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Emotion regulation as a potential moderator for the association between peer victimization and student engagement

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ABSTRACT

EMOTION REGULATION AS A POTENTIAL MODERATOR FOR THE ASSOCIATIONS BETWEEN PEER VICTIMIZATION AND STUDENT ENGAGEMENT

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The peer victimization literature is vast and identifies numerous potential risk factors for and outcomes of victimization. One important and previously examined risk factor is emotion regulation ability. A significant outcome of victimization previously discussed in the literature is student disengagement at school. One growing focus of peer victimization research is to examine possible protective factors and areas for intervention. Because it is a trainable skill set, emotion regulation is a ripe area for investigation as both a protective factor and an area for intervention.

The negative association between peer victimization and student engagement may result, in part, from poor emotion regulation skills. Inability to regulate one's emotions adaptively is associated with worsened outcomes following instances of victimization. Ruminating on the negative emotions associated with victimization may detract attention and resources away from student engagement. Strong emotion regulation ability, however, would allow students to redirect or reappraise following instances of peer victimization and remain engaged in school. The current study aimed to examine the associations among difficulty in six different components of emotion regulation and the frequency of relational and physical victimization.

Furthermore, the current study explored emotion regulation as a potential moderator of the association between peer victimization and three types of student engagement. Finally, the emotion regulation profiles of victims of physical and relational aggression were compared and distinct patterns of difficulty were analyzed.

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EMOTION REGULATION AS A POTENTIAL MODERATOR FOR THE
ASSOCIATION BETWEEN PEER VICTIMIZATION
AND STUDENT ENGAGEMENT

BY

JACLYN TENNANT

A THESIS SUBMITTED TO THE GRADUATE SCHOOL
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MASTER OF ARTS

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Michelle K. Demaray

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CHAPTER 1

INTRODUCTION

Peer victimization in the schools is a frequently reported problem by both parents and school personnel. It affects nearly all children at some point and is related to serious negative outcomes including internalizing and externalizing problems and decreased school engagement (Buhs, Ladd, & Herald, 2006; Crick & Grotpeter, 1995). Previous research has identified many risk factors for peer victimization, including poor emotion regulation (Wilton, Craig, & Pepler, 2000). One of the current aims of research surrounding peer victimization is to identify protective factors and areas for intervention; emotion regulation training can meet both these needs.

One potential area for intervention is the negative association between peer victimization and student engagement. Student engagement is an important construct that is positively associated with academic achievement and negatively associated with school dropout (Wang & Peck, 2013). As noted above, peer victimization endangers student engagement. There are several possible mechanisms at play behind this relationship. One likely explanation for this relationship centers on poor regulation skills. Self-regulation, including emotion regulation, is integral for agentic student engagement (Fredricks, Blumenfeld, & Paris, 2004). Because peer victimization increases the probability for emotion dysregulation, it follows that student engagement would suffer following peer victimization. Targeting emotion regulation may improve outcomes for students who are victimized; training emotion regulation skills such as

sustaining attention and goal-directed behavior while experiencing negative emotions or cognitively reappraising social situations may give students tools to alleviate some of the negative emotional effects of peer victimization and protect student engagement from degradation.

It is important to note that much of the victimization research to date that has examined student engagement and emotion regulation has conceptualized both variables as unitary constructs for the purpose of analyses. However, both student engagement and emotion regulation are multicomponent constructs. Because the components involve distinct behaviors, it is important to examine their unique components separately when considering the mechanisms by which they interact with other constructs. The current study aimed to contribute new information to the literature by examining the associations among six separate components of emotion regulation and two types of peer victimization as well as the associations among peer victimization, emotion regulation, and three components of student engagement.

Specifically, the current study sought to expand on the current literature on peer victimization by examining the associations between difficulties in the following emotion regulation components, emotional awareness, emotional acceptance, emotional clarity, controlling impulsivity, goal-directed behavior while experiencing negative emotions, and emotion regulation strategy use and the frequency of experiencing relational and physical victimization among middle schoolers. Additionally, the study examined whether overall emotion regulation ability moderates the association between a total peer victimization score and cognitive, affective, and behavioral engagement. Finally, the emotion regulation profiles of frequent victims of relational and physical aggression were examined to determine if these

students have unique areas of difficulty concerning emotion regulation that may put them at risk for peer victimization.

