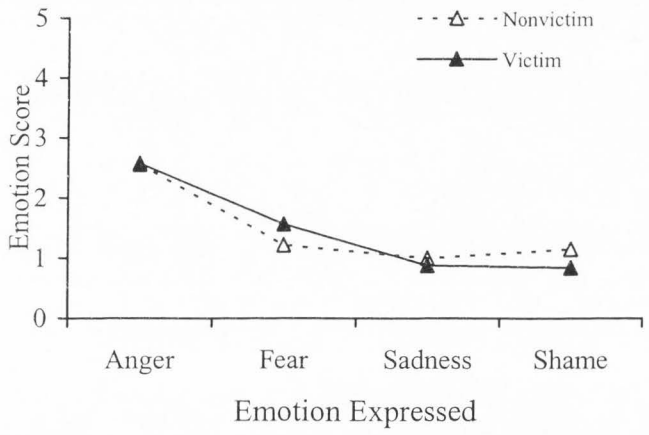


Figure 8. Mean "emotion expressed" scores of boys as a function of victimization status.

inconsistent with subhypothesis 1b (cf., Figure 5) and are contrary to previous research showing that victims express more anger and fear than nonvictims (Mahady Wilton et al., 2000; Olweus, 1993a).

Subhypothesis 1b: Regression result for the girls. Four linear regressions were conducted to test the prediction that higher rates of victimization for girls was

associated with reported higher intensities for each of the four emotion expressed scores (i.e., anger, sadness, shame, fear). For girls, victim status did not significantly predict "anger expressed" or "fear expressed" (the R^2 values approached 0). Victim status did significantly predict "sadness expressed," but not "shame expressed." However, the effect size for "shame expressed" was too small (.11) to constitute a finding consistent with subhypothesis 1b (see Table 13 and Figure 9). Therefore, for girls, as victimization increased, there was no corresponding increase in emotions expressed (cf., Figure 5).

Summary of findings for hypothesis 1. In every regression analysis, for boys and girls alike, the results showed weak effects of the victimization predictor on the emotion scores. These weak effects are consistent with subhypothesis 1a (i.e., that there would be minimal effects in the "emotion felt" scores attributable to victimization). On the other hand, subhypothesis 1b actually predicted stronger effects of victimization on participants' "emotion expressed" scores. Findings did not support this prediction for

Table 13

Linear Regressions Predicting Emotions Expressed for Girls: Summary of R, R^2, p, B, and Confidence Interval (CI) Values

Emotions	*R*	R^2	*p*	*B*	CI	Qual
Anger expressed	.17	.03	.07	.26	-.02 - .55	N
Fear expressed	.02	.00	.85	-2.40	-.27 - .22	N
Sad expressed	.33	.11	.00	.41	.19 - .63	N
Shame expressed	.14	.02	.13	.20	-.06 - .45	N

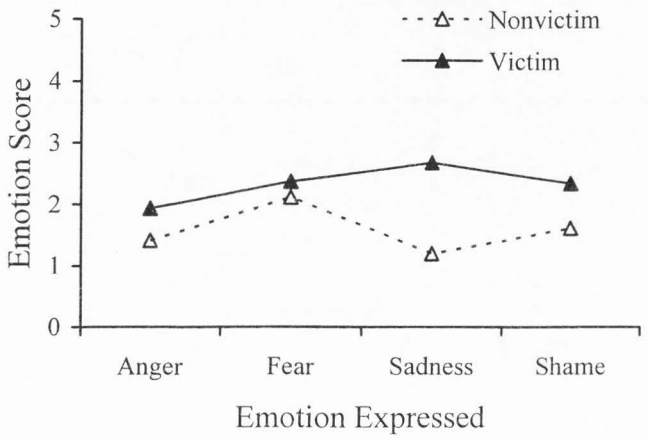


Figure 9. Mean "emotion expressed" scores of girls as a function of victimization status.

the boys, as higher levels of victimization for boys did not predict higher intensities of anger, fear, sadness, or shame expressed. Interesting to note, however, is that boys who experienced higher rates of victimization reported expressing more fear by a small *ES*. Statistically significant support for subhypothesis 1b also was not found for girls. However, girls who experienced higher frequencies of victimization reported expressing higher levels of anger, sadness, and shame by an effect small in magnitude.

Hypothesis 2: Victim-Related Differences in Emotion Regulation

Hypothesis 2 predicted that higher levels of victimization would be associated with lower (i.e., worse) scores on the emotion regulation scale. Two linear regressions were conducted for each gender using the continuous victimization variable as the independent variable and the emotion regulation scores ("Active Emotion Regulation" and "Passive Emotion Regulation") as the dependent variables. Hypothesis 2 would be

confirmed if victimization predicts either emotion regulation score by an effect size of at least moderate in magnitude ($R^2 \geq .15$). As seen in Table 14, victimization was not significantly associated with either passive or active emotion regulation for either gender, as the *ES*s were negligible in magnitude (see Figure 10).

The lack of significant findings for hypothesis 2 suggests that emotion regulation does not play a mediating role in the link between victimization and internalizing or externalizing outcomes, which could automatically invalidate hypothesis 3. Some researchers do nonetheless recommend examining mediationally oriented hypotheses even when the bivariate associations among the variables are not consistently significant (Shrout & Bolger, 2002).

Hypothesis 3: Role of Emotion Regulation in Victimization and Outcomes

Hypothesis 3 sought to ascertain the role emotion regulation plays in the connection between victimization and internalizing or externalizing outcomes. Prior

Table 14

Linear Regressions Predicting Emotion Regulation Scores: Summary of R, R^2, p, B, and Confidence Interval (CI) Values

Emotion regulation	*R*	R^2	*p*	*B*	CI	Qual
Boys						
Active emotion regulation	.08	.01	.40	-.08	-1.53 - .61	N
Passive emotion regulation	.10	.01	.29	-.10	-1.00 - .30	N
Girls						
Active emotion regulation	.11	.01	.24	.11	-.57 - 2.21	N
Passive emotion regulation	.10	.01	.31	-.10	-1.10 - .34	N

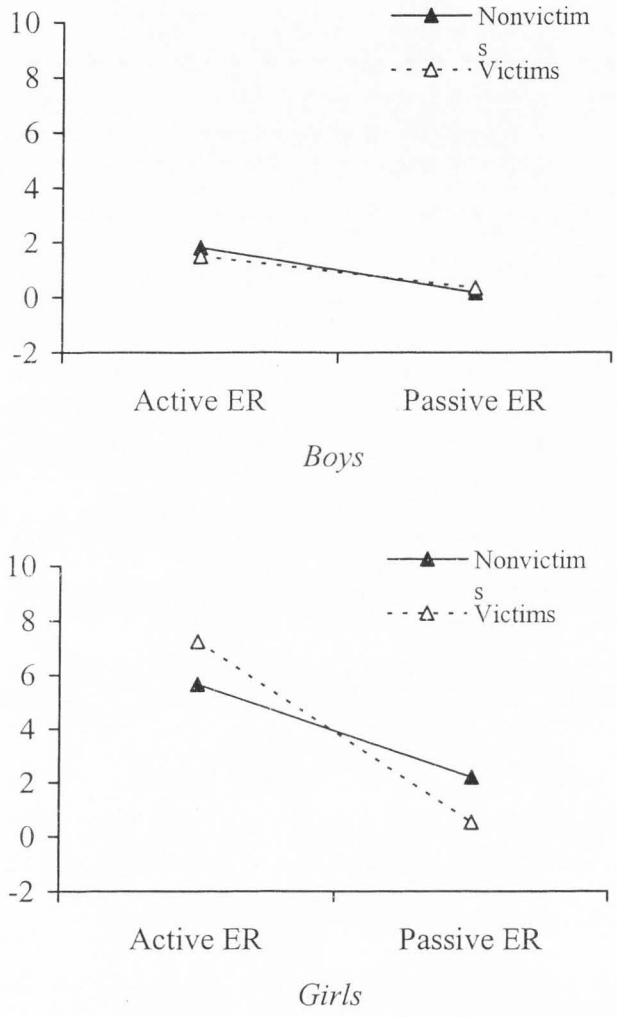


Figure 10. Means of emotion regulation scores for victims and nonvictims.

research has demonstrated an association between victimization and subsequent outcomes (see Hawker & Boulton, 2000, for a review), so any determination of a mediating role of emotional regulation would first require finding an association between victimization and outcomes in the current sample. Therefore, two linear regressions were conducted, separately for boys and girls, using the continuous victimization variable as the predictor and the YSR-based internalizing and

externalizing scores as the dependent variables. As seen in Table 15, victimization was significantly associated with internalizing outcomes for both boys and girls, with the effect sizes approaching moderate in size for girls and small in size for boys. Victimization was significantly associated with externalizing outcomes for girls (medium *ES*), but not for boys (although a small *ES* was found). Overall, these effects show that as victimization increased, there was a corresponding increase in internalizing and externalizing outcomes.

Models of mediating factors. Hypothesis 3 presents two competing models, summarized as follows.

Model A: Emotion regulation plays a *completely* indirect role in the association between victimization and internalizing/externalizing outcomes. That is, being victimized does not directly lead to higher levels of internalizing and externalizing outcomes compared to nonvictims, but instead, one's ability to regulate and inhibit the expression of certain emotions determines one's level of outcomes.