CHAPTER 2

REVIEW OF THE LITERATURE

A review of current literature regarding peer victimization, emotion regulation, and student engagement will be discussed below. First, peer victimization will be defined and different types of victimization will be described. A discussion of the gender differences, developmental differences, and consequences of peer victimization will follow. Second, emotion regulation and some of its components will be defined. Gender and developmental differences in emotion regulation will also be explored as will the association between peer victimization and emotion regulation. Third, a multicomponent model of student engagement will be explored, including gender and developmental differences, and the associations between student engagement and victimization and emotion regulation will be discussed. Fourth, a rationale for the current study, including research questions and predictions, will be presented. Finally, the results of the study will be presented and discussed.

Peer Victimization

Definition and Types of Peer Victimization

Peer victimization is the experience of targeted psychological, emotional, social, or physical harm by a peer who is not the recipient's sibling (Olweus, 1993). Although peer victimization includes bullying under its definition, the two constructs are not the same. Bullying is characterized by intentional and repeated aggression from a person in a position of power (Craig, 1998). Victimization, however, does not have to involve a power differential

between involved parties, nor does it have to be repeated with the frequency that bullying occurs. In research, peer victimization has two commonly measured types: overt aggression and relational aggression (Crick & Bigbee, 1998). Overt aggression includes threat of or actual physical acts of peer victimization such as pushing or shoving another student or knocking books out of his/her hands (Crick & Bigbee, 1998). Relational aggression is more subtle. It involves using words or manipulating relationships to harm another student (Crick & Bigbee, 1998). Overt and relational victimization were explored separately in the current study.

Peer victimization is a serious epidemic in the schools. In a sample of 6th-grade children, Salmivalli and colleagues (1996) found that approximately 11.8% of boys and 11.5% of girls were peer identified as victims, and students identified 60% of boys and 9% of girls as either a bully or someone who reinforced the bully's behavior or assisted the bully. Olweus (1991) also reported that approximately 10% of students are repeatedly victimized by peers. Other prevalence rates range from 6-10% for frequent victims (those who are recipients of hostile acts at least weekly) to 30-60% for occasional victims (Smith & Shu, 2000). Not only is peer victimization pervasive in the schools, with a majority of students playing a role, it also leads to significant negative outcomes for the victims.

Gender Differences in Victimization

Gender may affect the likelihood for a student to experience a certain type of victimization. It appears that boys are more likely to be victims of physical peer aggression, and girls are more likely to experience relational peer aggression (Bradshaw, Waasdrorp, & O'Brennan, 2013; Crick, 1997). Furthermore, the type of victimization experienced has implications for the specific associated maladjustment problems. The experience of physical

aggression and the experience of relational aggression are related to different outcomes. For instance, Hoglund (2007) hypothesized the following relationships between peer victimization and school functioning with maladjustment problems as mediators: a) girls are more likely to experience relational types of victimization, which are related to internalizing problems, and b) boys are more likely to experience physical victimization, which is related to externalizing problems. Higher levels of internalizing and externalizing problems predict lower levels of school engagement and subsequent school achievement. Bradshaw and colleagues (2013) also found that outcomes depended on the type of victimization experienced by the student. Adolescents in middle school who experienced verbal, physical, and relational aggression had higher levels of internalizing and externalizing problems than adolescents who experienced only one or two types of victimization. Middle school students who were victims of verbal and physical aggression reported higher levels of externalizing behavior, namely aggression, than students who were most frequently victims of verbal and relational aggression. Clearly, gender is preferentially associated with particular subtypes of victimization, and different subtypes of victimization are associated with distinct outcomes. Therefore, it is important to consider both gender and subtype of victimization when examining the relationship between peer victimization and negative outcomes.

Developmental Differences in Victimization

Previous research has shown that the risk of experiencing victimization peaks during middle school years (Bradshaw, Sawyer, & O'Brennan, 2007). As adolescents complete the transition to high school, their experience of relational, verbal, and physical aggression declines (Nylund, Bellmore, Nishina, & Graham, 2007). Type of victimization experienced also changes

during this time. Specifically, the rate of physical victimization decreases through the middle school years while the prevalence of relational victimization increases (Pettit, 1997; Sutton, Smith, & Swettenham, 1999). Because the experience of victimization is common during middle school, when social relations increase in complexity and students have more sophisticated ways of interacting with each other, it is an important time to examine the consequences of victimization and intervene by teaching students skills to limit the negative effects of victimization. One potential area to increase adolescents' skills in order to protect against the negative outcomes of victimization is emotion regulation.

Consequences of Victimization

Peer victimization can cause maladjustment that affects children and adolescents in multiple areas of their lives, including school functioning and social-emotional well-being. Academically, victimization is associated with lower levels of school enjoyment and academic achievement and more frequent reports of the school as unsafe (Card & Hodges, 2008). If students are worried about being victimized, they have fewer attentional resources to focus on schoolwork so academic achievement and academic engagement suffer. Through a longitudinal investigation, Schwartz and colleagues (2005) found that third and fourth graders' experience of maltreatment from peers was associated with concurrent academic underperformance and predicted future poor academic functioning. In terms of social and emotional functioning, frequent victimization has been found to be related to greater emotional and behavioral dysregulation, negative peer beliefs, and hostile behavior (Rudolph, Troop-Gordon, & Flynn, 2009). Peer victimization has been repeatedly linked to higher incidences of externalizing and internalizing problems (Bradshaw et al., 2013; McLaughlin, Hatzenbuehler, & Hilt, 2009).

Victims of relational aggression and victims who experienced verbal, physical, and relational aggression were more likely to be depressed and to abuse drugs and alcohol than were non-victims (Espelage, Low, & De La Rue, 2012). Because the negative effects of peer victimization pervade throughout the lives of children and adolescents, it is important to examine the potential antecedents of victimization as well as mediators and moderators of the relationship between victimization and associated negative outcomes.

Emotion Regulation

Definition and Components of Emotion Regulation

The ability to regulate emotion is central to student success in a number of ways, including attending to appropriate information during a lesson, managing stress that arises during standardized exams, and interacting with other classmates. Imagine the following scene: a tall, athletic student (Bill) trips a shy, slight student (Charlie) as he passes by in the lunchroom. Charlie drops his tray of food, and the lunchroom erupts in laughter. At this point, Charlie has a choice to make. He needs to decide how to react. In this situation, Charlie's goal is to eat his lunch safely, and whatever reaction he chooses to pursue will either facilitate or hinder progress toward his goal. One possible reaction would be for Charlie to stand up, brush himself off, and go get another tray of food, avoiding Bill on his return. Alternatively, he could alert an adult to the incident. Other options would be to cry or react aggressively and hit Bill with his lunch tray. All of the above scenarios represent possible ways for Charlie to handle the emotional situation he was in; however, some of them are more adaptive choices. For instance, responding by crying or hitting Bill is theatrical, draws more attention to the incident, and encourages Bill to continue to pick on Charlie. These alternatives are maladaptive because they will not help

Charlie achieve his goal of safely eating lunch. Walking away and ignoring Bill from then on prevents the situation from escalating, and alerting an adult may stop Bill from antagonizing Charlie in the future. These options are adaptive because they increase the odds of Charlie achieving his goal. It is important for students to be able to regulate their emotions in adaptive ways.

Emotion regulation is the process of changing either the magnitude, duration, or valence of an emotional response (Gross, Sheppes, & Urry, 2011). The process model of emotion regulation was used to inform this study (Gross, 1998, 2013; Gross & Thompson, 2007). The model begins with a stimulus or situation and ends with a response. The response is determined by the attention given to the stimulus/situation as well as the appraisal of the stimulus/situation. Strategies can be deployed before or during each stage of the process. Situation selection, situation modification, attentional deployment, cognitive change, and response modification are the five strategies. Situation selection involves choosing to enter a particular situation or not based on the characteristics of said situation. Situation modification involves actively attempting to change characteristics of the situation through one's behavior. Attentional deployment is a strategy that involves paying more or less attention to particular stimuli in order to change an emotion. Cognitive change involves changing how one thinks about certain stimuli or a situation in order to change an emotion. Finally, response modification involves changing one's response in order to change an emotion. For instance, Charlie could choose to cry in response to being tripped by Bill and likely feel sad and helpless about the situation or he could choose to tell an adult and feel empowered.