Table 15

Linear Regressions Predicting Outcomes: Summary of R, R^2, B, Confidence Intervals (CI), and p Values

Outcome	*R*	R^2	*B*	CI	*p*
Boys					
Internalizing	.31	.10	3.18	1.38 – 4.97	.00
Externalizing	.14	.02	1.34	-.43 – 3.10	.13
Girls					
Internalizing	.36	.13	3.94	2.06 – 5.83	.00
Externalizing	.37	.14	4.21	2.24 – 6.17	.00

Model B: Emotion regulation plays a partially indirect role in the association between victimization and internalizing and externalizing outcomes; that is, some of the connection between victimization and outcomes can be explained by one's emotion regulation abilities. Figure 11 illustrates these two models.

To test each model in Figure 11, an association between each indirect variable must first be established (i.e., from victimization to emotion regulation and from emotion regulation to outcomes). Obviously, the lack of a significant association between any path of the model would make testing the models in Figure 10 unnecessary. Therefore, Pearson product coefficients were calculated and presented for each model to determine if the variables were associated by at least a medium *ES* to warrant model testing. Cohen's (1988) standards for *ES*s for correlations were used,

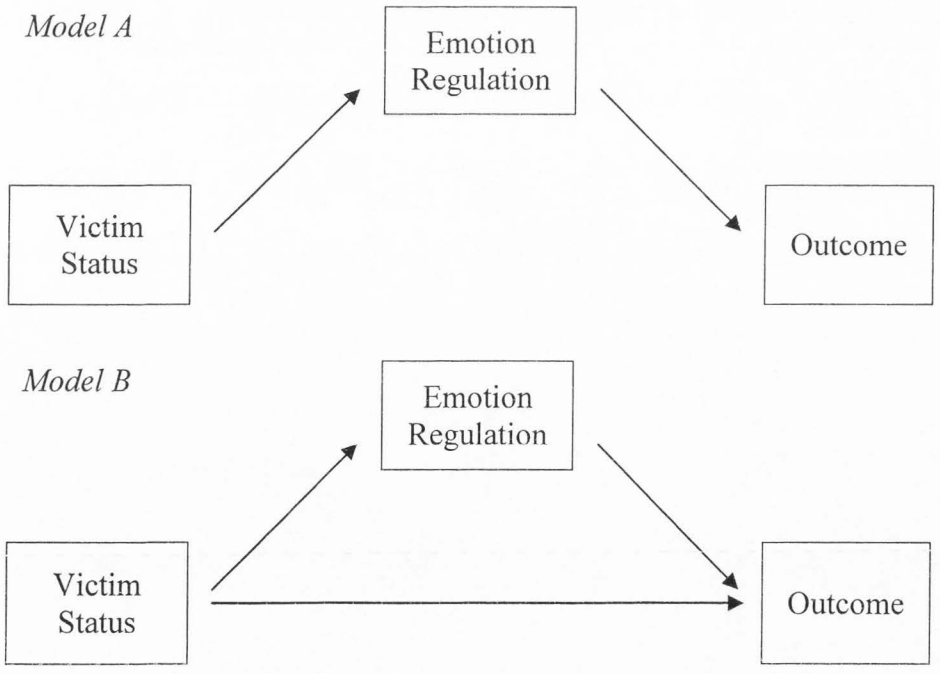


Figure 11. Possible models for emotion regulation as a mediator between victimization and internalizing and externalizing outcomes.

with r = .10, .30, and .50 representing small, medium, and large effects, respectively. An r coefficient value of $\geq$ .30 is needed to warrant subsequent path analysis and model testing. A correlation matrix (Table 16) was calculated to determine the magnitude of the association between victimization, emotion regulation, and outcomes to determine which models named in Table 17 would be subjected to a path analysis.

Depending upon the magnitudes of the associations between scores for each pair of variables, path analyses would be employed to examine the support for each of Models A and B. Readers should note that each of the two models could have been tested in eight cells, representing the combination of gender x type of emotion regulation x type of clinical outcome, as seen in Table 16. Unfortunately, few of the

Table 16

Correlation Matrix for Victimization, Emotion Regulation, and Outcomes

Gender	1	2	3	4
Boys				
1. Victimization	-			
2. Active ER	-.08	-		
3. Passive ER	-.10	.33*	-	
4. Internalizing	.31*	.08	.13	-
5. Externalizing	.14	-.23*	.04	.36*
Girls				
1. Victimization	-			
2. Active ER	.11	-		
3. Passive ER	-.10	.28*	-	
4. Internalizing	.36*	.03	-.13	-
5. Externalizing	.37*	-.36*	-.17	.53*

*$p \leq .05$

Table 17

Possible Models Proposed for Testing of Hypothesis 3

Model	Emotion regulation	Outcomes
Boys		
1.	Active emotion regulation	Internalizing
2.	Active emotion regulation	Externalizing
3.	Passive emotion regulation	Internalizing
4.	Passive emotion regulation	Externalizing
Girls		
5.	Active emotion regulation	Internalizing
6.	Active emotion regulation	Externalizing
7.	Passive emotion regulation	Internalizing
8.	Passive emotion regulation	Externalizing

bivariate associations among the variables were large enough to warrant extensive testing of either Model A or B in these eight cells.

Hypothesis 3: Association between victimization and "active emotion regulation." The coefficient values in Table 16 illustrate that the association between victimization and "active emotion regulation" is negligible for boys. This indicates that victimization of boys is not related to "active emotion regulation;" thus making any testing involving the mediating models of "active emotion regulation" for boys unnecessary. For girls, surprisingly, a small effect contrary to the hypothesis direction was found for "active emotion regulation" and victimization, indicating that hypothesis testing of victimization for girls and "active emotion regulation" is also unnecessary.

Hypothesis 3: Association between victimization and "passive emotion regulation." For "passive emotion regulation," both boy and girl victimization was associated with only a small negative *ES*, indicating that as victimization increases,

there is a slight, inverse ability to inhibit and not express passive emotions (fear, sadness, and shame). Unfortunately, the observed correlations between victimization and "passive emotion regulation" for both genders were too small to warrant further analysis of the models. Knowing that the weak association between victimization and ER deemed testing of the models unnecessary, the paths from ER to outcomes were still analyzed to determine the strength of those paths.

Hypothesis 3: Association between "active emotion regulation" and outcomes. The ability to regulate anger (i.e., "active emotion regulation") was negatively associated with externalizing problems for boys (r = -.23) and for girls (r = -.36), indicating that as one's ability to inhibit and suppress anger worsens, one has a corresponding increase in externalizing problems. On the other hand, "active emotion regulation" was not associated with internalizing outcomes for boys (r = .08) or girls (r = .03), suggesting that the ability to regulate anger is not related to one's level of internalizing problems for either gender.

Hypothesis 3: Association between "passive emotion regulation" and outcomes. For boys, "passive emotion regulation" was not significantly associated with externalizing outcomes (r = .04) and surprisingly, it was positively correlated with internalizing outcomes (r = .13), although small in magnitude. Thus, boys who endorsed higher levels of internalizing outcomes also reported inhibiting the expression of passive emotions (i.e., fear, sadness, shame). For girls, there was a negative association between "passive emotion regulation" and both internalizing (r = -.13) and externalizing (r = -.17) outcomes. Although the effects were small in magnitude, girls

externalizing (r = -.17) outcomes. Although the effects were small in magnitude, girls who reported difficulty inhibiting the expression of the passive emotions also reported slightly higher levels of internalizing and externalizing outcomes.

Hypothesis 3: Model testing for boys and girls and summary. Hypothesis 3 asserted that emotion regulation played an indirect role in the connection between being victimized and outcomes of either an internalizing or externalizing nature. Unfortunately, victimization was not correlated highly with emotion regulation for either boys or girls. The weak association of victimization to emotion regulation for both genders meant that it was unnecessary to test emotion regulation roles in mediating the relationship of victimization to outcomes.

CHAPTER V

DISCUSSION

The primary goal of the present thesis was to ascertain the role of emotion regulation in the connection between being victimized and symptoms of internalizing or externalizing behaviors. An ancillary goal of the thesis was to test the argument in the current literature that victims suffered from poor emotion regulation abilities by comparing the internal state (i.e., emotion felt) of the victim to the external state (i.e., emotion expressed). Results relevant to hypothesis 1 are discussed separately for boys and girls and for each emotion, as the results from hypothesis 1 implicate different processes depending on the emotion measured and the gender of the victim. Hypotheses 2 and 3 are discussed together, as the results regarding both hypotheses support similar conclusions.

To frame the discussion of findings, Gross's (1998a, 1998b) entire model of emotion regulation should be briefly reviewed. Gross distinguishes between antecedent-focused regulation and response-focused regulation. Most literature concerning victims of bullying has concentrated on the response-focused regulation components of Gross's model, assuming that victims are unable to inhibit the *expression* of certain emotions. Although the discussion focuses on the response-focused regulation components in Gross's model, it is important to note that several results implicate victim-related differences in antecedent-focused regulation, despite antecedent-focused regulation not being measured. Figure 12 illustrates the differences between antecedent- and response-focused emotion regulation.