A person can regulate both positive and negative emotions by either increasing or decreasing the intensity. For example, before a big exam, a student can downregulate her

feelings of anxiety. Imagine another example. Jill's soccer team has just won a big match against their rivals. Jill's best friend is on the other team. When Jill congratulates her friend on a good game after the match, she must decrease her own level of happiness in order to empathize with her friend's feelings of loss.

Emotion regulation can be conscious or unconscious (Gross & Thompson, 2007). Typically, emotion regulation is viewed as a conscious process. However, when a person repeats the same behaviors in response to similar stimuli over time, those stimulus-response pairs become habitual and unconscious. The brain programs unconscious patterns of emotion regulation similarly. While the brain's ability to learn response patterns increases efficiency when the response pattern is an adaptive one, it can be detrimental to a student's well-being when the response pattern is maladaptive and difficult to change. Because unconscious patterns of emotion regulation are difficult to change once engrained, it is important to teach students adaptive emotion regulation strategies at a young age. It is also important to consider that whether emotion regulation strategies are adaptive or maladaptive depends on the context. A strategy may work well in one situation but cause problems in another situation. Therefore, students must also be taught to consider the situational context when selecting an emotion regulation strategy. The above information on emotion regulation makes it clear that emotion regulation is a complex construct, consisting of several skills.

It is important to study emotion regulation during adolescence because adolescents face a number of new emotionally arousing experiences during the transition to and throughout middle school. During this time adolescents are also more capable of and driven to employ more intrinsic methods of emotion regulation. For example, the prefrontal cortex has developed to a point where adolescents can use more cognitively based strategies for emotion regulation

(Diamond, 2002), and changes in the parent-child relationship prompt the adolescent to defer using parents as a source of extrinsic emotion regulations (Gross, 2013).

Gender Differences in Emotion Regulation

Emotion regulation is a component of general self-regulation. Gender differences in self-regulation are found in children as young as kindergarten, with girls typically demonstrating higher rates of self-regulation (Matthews, Ponitz, & Morrison, 2009). Self-regulation encompasses many processes (e.g., behavioral, attentional, motivational) underlying the ability to control one's reaction to the surrounding environment. One important component of self-regulation is emotion regulation (Bronson, 2000). Emotional expression, a manifestation of emotion regulation, also reflects differences between boys and girls. In general, girls show more positive emotions as well as more internalizing behaviors than do boys (Chaplin & Adlao, 2013). This gender difference in the expression of positive emotion increases from toddlerhood to adolescence. Additionally, boys display more externalizing behaviors than girls. Boys lead girls in externalizing behavior until adolescence, when they begin to demonstrate fewer externalizing behaviors than girls (Chaplin & Adlao, 2013). Gender differences also exist in the use of particular emotion regulation strategies. Females, for example, ruminate more frequently than do males. Conversely, men tend to suppress their emotions more often than do women (Tamres, Janicki, & Helgeson, 2002). The observed gender differences in self-regulation, emotional experience, and emotion regulation strategy selection provide support for examining emotion regulation ability and its associations with peer victimization and student engagement separately for boys and girls.

Developmental Differences in Emotion Regulation

Because emotion regulation is an executive function and relies on the activation of the prefrontal cortex, there are developmental differences in emotion regulation that extend from toddlerhood to later adulthood (Diamond, 2002). At a young age, children do not always have the self-regulatory control to regulate their emotions from within themselves. During this period, parents and other adults often help children regulate their emotions through comforting words, actions, and objects. Adults also regulate children's emotional experiences by selecting the majority of their environment (situations) for them (Gross & Thompson, 2007). As children age, they accumulate experiences that help them learn how to regulate their emotions (Goleman, 1997). Neurological changes also occur from childhood to adolescence that enable improvements in emotion regulation abilities. Just before puberty, the prefrontal cortex begins a growth spurt, giving early adolescents more neural resources to regulate their emotions and employ more sophisticated emotion regulation strategies like cognitive reappraisal (Giedd et al., 1999; McRae et al., 2012). Emotion regulation abilities continue to grow and change throughout the lifetime, but early adolescence marks a critical period for the development of emotion regulation. This time period is also fraught with an increasing number of stressors and emotionally laden experiences in school and relationships, making emotion regulation skills necessary for adaptive social and academic functioning.

Victimization and Emotion Regulation

Emotion dysregulation has been associated with peer victimization as both an antecedent and an outcome (Rosen, Milich, & Harris 2012; Spence, De Young, Toon, & Bond, 2009;

Wilton et al., 2000). The particular emotion regulation profiles of students may be related to whether they experience frequent peer victimization and how they cope with the negative emotions following peer victimization. In a longitudinal study of peer ratings of social adjustment, Pope and Bierman (1999) found that an inability to regulate negative emotions, reflected through withdrawal and aggression, predicted victimization during adolescence. Kochenderfer-Ladd (2004) used hypothetical scenarios to elicit emotional reactions and response plans in students in kindergarten through fifth grade. Different emotions were associated with positive and negative hypothetical outcomes such that fear predicted conflict resolution and less future victimization while anger and embarrassment predicted revenge behaviors, increased internalizing problems, and more future victimization. During playground observations, Wilton and colleagues (2000) identified two common responses to peer victimization: employing problem-solving strategies and reacting with physical or verbal aggression. The researchers found that students who engaged in problem-solving strategies following instances of peer victimization were 13 times more likely to defuse the victimization experience than were students who reacted aggressively. Clearly, emotional dysregulation can prolong the experience of peer victimization and worsen the outcomes (Spence et al., 2009; Wilton et al., 2000). For example, if students ruminate on the negative emotions associated with a victimization experience, they are more likely to develop low self-esteem or internalizing problems like depression or social anxiety than if they shift their attention away from the negative feelings. Finally, one previous study examined the association between peer victimization and effortful control, a construct closely related to emotion regulation that enables people to selectively allocate their attention as well as monitor and manage their thoughts and feelings (Iyer, Kochenderfer-Ladd, Eisenberg, & Thompson, 2010). The researchers collected teacher reports

of effortful control and teacher, self-, and peer reports of victimization status at three time points over a year and found that effortful control was negatively correlated with victimization across time and reporters. Overall, these findings highlight the role of adaptive emotion regulation in short-circuiting the peer victimization cycle.

The association between emotion regulation and negative outcomes may differ by type of victimization experienced. For example, McLaughlin et al. (2009) found not only that self-reported peer victimization was associated with increases in emotion dysregulation (reflecting self-reported difficulties with emotional understanding, maladaptive expression of anger and sadness, and rumination) over a four-month period, but increases in emotion dysregulation then mediated the association between relational and reputational victimization and increased internalizing symptoms observed over a 7-month period; emotion regulation was not found to mediate a similar association between overt victimization and negative outcomes. Although observed gender differences in associations among victimization, emotion regulation, and outcomes are mixed (Hanish et al., 2004; Wilton et al., 2000), gender may also play a role in the selection of coping strategies following instances of peer victimization. Hanish and colleagues (2004) found that an emotion regulation-mediated association between anger and victimization was stronger for girls than for boys, though it was significant for both. However, Wilton and colleagues (2000) found no significant gender differences. Regarding specific methods of regulation, it is suggested that girls are more likely than boys to seek help and support in response to peer victimization, behaviors that may both defuse the victimization experience and help them effectively cope with the negative emotions associated with victimization (Hunter, Boyle, & Warden, 2004). These results emphasize the importance of further examining the associations among discrete components of emotion regulation, gender, and victimization.

When examining the association between victimization and emotion regulation, past researchers have focused on the role of emotion regulation as a unitary construct. As discussed earlier, emotion regulation is a multidimensional construct and includes components that vary in function and the amount of skill required to employ (Gross, 2013; Gross & Thompson, 2007). However, these components have not been analyzed separately. Certain components of emotion regulation may be more strongly associated with peer victimization than others. Likewise, some components of emotion regulation may be more likely to be risk factors of peer victimization while others may have more power to relieve or increase the negative emotions resulting from peer victimization. Therefore, it would benefit the field to examine the associations among peer victimization and different components of emotion regulation.