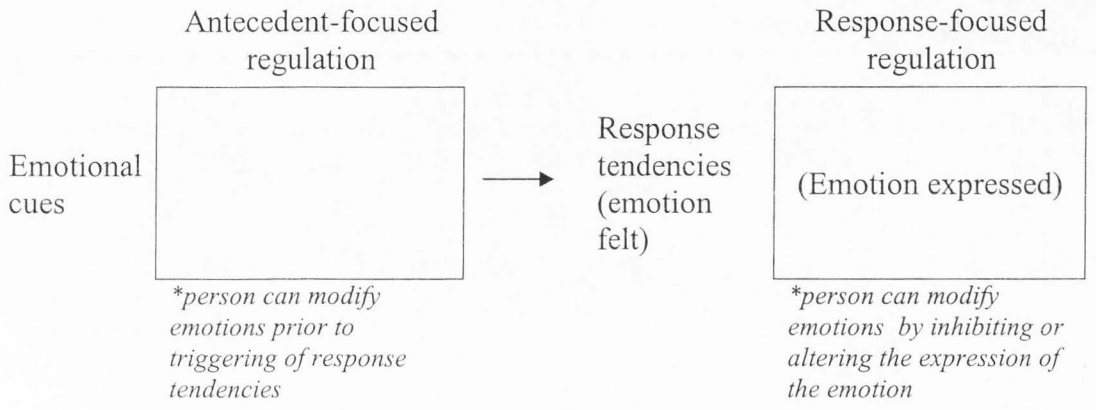


Figure 12. Emotion regulation cycle: Antecedent versus response-focused regulation.

Hypothesis 1: Emotions Felt and Emotions Expressed

Experience and Expression of Anger in Boy Victims and Nonvictims

As predicted, level of victimization for boys did not affect their reported intensities of anger felt during a bullying episode. Contrary to the hypothesis, however, boys who reported higher rates of victimization did *not* simultaneously report higher expressions of anger. The partial support for hypothesis 1 suggests that the inhibition of anger may not be an emotion regulation skill that victims and nonvictims differ on. Perhaps previous researchers' focus on the victim's overt behavior and consequential lack of consideration for the initial impulse of the emotion (cf., Frijda, 1986) has led them to misunderstand the exact nature of response-focused regulation difficulties boy victims may have with anger. Gross (1998a) asserted that an expressed emotion can be modified by intensifying, prolonging, or curtailing it, so it is possible that victim-related breakdowns within response-focused regulation concern difficulty stifling an emotion

once the choice has been made to express it, as opposed to an inability to inhibit its expression. Therefore, victims and nonvictims may not differ in the *magnitude* (i.e., intensity) of anger expressed, but instead may differ in the *duration* of its expression (cf. Kochender & Ladd, 1997; Mahady Wilton et al., 2000; Perry, Hodges, & Egan, 2001). Although the current study did not directly measure duration of such responses by participants, this regulation difficulty matches previous research that victims continue to express anger during a bullying episode despite its expression being ineffective at terminating the bullying experience, whereas nonvictims select more effective problem-solving responses (Mahady Wilton et al.; Perry et al., 1990, 2001).

Experience and Expression of the Passive Emotions in Boy Victims and Nonvictims

Examining the mean scores of the reported emotions revealed a "floor effect" for boys in their willingness to report feeling and expressing fear, sadness, and shame. Boys in general reported lower intensities of these passive emotions than girls did (see Figure 2). One possible reason for this finding may be that boys in middle school do not experience passive emotions when bullied. However, this is unlikely given that the majority of victims are considered "passive" emotions, which are described as being more anxious and fearful than their peers (Olweus, 1993a; Schwartz et al., 2001). It seems most likely that boys were simply reluctant to report feeling "passive" emotions because of gender-related social-demand characteristics and/or display rules (Pollack, 1998; Zeman & Garber, 1996). Despite the floor effect, conclusions were still drawn regarding the regulation of fear and shame.

Experience and Expression of Fear in Boy Victims and Nonvictims

Boys who experienced higher rates of victimization reported expressing somewhat more fear than those that reported low rates of victimization. Though small in magnitude, it is consistent with the direction of the hypothesis and suggests that boy victims may have trouble inhibiting the impulse to express fear during a bullying episode. Nonvictims, in contrast, apparently are able to avoid expressing an emotion that may reinforce the bully (see Olweus 1993a) or prolong the bullying episode (Mahady Wilton et al., 2000). This finding provides some support that victims have poor response-focused regulation associated with fear.

Experience and Expression of Shame in Boy Victims and Nonvictims

Boys who reported high rates of victimization more than those that reported low rates reported feeling greater shame, although the effect size was small in magnitude. This finding is consistent with previous evidence suggesting that victims suffer from excessive feelings of characterological shame (Juvonen et al., 2001). Perhaps victims feeling more shame compared to nonvictims is a result of being repeatedly victimized over time without being able to defend themselves (Perry et al., 1988). However, this increase in feeling shame did not correspond to expressing more shame, as no association was found between victimization for boys and their reported expressions of shame.

Feeling somewhat greater shame as the frequency of victimization increases suggests that boy victims may have some antecedent-focused emotion regulation

difficulties in regard to regulating shame. Perhaps boy victims are unable to avoid feeling shame because they ruminate about their victimization status and question why they are constantly targeted (e.g., "Why am I picked on instead of someone else? Is it my fault?"), whereas a nonvictim may be more successful in diverting their attention to less self-critical or blaming thoughts (e.g., "That bully is just mean…I didn't do anything to deserve being picked on," cf., Ahmed, 2005; Juvonen et al., 2001). Perhaps, then, a boy victim's inability to regulate his emotions prior to the evocation of response tendencies could lead a boy victim to feel more shame compared to a nonvictim.

Experience and Expression of Anger in Girl Victims and Nonvictims

Hypothesis 1 concerning girls and anger was not confirmed as seen from the lack of substantial differences between victimization and the degree of anger expressed. However, girls who reported higher rates of victimization also reported expressing more anger than those girls who reported lower rates of victimization by a small effect size. This suggests that girl victims may have trouble inhibiting anger impulses compared to nonvictims and fits the current literature that victims have trouble with the inhibition of emotions during a bullying episode (Kochenderfer-Ladd & Skinner, 2002; Mahady Wilton et al., 2000; Perry et al., 2001). Based on this small effect size, it is possible that girl victims have trouble with response-focused emotion regulation.

In addition, a small effect size was found for level of victimization and intensity of anger felt. Although this finding was contrary to the hypothesis, it suggests that girl

victims may also have trouble with antecedent-focused emotion regulation. Perhaps girl victims are unable to manage their emotions prior to a bullying attack primarily because of their continued victim status, as those students identified as victims in middle school typically have a history of victimization dating back to elementary school (Olweus, 1993a). This residual pattern of victimization across time certainly could lead girl victims to feel more anger and frustration than nonvictims, as they are yet again in a situation they have not been able to avoid (cf., Olweus; Perry et al., 1990, 2001). These increased feelings of anger would then place a greater demand on their response-focused regulation skills, and consequently, result in a greater intensity of anger expressed. These results leave open the possibility that victims and nonvictims have similar inhibition capacities, but it appears that the intense feelings of anger felt by victims causes too much strain on their response-focused regulation system to allow it to function effectively (i.e., inhibit the anger impulse). The notion that girl victims suffer from both antecedent-focused and response-focused regulation difficulties is inconsistent with the literature's suggestion that victims struggle *only* with response-focused regulation difficulties and illustrates the complexity of regulation difficulties victims may experience.

Experience and Expression of Sadness in Girl Victims and Nonvictims

Small effect sizes were found between level of victimization for girls and for both sadness felt and expressed, indicating partial support for hypothesis 1. The difficulties with antecedent- and response-focused regulation that may contribute to the

higher reported experience and expression of anger are likely also contributing to the somewhat higher victim-related differences found for sadness, as a victim's consistent victimization would lead to greater feelings of sadness and a greater demand on one's ability to inhibit emotions. Additionally, the greater reported feelings of sadness in girl victims might be a precursor to the internalizing problems that victims experience (see Hawker & Boulton, 2000); but victims may actually be *choosing* to express sadness (as opposed to failing to inhibit it) because its expression may be negatively reinforcing (i.e,. it ends the bullying interaction quicker than a more aggressive response; cf. Mahady Wilton et al., 2000). Unfortunately, expressing sadness is detrimental because it reinforces the bully's needs for dominance (Olweus, 1993a) and is associated with subsequent victimization (Mahady Wilton et al., 2000; Olweus, 1993a, 1993c). This implies that victims may not realize or understand the long-term consequences of the expression of sadness, and highlights the need within Gross' model of an "evaluation" component reflecting a person's ability to assess the current and/or subsequent consequences of expressing any emotion. This evaluation piece is discussed in more detail later in regard to hypotheses 2 and 3.

Experience and Expression of Fear in Girl Victims and Nonvictims

Level of victimization was not associated with reported intensities for feeling fear; however, contrary to hypothesis 1, victimization was *not* associated with higher intensities for expressing fear. Perhaps girls are more inclined to express less confrontational approaches because of the social-demand characteristics discussed

earlier (Zeman & Garber, 1996). As such, one may not necessarily see any victim-related differences for girls in terms of inhibiting "flight" responses, as girls in general may be more inclined to express those responses.

Experience and Expression of Shame in Girl Victims and Nonvictims

Level of victimization for girls was not associated with intensities of shame felt, as was predicted. However, girls who reported higher rates of victimization more than girls who reported low rates reported expressing somewhat more shame. Although small, the greater expression of shame is not too surprising in light of victims' tendencies to characterologically self-blame (Juvonen et al., 2001) and to score higher on shame measures compared to bullies (Ahmed, 2005). As with anger and sadness, girl victims may be unable to inhibit the expression of an emotion that is linked with continued victimization (cf. Mahady Wilton et al., 2000; Salmivalli et al., 1996), but victims also may be choosing to express shame for the same reasons they may choose to express sadness (i.e., it is negatively reinforcing).