Student Engagement

Definition and Associated Outcomes of Student Engagement

Student engagement is defined as the degree of interest, attention, and investment students have for their school and educational material (Marks, 2000). The conceptualization of student engagement used in this work follows Fredricks and colleagues' (2004) model. This model includes three types of student engagement: emotional, cognitive, and behavioral. Affective engagement reflects the level of interest students have in school, the amount of value they place on education, and type of emotions students feel in regard to school. Cognitive engagement represents a student's intrinsic motivation for learning. Students with high levels of cognitive engagement are likely to put forth large amounts of effort toward school assignments and persevere to overcome challenges. Finally, behavioral engagement includes following school rules and participating in the school community. It is reflected in behaviors such as

completing homework on time, speaking during class discussions, joining school clubs, and asking questions in class.

Student engagement is a strong predictor of academic achievement. Behavioral, cognitive, and affective engagement are all positively related to level of educational aspiration, college enrollment, and grade point average and negatively associated with high school dropout and depression (Wang & Peck, 2013). Interestingly, the strength of these relationships was affected by the engagement profile of the student. For instance, students who were cognitively and behaviorally engaged, but not emotionally engaged, were more likely than any other group to experience depression. This finding highlights the relative importance of different types of student engagement for students' outcomes. Because student engagement is a predictor of academic achievement, it is an important construct to protect and foster among students.

Factors Affecting Student Engagement

Multiple factors underlie the development of student engagement. Positive student-teacher relationships foster student engagement as do a warm classroom environment and appropriate curricula (Hughes, Luo, Kwok, & Loyd, 2008; Reyes, Rivers, White, & Salovey, 2012). Student engagement is arguably strongest and most resistant to breakdown if it is grounded in qualities inherent in the student. Students who are agents of their engagement may be able to maintain motivation to complete homework, see value in school, and overcome obstacles even while under distress or in barren situations.

Students' emotions can reciprocally interact with the multiple components of their engagement. For example, emotions can affect cognitive engagement by influencing attention and memory. Researchers have found that when students experienced positive feelings (e.g.,

excitement, curiosity, or enjoyment) related to an academic task, they focused more attention on said task relative to when they experienced negative task-related emotions like boredom or anger (Pekrun, Goetz, Daniels, Stupnisky, & Perry, 2010). Memory recall is generally mood congruent such that students in a negative mood state are primed to recall negative task and self-information. Students in a positive mood, on the other hand, are more capable of retrieving positive self-appraisal and task information from their memories (Olafson & Ferraro, 2001). Positive activating (arousing) emotions, like enjoyment, are positively related to the amount of effort students allot for a task. Conversely, negative activating emotions such as anger and shame are sometimes negatively associated with effort or behavioral engagement. In certain cases, negative activating emotions can encourage students to put forth additional effort in order to avoid continued feelings of shame, for instance (Linnenbrink, 2007; Pekrun et al., 2010). Finally, students' emotions surrounding the social learning environment can affect their feelings of relatedness. When students' needs for relatedness are fulfilled, their affective engagement is increased. Clearly, emotions and student engagement are deeply intertwined, making emotion regulation a potential target of intervention for increasing student engagement, which will be discussed further below.

Gender Differences in Student Engagement

The school experience can frequently differ for girls and boys, which may lead to gender differences in student engagement. In a longitudinal study, beginning with students in first grade, girls demonstrated more effortful engagement (e.g., involvement in learning tasks) and conduct engagement (e.g., prosocial behavior and following school rules), two subtypes of Fredricks's behavioral engagement construct (Hughes et al., 2008). Additionally, gender

differences exist in how students perceive opportunities for interest, challenge, choice, and enjoyment in their classroom activities. Interest, challenge, choice, and enjoyment reflect elements of emotional and cognitive engagement. Specifically, girls reported finding their classroom activities significantly more interesting and enjoyable than did boys through grades 3 to 8 (Gentry, Gable, & Rizza, 2002). Researchers speculate that these gender differences in reported interest and enjoyment translate into gender differences in motivation, with girls viewed as more motivated than boys, as well as academic achievement. These observed gender differences provide justification for examining the associations among student engagement, peer victimization, and emotion regulation separately for girls and boys.