Emotion Regulation Difficulties as a Result of Type of Victimization

Inspecting the results pertaining to hypothesis 1 suggested that girls might experience more emotion regulation difficulties overall than boys do in bullying situations. This finding may reflect gender-related differences in the type of bullying boys and girls typically experience. Whereas boys are more likely to experience direct forms of bullying, girls are more likely to experience indirect forms (see Table 1; Crick

et al., 2001; Olweus, 1993a). Occurrences of indirect bullying are covert and potentially can occur anywhere, thus making it harder to anticipate and, consequently, harder to avoid than direct forms of bullying. For example, a boy who is bullied during recess could potentially avoid the bullying by avoiding recess. However, a girl who experiences indirect bullying (e.g., having rumors spread) would not necessarily be able to predict when and where the bullying would occur, as such bullying is not confined to one location (e.g., the rumors could spread to lunch, recess, other classrooms, and so forth). Therefore, girls may be unable to avoid indirect bullying as often as boys can avoid direct bullying (cf., Owens, Slee, & Shute, 2001). Perhaps the more extensive regulation difficulties suggested by hypothesis 1 between girl victims and boy victims is a function of the type of bullying girls experience more than boys and the difficulty therein of predicting and avoiding its occurrence (cf. Khatri et al., 2000).

Summary for Hypothesis 1

Unfortunately, little support was found for hypothesis 1. Perhaps the current literature's reliance on tests of statistical significance and lack thereof on effect sizes (see Borg, 1998) when evaluating emotion regulation abilities among victims and nonvictims has led to the faulty notion that victims suffer primarily from response-focused regulation difficulties. Perhaps the literature has underestimated the severity of regulation difficulties in victims, as the current results suggest difficulty with antecedent-focused regulation in addition to response-focused regulation. Table 18 summarizes the emotion regulation difficulties that victims may suffer from, based on the results bearing on hypothesis 1.

Table 18

Summary of Suggested Emotion Regulation Difficulties after Hypothesis 1 Analysis

Emotion	Boys	Girls
Anger	Response-focused *(de-escalation)*	Antecedent-focused; response-focused *(inhibition)*
Fear	Response-focused (*inhibition*)	*(no victim difference)*
Sadness	*(no victim difference)*	Antecedent-focused; response-focused *(inhibition, evaluation)*
Shame	Antecedent-focused	Response-focused *(inhibition, evaluation)*

Note. Suggested emotion regulation difficulties after hypothesis 1 analysis displays possible regulation difficulties (antecedent-focused and/or response-focused regulation) for victims compared to nonvictims for each emotion measured.

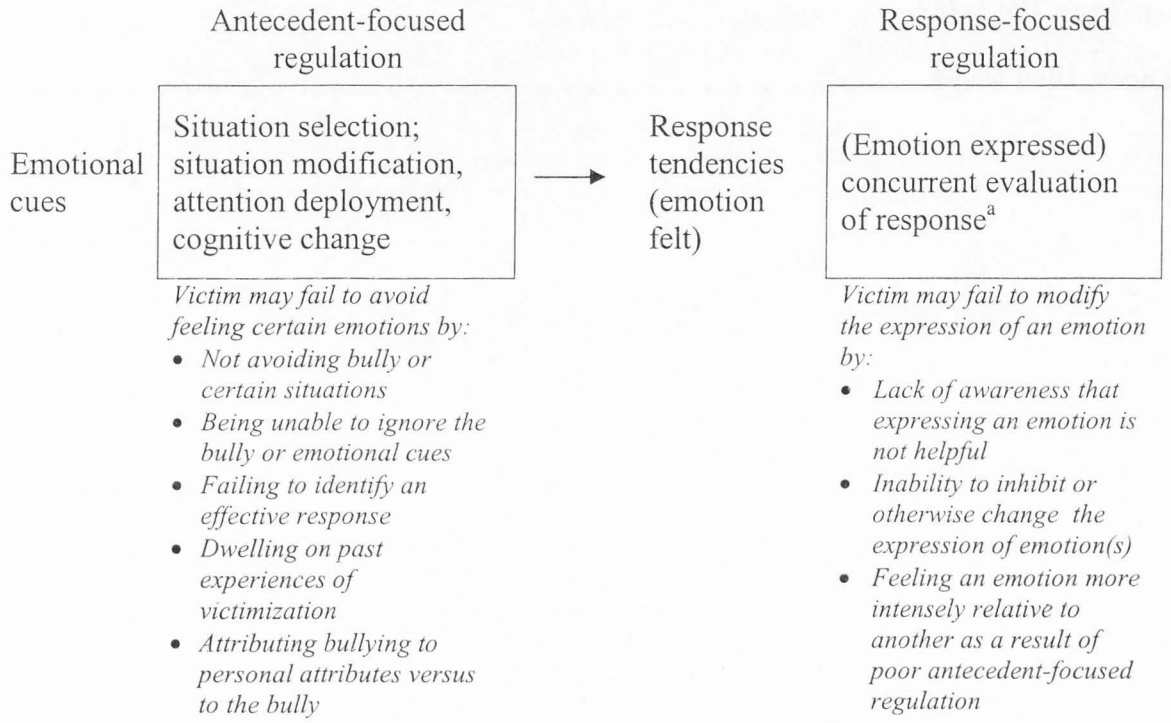
Hypotheses 2 and 3: Exploring the Relationship Between Victimization and Response-Focused Emotion Regulation

Hypothesis 2 asked if higher rates of victimization were associated with poorer emotion regulation abilities. Unfortunately, victimization was not associated with either passive emotion regulation or active emotion regulation. Additionally, hypothesis 3 pertained to emotion regulation as a mediator (i.e., indirect effect) of the association between victimization and outcomes, but this prediction was not supported by the present findings. Possible explanations of the lack of support for these hypotheses are presented below. Two alternative interpretations of the lack of support for hypothesis 2 and 3 are considered.

One possible explanation is that victims and nonvictims actually do have similar emotion regulation skills and that emotion regulation does not play a role in predicting internalizing or externalizing outcomes with victims of bullying. This, however, is

inconsistent with certain results bearing on hypothesis 1, which suggested that higher rates of victimization are associated with some emotion regulation difficulties. In addition, previous research has provided evidence suggestive of a connection between being victimized and emotion regulation difficulties (Mahady Wilton et al., 2000; Schwartz, 2000; Schwartz & Proctor, 2000; Schwartz et al., 2001).

A second and more interesting possibility is that victims more than nonvictims have difficulty with antecedent-focused emotion regulation and that these are the deficits playing a mediating role between victimization and adverse outcomes. Those who are skilled in antecedent-focused regulation manage their emotions in one of four ways *prior* to feeling any emotion: (a) situation selection, (b) situation modification, (c) attention deployment, and (d) cognitive change (see Figure 13). Previous research findings indicate that victims may struggle with any one or more of these antecedent regulation abilities. For instance, victims may have difficulty with situation selection, as they struggle to avoid situations in which they have been bullied before (Mahady Wilton et al., 2000), and with situation modification, as few victims use problem-solving approaches behaviors that help prevent bullying (Kochenderfer & Ladd, 1996a, 1997; Mahady Wilton et al.). In addition, victims may experience trouble with cognitive change, as they reportedly misinterpret comments as being more aggressive than they actually are (Camodeca & Goossens, 2005), and have difficulty with attention deployment because they may ruminate on previous victimization experiences (Ahmed, 2005; Juvonen et al., 2001). Any one of these factors could account for victim-related differences pertaining to regulation, but the current study did not directly measure



[a] Hypothesized component not included in Gross's (1998a; 1998b) model of emotion regulation.

Figure 13. Revised emotion regulation cycle.

antecedent-focused regulation, therein preventing any firm conclusions to be drawn.

However, antecedent-focused regulation does not account for all of the regulation difficulties proposed by the current findings. As implied by findings from hypothesis 1, victims may have deficits with an evaluation component of emotion regulation. One limitation of Gross' model is its lack of a clear evaluation component that can effectively encapsulate such deficits. Although some evaluation takes place during antecedent-focused regulation, as a victim can select different ways to respond to an imposing bullying attack and use cognitive strategies (i.e., ignoring, reframing) to avoid feeling certain emotions (see Figure 12), this type of evaluation does not address

judging the impact of expressed emotions on the current situation *while* the victim is expressing those emotions. Figure 13 incorporates this much needed evaluation piece within response-focused emotion regulation. Using this more complete model of emotions' role at various stages in the regulation process, future research might be better able to investigate the regulation differences among victims and nonvictims and the mediating role of emotion regulation in accounting for relationships between victimization and clinically significant outcomes.

Limitations of the Study

There are obvious limitations to the design and measures of this study that need to be considered while evaluating the importance of the results. First, the study relied on self-reports to derive indices of emotion regulation and these could underestimate victims' true difficulties in this realm. It is possible that participants may have reported what they *think* they would do in a bullying situation as opposed to what they would *actually* do in that situation, particularly because of the analog nature of the Bully REM. As such, participants may not have accurately reported their true responses to a bullying interaction.

In addition, the Bully REM developed for the thesis did result in lower-than-optimal reliability coefficients across the bullying situations. It is difficult to evaluate whether the lower-than-desired reliabilities are due to the self-report nature of the measure or characteristics specific to the Bully REM itself. The original REM, on which the Bully REM was modeled, has been shown to yield strong reliability

coefficients, discriminate well between intact groups known to differ in their emotion regulation strategies (e.g., delinquent compared to nondelinquent samples), and to correlate as would be expected with other measures of general emotion regulation (Barrett & Ferguson, 2002). The original REM operationalizes emotions more in terms of action tendencies associated with emotions that derive from different families of emotion or their consequences. In contrast, the Bully REM was attempting to measure very subtle differences within classes of emotions (e.g., passive emotions), distinctions that children may not be able to make.

Also, the original REM's situations are more homogenous than those created for the Bully REM. In the latter, each of three types of bullying episodes were incorporated, but with only one exemplar of each type of situation. Situational variability alone could dampen the reliability coefficients, because the different types of bullying situations themselves differ as to incidence, gender-relevance, age-relevance, and the emotions each would elicit. In effect, instead of having several replications of "items" that should be similar and thus correlate within the measure, the Bully REM had very few similar "items."

The method of scoring emotion regulation used in this study could have been improved. It may have been advisable to employ statistical techniques akin to those that Barrett and Ferguson (2002) used to analyze the original REM. These authors created an emotion regulation profile for each individual based on correlations of the felt with expressed scores across the homogeneous situations and then subcategorized groups based on the distinction between over- and underregulation of emotion. This

time intensive procedure would have been implemented in the present study had the reliability coefficients proved stronger. Because they were not, a different and defensible method of scoring was developed, but its validity is nonetheless in need of further study.

Conclusions regarding the results for boys, particularly in regard to passive emotions (fear, sadness, and shame), are limited by their tendency to endorse low intensities of these states. It is difficult to fathom how the social stigma of admitting these feelings can be lessened in a self-report type procedure. One possibility is to present the situations in the third person (e.g., from the perspective of someone else who is the victim in the scenario) rather than first person. It will be important for future research to assess whether boys' low intensity endorsements of passive emotions actually is due to desires to adhere to general stereotypes regarding gender-specific feeling rules.

Although the sample size in this study was large enough to provide valid tests of the hypotheses, it is unfortunate that so few victims could be identified—at least from a research perspective. The rates of victimization found in the present sample were, however, similar to those reported in others' research (cf. Grills & Ollendick, 2002; Kochenderfer & Ladd, 1996a, 1996b, 1997; Olweus, 1993a; Perry et al., 1988). Thus, future research focusing on victims will simply need to recruit from an even larger potential pool of participants to ensure a larger sample of victims.

Contribution to Literature and Future Directions

The primary strength of the present study was its theory-based approach to testing the hypothesis that victims have poorer emotion regulation abilities than nonvictims, as opposed to the tendency in previous research to draw conclusions that these skills are lacking in victims based on observation methodologies. Guided by this model, the current study examined emotion regulation within a specific context and was able to explore pieces of the model relative to the entire process of emotion regulation that the current literature has neglected to do so thus far. The current methodology examines the initial impulse and expression of an emotion, thus filling an important gap in both theory and research. The study also examined emotion regulation in relation to internalizing and externalizing outcomes and has added to the growing literature that explores possible mediators between victimization and its aftermath (Juvonen & Graham, 2001; Kochender-Ladd & Skinner, 2002).

By examining response-focused regulation, the present study revealed a need to analyze the entire model of emotion regulation, as the results suggested that victims may suffer from both response-focused and antecedent-focused regulation. Victims of both genders may experience various "break downs" within emotion regulation that occur at distinct and different stages, and therefore, may differ in their consequences and intervention strategies needed to change them. Future research should identify subtypes of victims, measure both antecedent- and response-focused regulation conjointly, and focus on one type of bullying in order to more precisely ascertain emotion regulation's roles in increasing the risk of victimization or its continuation.

Assessment of the entire model and applications to intervention strategies are of obvious practical importance for this nation's schools and children.

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APPENDICES

Appendix A

Informed Consent and Parent Permission

Professor Tamara J. Ferguson
Department of Psychology
2810 Old Main Hill
Utah State University
Logan UT 84322-2810
Telephone: (435) 797-3272
Facsimile: (435) 797-1448
E-Mail. tjferguson@cc.usu.edu

INFORMED CONSENT
Emotion Regulation and its Relation to Problematic Outcomes

Introduction and Purpose: Jason Harlacher, a graduate student in the Department of Psychology at Utah State University is conducting a research project under the supervision of Professor Tamara Ferguson. Mr. Harlacher is researching how children interact with each other. Specifically, the project will determine how emotions and feelings affect a child and his or her interactions with others. Approximately 120 children will be needed for the study.

What the Study Involves: The study will involve your child (_____ _____), you (as the child's parent or legal guardian), and your child's school teacher. If you give consent and your child wants to be a part of the study, your child will be asked to complete the following tasks. The child will complete 3 questionnaires during one class period at the school, at a time that the school deems to be minimally disruptive. The three questionnaires will measure the types of interactions your child has with peers, how he or she feels during those interactions, the types of behaviors he or she shows during those interactions, and your child's general feelings and behaviors toward other students. The time to complete all three questionnaires will last approximately 50 minutes. Those children that do not participate in the study will be given time to work on academic work during the time the study is conducted.

Children will not be able to see each others' answers and your child's responses will be completely anonymous, as each child will not be asked to write their name on the questionnaires at any time. In order for the researchers to identify which 3 questionnaires were completed by the same child, the questionnaires will have corresponding ID numbers placed on them. However, there will be no way to match up your child's name with the questionnaires they fill out.

Several classrooms will participate in the study and the classroom that returns the most Informed Consent forms will receive a pizza party, which will be held during a time the teacher chooses. You will be notified prior to the pizza party when it will be held. Although not every child may participate in the study, each child in the classroom will be able to participate in the pizza party.

Benefits and Risks: There are no foreseeable or inherent risks in this study. The study will be beneficial to people who work with children, in that it will help us understand the role of emotions during a child's interactions with others. If, during the course of this study, the research identifies new information that would affect your child's participation in the research, you will be notified and your consent for continuing in the research will be obtained again.

Voluntary Participation & Confidentiality: We never ask children to identify themselves by name on the questionnaires. The only time we ask for names is on this consent form and on the form your child signs *if* you have already given your child permission to be in the study and *if* your child wants to be in the study. We store these forms separately from the questionnaires. Any data that could identify any

Utah State UNIVERSITY

Professor Tamara J. Ferguson
Department of Psychology
2810 Old Main Hill
Utah State University
Logan UT 84322-2810
Telephone: (435) 797-3272
Facsimile: (435) 797-1448
E-Mail. tjferguson@cc.usu.edu

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child cannot, and will not, be shared with the school, any other agency, or individual. In any study, data are always analyzed and reported across groups of children; we never analyze any one individual's answers. We are bound by rules of ethics to keep participation confidential, and we keep all data locked away in filing cabinets in our office that is accessible only to the research team. The questionnaire data will be kept for at least 5 years, since this is a requirement of the American Psychological Association.

Approval of the Research Study: The study has been approved by your school district and school principal. The Institutional Review Board (IRB) for the protection of human participants at Utah State University has reviewed and approved this research project. If you have any concerns about this approval, you may call the IRB at (435) 797-1821.

Although the remainder of this letter seems rather long, please know that we are required by federal law to fully inform you of all aspects of the study, so you have the information you need to decide whether to give permission for your child to participate.

Questions and Concerns: If you have any questions or concerns about the study or this document, please contact either Dr. Tamara Ferguson or Jason Harlacher. Dr. Ferguson can be contacted by phone at (435) 797-3272 or by email at "uf734@cc.usu.edu." Jason can be reached by phone at (435) 232-9675 or by email at "jharlacher@hotmail.com."

Permission to Participate: On the next page, you may provide permission for your child to participate. Your child's participation in this research is completely voluntary. If the child starts the study but then wishes to stop, his or her participation will be stopped. If you give permission for your child to participate in the study, you may withdraw this consent and stop participation at any time without penalty or loss of benefits to which your child is otherwise entitled. It is possible that the professor doing this study will follow it up with another study at a later time. If you are willing to be contacted again for a follow-up study, please let us know below. Thank you sincerely for your kind help and cooperation!

Jason E. Harlacher
Master's Degree Candidate

Tamara J. Ferguson, Ph.D.
Professor of Psychology

Utah State UNIVERSITY

Professor Tamara J. Ferguson
Department of Psychology
2810 Old Main Hill
Utah State University
Logan UT 84322-2810
Telephone: (435) 797-3272
Facsimile: (435) 797-1448
E-Mail. tjferguson@cc.usu.edu

PARENT PERMISSION

Emotion Regulation and its Relation to Problematic Outcomes

Parental permission for my child to participate: You have been given two copies of this letter. Should you give permission, please sign both copies. Keep one copy for your own records and return the other copy to school with your child. After signing this permission slip, your child will also be asked to give his or her permission and may or may not decide to take part in the study.

Signature of Parent/Guardian: The research has been explained to me and I understand the procedures. I give permission for my child, (child's name) to participate in this study. I understand that if I (or my child) choose to have my child stop participating in the research there will be no negative consequences.

Minor's name:

_____
First *Middle Initial* *Last*

Minor's Date of Birth (MM/DD/YYYY): ____/_____/_____

Parent/Guardian name (printed):

_____
First *Middle Initial* *Last*

Parent/Guardian signature:

_____

Today's Date (MM/DD/YYYY): ____/_____/_____

Appendix B

Child Assent Form

Utah State University

Professor Tamara J. Ferguson
Department of Psychology
2810 Old Main Hill
Utah State University
Logan UT 84322-2810
Telephone: (435) 797-3272
Facsimile: (435) 797-1448
E-Mail. tjferguson@cc.usu.edu

CHILD ASSENT
Emotion Regulation and its Relation to Problematic Outcomes

Dear Student:

Who am I? My name is Jason Harlacher and I am a student at Utah State University, studying to become a psychologist in the schools. I work together with a professor (teacher) at the university. Her name is Tamara Ferguson.

Do we have permission? The university, one of your parents (or legal guardians), your school, and your teacher have all given us permission to ask you to be in the study. This letter explains the study and gives you the chance to decide if you would like to be a part of the study. The study is about how children interact with each other and how they feel during those interactions.

What will I do in the study? You will fill out three surveys. One survey will ask about how you get along with other students. The second survey will ask how you feel when you're hanging out with other children and what kind of things you do when you feel a certain way. The third survey will ask general questions about how you feel and get along with others.

We will take about 50 minutes to fill out the surveys. No one will be able to see your answers while you are filling out the surveys, since we'll give you a folder to hide your answers.

Do I *have* to be in the study? It's totally up to you to say "yes, I want to do the study" or "no, I don't want to do the study." Also, if you say "yes" but change your mind later, that is okay. You can stop being in the study any time you want to and nothing bad will happen.

Will the study be helpful? The study will be helpful to us in figuring out how kids get along with other and how emotions affect that. The study probably won't be helpful to you personally, but you may learn some things about yourself.

Will the study be "bad" at all? We can't think of any bad things about the study. Sometimes you're asked to think about times you felt good or bad, but that's no different than what happens during your own life anyway.

Utah State UNIVERSITY

Professor Tamara J. Ferguson
Department of Psychology
2810 Old Main Hill
Utah State University
Logan UT 84322-2810
Telephone: (435) 797-3272
Facsimile: (435) 797-1448
E-Mail. tjferguson@cc.usu.edu

CHILD ASSENT
Emotion Regulation and its Relation to Problematic Outcomes

Are my answers secret? Yes, your answers are totally secret. We don't put your real name on the questionnaires; instead, you will have a number that will be on the questionnaires (we've put the number on there already!). We certainly won't tell your parents or your teachers or anybody what you said. Also, this isn't graded or anything, so it won't affect your grades in school.

Asking questions: If you have any questions right now, please ask myself (Jason Harlacher) or the people working with me. If you have questions later, you can ask myself or Professor Ferguson or you can ask your teacher to get in touch with us.

Jason E. Harlacher

Tamara J. Ferguson

Jason Harlacher
Master's Candidate
(801) 403-9494

Tamara J. Ferguson, Ph.D.
Professor of Psychology
(435) 797-3272

Utah State UNIVERSITY

Professor Tamara J. Ferguson
Department of Psychology
2810 Old Main Hill
Utah State University
Logan UT 84322-2810
Telephone: (435) 797-3272
Facsimile: (435) 797-1448
E-Mail. tjferguson@cc.usu.edu

CHILD ASSENT
Emotion Regulation and its Relation to Problematic Outcomes

Do you give permission to be in the study? Now that I've told you about the study, do you have any questions? And, now that I've answered your questions, do you want to be in the study? Remember, even if you say "yes" now, you can stop being in the study later on if you decide to. If you do want to be in the study, then I will ask you to sign and print your name in the spaces.

I want to be in the study:

My name is: _____ (print your name)

My signature is _____ (please sign your name)

The date today is: _____ (put today's date)

Appendix C

Modified Olweus Bully/Victim Questionnaire

Questionnaire for Students

Today's Date: _____

School: _____

Gender: Male Female

Your Exact Age: _____ (For example: 11 years + 2 months)

Grade: 6 7 8

Ethnicity:
___ White/Caucasian
___ Black/African-American
___ Hispanic/Latino
___ American-Asian
___ Other:_____

If you want to put what your religion is, you can fill that in here:

_____

You will find questions in this booklet about your life in school. There are several answers next to each question. Each answer has a box in front of it like this:

1.	How do you like school?	☐ I dislike school very much ☐ I dislike school ☐ I neither like nor dislike school ☐ I like school ☐ I like school very much

Answer the question by marking an "**X**" in the box next to the answer that best describes how you feel about school. If you really dislike school, mark an "**X**" in the box next to "I dislike school very much." If you really like school, put an "**X**" in the box next to "I like school very much," and so on. Only mark one of the boxes. Try to keep the mark inside the box. Now put an "**X**" next to the answer that best describes how you feel about school.

If you mark the wrong box, you can change your answer like this: make the wrong box completely black: ■ Then put an "**X**" in the box where you want your answer to be.

Don't put your name on this booklet. No one will know how you have answered these questions. But it is important that you answer carefully and how you really feel. Sometimes it is hard to decide what to answer. Then just answer how you think it is. If you have questions, raise your hand.

Most of the questions are about **your life in school in the past couple of months, that is, the period from the start of school after Summer vacation until now**. So when you answer, you should think of how it has been during the past couple of months and **not only how it just now.**

Now you can answer the next question:

2.	Are you a boy or a girl?	☐ boy ☐ girl
3.	How many good friends do you have in your class(es)?	☐ none ☐ 1 good friend ☐ 2 or 3 good friends ☐ 4 or 5 good friends ☐ 6 or more good friends

About Being Bullied by Other Students

Here are some questions about being bullied by other students. First, we define or explain the word bullying. We say a student is being bullied when another student, or several other students

- say mean and hurtful things or make fun of him or her, or call him or her mean and hurtful names.
- completely ignore or exclude him or her from their group of friends or leave him or her out of things on purpose
- hit, kick, push, shove around, or lock him or her inside a room.
- tell lies or spread false rumors about him or her or send mean notes and try to make other students dislike her
- and other hurtful things like that.

When we talk about bullying, these things happen repeatedly, and it is difficult for the student being bullied to defend himself or herself. We also call it bullying when a student is teased in a mean and hurtful way.

But we don't call it bullying when the teasing is done in a friendly or playful way. Also, it is not bullying when two students of about equal strength or power argue or fight.

4.	How often have you been bullied at school in the past couple of months?	☐ I haven't been bullied at school in the past couple of months ☐ it has only happened once or twice ☐ 2 or 3 times a month ☐ about once a week ☐ several times a week

Have you been bullied at school in the past couple of months in one or more of the following ways? Please answer all of the questions.

5.	I was called mean names, was made fun of, or teased in a hurtful way.	☐ it hasn't happened in the past couple of months ☐ it has only happened once or twice ☐ 2 or 3 times a month ☐ about once a week ☐ several times a week

6.	Other students left me out of things on purpose, excluded me from their group of friends, or completely ignored me.	☐ I haven't been bullied at school in the past couple of months ☐ it has only happened once or twice ☐ 2 or 3 times a month ☐ about once a week ☐ several times a week
7.	I was hit, kicked, pushed, shoved around, or locked indoors.	☐ I haven't been bullied at school in the past couple of months ☐ it has only happened once or twice ☐ 2 or 3 times a month ☐ about once a week ☐ several times a week
8.	Other students told lies or spread false rumors about me and tried to make others dislike me.	☐ I haven't been bullied at school in the past couple of months ☐ it has only happened once or twice ☐ 2 or 3 times a month ☐ about once a week ☐ several times a week

Appendix D

The Bully REM

THE BULLY REM

(Note to readers: Each situation is labeled to indicate to the type of bullying it represents. In each of the situations, the action tendencies corresponding to anger, fear, sadness, and shame are also labeled as to the intended emotion. The situation and emotion-pertinent action tendency labels were *not* provided to the participants. The name of the instrument — the Bully REM— also was not printed anywhere on the instrument provided to participants.)

Child's Age: _____ (For example: 13 years + 5 months)

Child's Gender: Male Female Child's Grade: _____

Questionnaire Number: _____

Instructions: These are some stories about things that really happen to kids your age. We want you to *imagine* that each situation *really happened* to you, and tell us how you would feel and act in each situation. Anything you write down will be a complete secret. So, please be completely honest.

Let me explain this:

Things will happen to us, and we have reactions to them. Sometimes, we have a FIRST reaction – a kind of immediate feeling or impulse. Here's an example: Let's say you were asked to a party by one of the most popular kids in the school. Your FIRST reaction might be to want to jump up and down for joy. Do you necessarily act on your first reaction? Maybe yes – that is, maybe you actually do jump up and down for joy. Maybe no – that is, even though this was your FIRST reaction, you choose to not act that way.

We're going to present you with a bunch of different reactions you could have in a situation. We want you to tell us how much each reaction would be one of the FIRST things you'd **feel like** doing, whether or not you would even really do it. Then, we want you to tell us how likely it is that you would **actually do** each of the things listed **while this situation was happening or immediately after the situation happened**.

For each reaction: You circle ONE number for "How much I'd FEEL"
and ONE number for "How much I'd ACTUALLY."

Let's do a couple of examples first.

Practice Situation 1:

You are at the airport one day in line to get a drink at one of the stores. All of a sudden you realize that Britney Spears is standing in line right behind you. You overhear Britney whisper to the person she's with that *you* smell bad. She whispered something like, "Yuck, get a whiff of that kid!"

	Reaction	How much I'd FEEL like doing this						How much I'd ACTUALLY do this					
		Not at all		Fair amount		A whole lot		Not at all		Fair amount		A whole lot	
1.	You ignore the comment and act as if nothing happened.	0	1	2	3	4	5	0	1	2	3	4	5
2.	You turn around and tell her she smells bad.	0	1	2	3	4	5	0	1	2	3	4	5
3.	You turn around and tell her what she said is not very nice.	0	1	2	3	4	5	0	1	2	3	4	5

Let's read Reaction #1. Try to imagine how much you would **feel like** doing Reaction #1, whether or not you would even really do it. Then, look at the rating scale asking **"How much I'd FEEL like doing this."** You circle the number

0, if you perceive that you would *not at all* feel that way.
1, if you perceive that you would feel that way *a little bit*
2, if you perceive that you would feel that way *a bit*
3, if you perceive that you would feel that way *a fair amount*
4, if you perceive that you would feel that way *a lot*
5, if you perceive that you would feel that way *a whole lot*

Okay, let's read Reaction #1 a second time. This time, though, think about how likely it is that you would **actually *behave* this way while this situation was happening or immediately after the situation happened**. Then, look at the rating scale asking "**How much I'd ACTUALLY do this.**" You circle the number

0, if you perceive that you would *not at all* actually behave that way.
1, if you perceive that you would actually behave that way *a little bit*
2, if you perceive that you would actually behave that way *a bit*
3, if you perceive that you would actually behave that way *a fair amount*
4, if you perceive that you would actually behave that way *a lot*
5, if you perceive that you would actually behave that way *a whole lot*

After you've made both ratings for Reaction #1, you make both ratings for Reaction #2, etc.

a) Now, still thinking about this situation (practice situation 1), think of all the following groups of emotions you would have been experiencing, and check all that apply.

_____ 1. Sad/Depressed
_____ 2. Afraid/Scared
_____ 3. Embarrassed/Ashamed
_____ 4. Mad/Angry/Frustrated
_____ 5. Anxious/Nervous/Tense
_____ 6. Happy/Proud/Excited

Practice Situation 2:

You are having a birthday party and you have been hoping for a new video game for your Playstation 2. You're unwrapping your presents and have yet to open the game. You get to the last present and open it up and surprise! It's the game you've been hoping for.

		How much I'd FEEL like doing this						How much I'd ACTUALLY do this					
	Reaction	Not at all			Fair amount		A whole lot	Not at all			Fair amount		A whole lot
1.	You smile big and scream for joy.	0	1	2	3	4	5	0	1	2	3	4	5
2.	You act as if you weren't that excited to open it.	0	1	2	3	4	5	0	1	2	3	4	5
3.	You say "thank you" and smile.	0	1	2	3	4	5	0	1	2	3	4	5

Let's read Reaction #1. Try to imagine how much you would **feel like** doing Reaction #1, whether or not you would even really do it. Then, look at the rating scale asking **"How much I'd FEEL like doing this."** You circle the number

0, if you perceive that you would *not at all* feel that way.
1, if you perceive that you would feel that way *a little bit*
2, if you perceive that you would feel that way *a bit*
3, if you perceive that you would feel that way *a fair amount*
4, if you perceive that you would feel that way *a lot*
5, if you perceive that you would feel that way *a whole lot*

Okay, let's read Reaction #1 a second time. This time, though, think about how likely it is that you would **actually *behave* this way while this situation was happening or immediately after the situation happened**. Then, look at the rating scale asking "**How much I'd ACTUALLY do this."** You circle the number

0, if you perceive that you would *not at all* actually behave that way.
1, if you perceive that you would actually behave that way *a little bit*
2, if you perceive that you would actually behave that way *a bit*
3, if you perceive that you would actually behave that way *a fair amount*
4, if you perceive that you would actually behave that way *a lot*
5, if you perceive that you would actually behave that way *a whole lot*

After you've made both ratings for Reaction #1, you make both ratings for Reaction #2, etc.

a) Now, still thinking about this situation (practice situation 2), think of all the following groups of emotions you would have been experiencing, and check all that apply.

_____ 1. Sad/Depressed
_____ 2. Afraid/Scared
_____ 3. Embarrassed/Ashamed
_____ 4. Mad/Angry/Frustrated
_____ 5. Anxious/Nervous/Tense
_____ 6. Happy/Proud/Excited

Here are the situations we want you to imagine being in...

Situation 1: ***(Direct Physical Bullying)***

You're walking down the hallway holding your books in your hand when you see another student who is much bigger than you coming the other way. The other student is about to pass you, but slams a shoulder into you and causes you to fall to the ground and drop all of your books. The bigger student says, "Watch where you're going!" and pushes you while you're on the ground.

		How much I'd FEEL like doing this						How much I'd ACTUALLY do this					
	Reaction	Not at all		Fair amount		A whole lot		Not at all		Fair amount		A whole lot	
1.	Yell at the kid. ***(anger)***	0	1	2	3	4	5	0	1	2	3	4	5
2.	Rush away from the kid as fast as I could. ***(fear)***	0	1	2	3	4	5	0	1	2	3	4	5
3.	Look away from the kids who are passing by me in the hall. ***(shame)***	0	1	2	3	4	5	0	1	2	3	4	5
4.	Get a look on my face like this ☹. ***(sadness)***	0	1	2	3	4	5	0	1	2	3	4	5
5.	Tell the kid nicely not to do that and then tell someone (friend, teacher) what happened.	0	1	2	3	4	5	0	1	2	3	4	5

a) Now, still thinking about this situation (situation 2). think of all the following groups of emotions you would have been experiencing, and check all that apply.

_____ 1. Sad/Depressed
_____ 2. Afraid/Scared
_____ 3. Embarrassed/Ashamed
_____ 4. Mad/Angry/Frustrated
_____ 5. Anxious/Nervous/Tense
_____ 6. Happy/Proud/Excited

Situation 2: ***(Indirect Physical Bullying)***

It's lunchtime and you're in the cafeteria. You get your lunch and sit down by yourself while you wait for your friends to join you. You realize you forgot to get a straw so you leave your lunch and go up to the counter to get a straw. When you return to your seat, you realize someone has mashed all of your food together and poured your drink over it. You look up and notice the table next to you snickering and laughing.

		How much I'd FEEL like doing this						**How much I'd ACTUALLY do this**					
	Reaction	Not at all		Fair amount		A whole lot		Not at all		Fair amount		A whole lot	
1.	I'd feel kind of drained and tired ***(sad)***	0	1	2	3	4	5	0	1	2	3	4	5
2.	Yell at the kids to stop laughing. ***(anger)***	0	1	2	3	4	5	0	1	2	3	4	5
3.	Leave the cafeteria as fast as I could to get away from whoever did this. ***(fear)***	0	1	2	3	4	5	0	1	2	3	4	5
4.	Just disappear, so all the kids couldn't see me. ***(shame)***	0	1	2	3	4	5	0	1	2	3	4	5
5.	Ask if anyone saw what happened and then tell a teacher what happened.	0	1	2	3	4	5	0	1	2	3	4	5

a) Now, still thinking about this situation (situation 4), think of all the following groups of emotions you would have been experiencing, and check all that apply.

_____ 1. Sad/Depressed _____ 4. Mad/Angry/Frustrated
_____ 2. Afraid/Scared _____ 5. Anxious/Nervous/Tense
_____ 3. Embarrassed/Ashamed _____ 6. Happy/Proud/Excited

Situation 3: ***(Direct Verbal)***

You're in the locker room changing for gym class and there are 3 of the more popular students next to you changing as well. They begin to joke around with each other and although you don't know them, they begin to tease you as well. They make comments about your clothes and your looks and begin to make fun of your family.

		How much I'd FEEL like doing this						**How much I'd ACTUALLY do this**					
	Reaction	Not at all		Fair amount		A whole lot		Not at all		Fair amount		A whole lot	
1.	Tell them to shut up or make fun of them back. ***(anger)***	0	1	2	3	4	5	0	1	2	3	4	5
2.	Hurry up and change to get away from them as fast as you can. ***(fear)***	0	1	2	3	4	5	0	1	2	3	4	5
3.	Look down to the ground. ***(shame)***	0	1	2	3	4	5	0	1	2	3	4	5
4.	Feel tired and blue, like there was nothing I could do ***(sadness)***	0	1	2	3	4	5	0	1	2	3	4	5
5.	Ask them nicely to stop and then move to another part of the locker room if they don't.	0	1	2	3	4	5	0	1	2	3	4	5
6.	Tell a friend or teacher what happened.	0	1	2	3	4	5	0	1	2	3	4	5

a) Now, still thinking about this situation (situation 5), think of all the following groups of emotions you would have been experiencing, and check all that apply.

_____ 1. Sad/Depressed
_____ 2. Afraid/Scared
_____ 3. Embarrassed/Ashamed
_____ 4. Mad/Angry/Frustrated
_____ 5. Anxious/Nervous/Tense
_____ 6. Happy/Proud/Excited

Situation 4: ***(Relational Bullying)***

While standing with 4 of your friends in the hallway between classes, you ask them all what they are doing on Friday. After they glance around at each other, one of them says that they were all invited to a party. You had no idea there was a party this weekend and your friends tell you it's an "invite-only" party. Your friends plan on going to the party, even though you didn't receive an invitation.

		How much I'd FEEL like doing this						**How much I'd ACTUALLY do this**					
	Reaction	Not at all		Fair amount		A whole lot		Not at all		Fair amount		A whole lot	
1.	Yell at your friends that they're being rude. ***(anger)***	0	1	2	3	4	5	0	1	2	3	4	5
2.	Just leave and get to class. ***(fear)***	0	1	2	3	4	5	0	1	2	3	4	5
3.	Look down to the ground so you don't meet their eyes. ***(shame)***	0	1	2	3	4	5	0	1	2	3	4	5
4.	Say nothing and look like this ☹. ***(sadness)***	0	1	2	3	4	5	0	1	2	3	4	5
5.	Act as if it doesn't bother you and then tell someone what happened when you get home.	0	1	2	3	4	5	0	1	2	3	4	5
6.	Ask them to stop in a nice way.	0	1	2	3	4	5	0	1	2	3	4	5

a) Now, still thinking about this situation (situation 6), think of all the following groups of emotions you would have been experiencing, and check all that apply.

_____ 1. Sad/Depressed
_____ 2. Afraid/Scared
_____ 3. Embarrassed/Ashamed
_____ 4. Mad/Angry/Frustrated
_____ 5. Anxious/Nervous/Tense
_____ 6. Happy/Proud/Excited

Appendix E

Results of Reliability Analysis From the Bully REM

Bully REM Results

The following tables show the results of the reliability analysis conducted on the four bullying situations from the Bully REM. Table E1 displays the Cronbach's alpha coefficients from the four bullying situations from the Bully REM (situations 1 to 4 in Appendix D). Table E2 displays the variances for each emotion felt and emotion expressed. Tables E3-E10 illustrate the situation correlations for each emotion felt and emotion expressed.

Table E1

Cronbach's Alpha Coefficients for the Four Items From Bully REM

Emotions	Items	Boys	Girls
Anger felt	4	.56	.76
Anger expressed	4	.67	.78
Fear felt	4	.73	.74
Fear expressed	4	.78	.63
Sadness felt	4	.41	.50
Sadness expressed	4	.34	.50
Shame felt	4	.74	.80
Shame expressed	4	.70	.76

Table E2

Variances for Bully REM for Boys and Girls

Emotions	Item variances	Inter-item covariances	Inter-item correlations
Boys			
Anger felt	.21	.28	.03
Anger expressed	.41	.29	.02
Fear felt	.41	.05	.01
Fear expressed	.41	.02	.00
Sadness felt	.55	.11	.02
Sadness expressed	1.46	.05	.03
Shame felt	.17	.02	.01
Shame expressed	.47	.01	.02
Boys			
Anger felt	.10	.12	.01
Anger expressed	.79	.15	.01
Fear felt	.30	.24	.02
Fear expressed	.07	.15	.02
Sadness felt	.02	.38	.03
Sadness expressed	.53	.20	.03
Shame felt	.03	.07	.00
Shame expressed	.13	.05	.01

Table E3

Intercorrelations for the Four Anger Felt Items

Anger felt	1	2	3	4
Boys				
1 Direct physical bullying	-			
2 Direct verbal bullying	.46	-		
3 Indirect physical bullying	.31	.27	-	
4 Relational bullying	.01	.03	.36	-
Girls				
1 Direct physical bullying	-			
2 Direct verbal bullying	.58	-		
3 Indirect physical bullying	.37	.39	-	
4 Relational bullying	.43	.38	.46	-

Table E4

Intercorrelations for the Four Anger Expressed Items

Anger expressed	1	2	3	4
Boys				
1 Direct physical bullying	-			
2 Direct verbal bullying	.57	-		
3 Indirect physical bullying	.33	.43	-	
4 Relational bullying	.19	.12	.33	-
Girls				
1 Direct physical bullying	-			
2 Direct verbal bullying	.60	-		
3 Indirect physical bullying	.53	.52	-	
4 Relational bullying	.36	.35	.48	-

Table E5

Intercorrelations for the Four Fear Felt Items

Fear felt	1	2	3	4
Boys				
1 Direct physical bullying	-			
2 Direct verbal bullying	.29	-		
3 Indirect physical bullying	.49	.40	-	
4 Relational bullying	.36	.46	.47	-
Girls				
1 Direct physical bullying	-			
2 Direct verbal bullying	.48	-		
3 Indirect physical bullying	.53	.47	-	
4 Relational bullying	.17	.39	.45	-

Table E6

Intercorrelations for the Four Fear Expressed Items

Fear expressed	1	2	3	4
Boys				
1 Direct physical bullying	-			
2 Direct verbal bullying	.45	-		
3 Indirect physical bullying	.48	.46	-	
4 Relational bullying	.48	.48	.52	-
Girls				
1 Direct physical bullying	-			
2 Direct verbal bullying	.48	-		
3 Indirect physical bullying	.26	.27	-	
4 Relational bullying	.16	.20	.45	-

Table E7

Intercorrelations for the Four Sadness Felt Items

Sadness felt	1	2	3	4
Boys				
1 Direct physical bullying	-			
2 Direct verbal bullying	.29	-		
3 Indirect physical bullying	.40	.15	-	
4 Relational bullying	.05	.01	.08	-
Girls				
1 Direct physical bullying	-			
2 Direct verbal bullying	.36	-		
3 Indirect physical bullying	.34	.33	-	
4 Relational bullying	-.07	.17	.08	-

Table E8

Intercorrelations for the Four Sadness Expressed Items

Sadness expressed	1	2	3	4
Boys				
1 Direct physical bullying	-			
2 Direct verbal bullying	.09	-		
3 Indirect physical bullying	.16	.01	-	
4 Relational bullying	.07	.09	.51	-
Girls				
1 Direct physical bullying	-			
2 Direct verbal bullying	.20	-		
3 Indirect physical bullying	.46	.01	-	
4 Relational bullying	.31	.02	.27	-

Table E9

Intercorrelations for the Four Shame Felt Items

Shame felt	1	2	3	4
Boys				
1 Direct physical bullying	-			
2 Direct verbal bullying	.32	-		
3 Indirect physical bullying	.38	.46	-	
4 Relational bullying	.35	.55	.46	-
Girls				
1 Direct physical bullying	-			
2 Direct verbal bullying	.32	-		
3 Indirect physical bullying	.38	.46	-	
4 Relational bullying	.35	.55	.46	-

Table E10

Intercorrelations for the Four Shame Expressed Items

Shame expressed	1	2	3	4
Boys				
1 Direct physical bullying	-			
2 Direct verbal bullying	.55	-		
3 Indirect physical bullying	.52	.46	-	
4 Relational bullying	.41	.61	.51	-
Girls				
1 Direct physical bullying	-			
2 Direct verbal bullying	.55	-		
3 Indirect physical bullying	.49	.45	-	
4 Relational bullying	.32	.27	.32	-

Where cited?

Appendix F

Two-Way ANOVA Summary Statistics

Two-Way ANOVA Summary Statistics

A two-way ANOVA was conducted to determine if victim status varied depending on a participants' grade and/or gender. Table F1 summarizes the *F*, *df*, and *p* values. Table F2 summarizes the mean and *SD* for each cell. Figure F1 displays the mean scores for victim status variable. Results were not significant, indicating that victimization occurred with the same frequency between grade and gender.

Table F1

Two-Way ANOVA Predicting Victim Status: Summary of F, df, p

Variable	*F* (df)	*df*	*p*
Gender	.30	(1, 230)	.59
Grade	.11	(2, 229)	.90
Gender x Grade	.82	(2, 229)	.44

Table F2

Two-Way ANOVA Predicting Victim Status: Summary of M, SD, and SMD

Variable	Mean	*SD*
Boys		
Grade 6	.13	.35
Grade 7	.20	.41
Grade 8	.12	.33
Girls		
Grade 6	.15	.37
Grade 7	.09	.29
Grade 8	.13	.34
SMD		
Grade 6	-.05	
Grade 7	.29	
Grade 8	-.03	

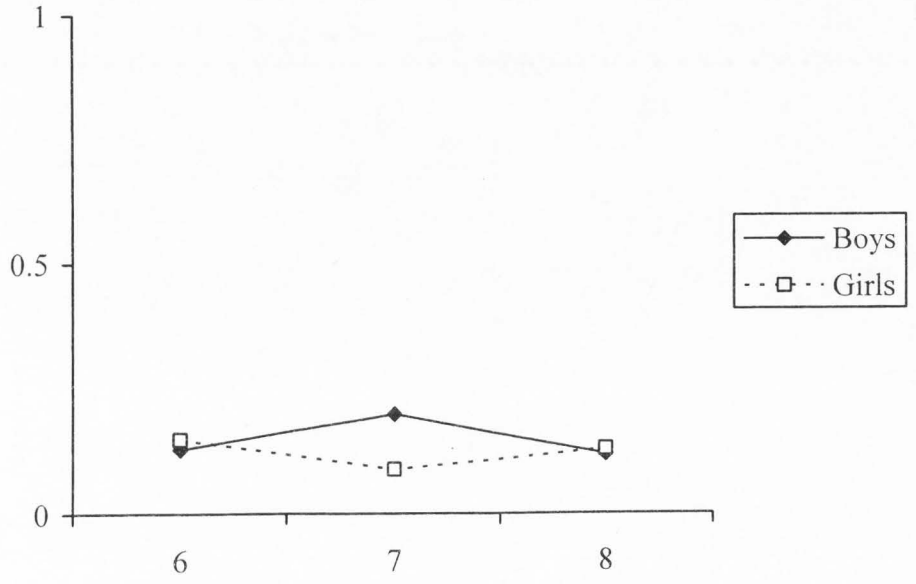

Figure F1. Victim mean scores for girls and boys separately within each grade level.