Developmental Changes in Student Engagement

Because of differences in school constraints and environment, peer relations, and student motivations, student engagement appears to decline from elementary school to middle school. Students reported lower levels of interest and enjoyment with each subsequent year from 3rd to 8th grade. Reported levels of challenge remained stable from 3rd to 8th grade, but students in grades 6-8 reported fewer opportunities for choice in classroom activities than did students in grades 3-5 (Gentry et al., 2002). It is concerning that middle school students, who desire and would benefit from greater autonomy than elementary school students (Pianta, 2009), report perceiving less interest, choice, and enjoyment than their younger counterparts. Increasing opportunities for choice and fostering interest and enjoyment in curriculum would likely improve student motivation and engagement, leading to greater academic achievement and reduced risk of dropout. Another factor that may be driving reduced levels of student engagement during adolescence is the increasing amount of interpersonal stress that occurs during early adolescence.

While students cannot personally change the amount of autonomy or choice they are offered at school, they can control their own stress and emotional experiences to an extent. Consequently, emotion regulation skills would be a wise place to intervene when aiming to improve student engagement.

Victimization and Student Engagement

Peer victimization endangers student engagement and academic achievement (Buhs et al., 2006). Using teacher, peer, and self-report data, researchers have identified a negative association between peer victimization and teacher-reported independent and engaged classroom behavior that persist over time and across informants (Iyer et al., 2010). Other researchers have found similar results; for instance, using a national data set on 10th-grade school climate, Ripski and Gregory (2009) found that early adolescents' perceptions of victimization were negatively associated with teacher-reported student engagement, and Juvonen and colleagues (2011) found that self-reported victimization and peer nominations of victim reputation predicted lower teacher ratings of academic engagement among middle school students. Student engagement also appears to be a partial mediator of the association between victimization and decreases in academic achievement (Buhs, 2005). Because student engagement is one process through which peer victimization may threaten academic achievement, it is important to understand the mechanisms by which victimization may decrease student engagement.

Internalizing and externalizing problems have been proposed as mediators of the association between peer victimization and student engagement. Hoglund (2007) examined the role of internalizing and externalizing problems in the relationships between relational and physical subtypes of victimization and school engagement. Both physical and relational

victimization were significantly and negatively correlated with school engagement for girls and boys alike. For girls and boys, internalizing and externalizing problems were significantly and positively associated with both relational and physical victimization and significantly and negatively related to school engagement. Notably, internalizing problems were more strongly associated with relational victimization than physical victimization. Furthermore, interesting gender differences were found in how internalizing and externalizing problems mediated the influence of victimization on engagement. Internalizing and externalizing problems partially mediated the association between relational and physical victimization and engagement for girls. For boys, however, the only significant mediator was externalizing problems for the association between physical victimization and engagement. These findings suggest that the negative emotions and behaviors associated with experiences of victimization may interfere with engagement and that there may be important gender and subtype (physical and relational) differences in how victimization relates with student engagement.

Peer victimization may also relate to the components of student engagement (cognitive, affective, and behavioral) differently. However, previous research examining the association between victimization and student engagement has typically conceptualized student engagement as a single factor. Researchers have examined the associations between victimization and constructs that strongly relate to a particular component of student engagement. For example, data from 1,253 8th-, 10th-, and 12th-grade students reveal negative associations among self-reported physical, verbal, and relational victimization and perceived school connectedness, a construct reflected in affective student engagement (Fredricks et al., 2004; O'Brennan & Furlong, 2010). Additionally, an examination of the associations among self- and peer reports of victimization, friendship support, and school liking yielded significant moderation results

suggesting that self-reported victimization was associated with lower ratings of school liking, a construct correlated with affective and cognitive engagement, for students who reported high levels of friendship support (Erath, Flanagan, & Bierman, 2008; Fredricks et al., 2004).

However, more research is needed to elucidate the potential unique associations among peer victimization and cognitive, affective, and behavioral engagement. Because of each subtype of engagement's distinct nature and collection of associated feelings and behaviors, it is reasonable to expect that peer victimization might relate with each of these subtypes differently. For example, the negative emotions associated with experiences of victimization can detract attention away from school because the victim is stuck ruminating on their experience; through this process, academic engagement may be reduced as the student's attention and participation in class decreases. Alternatively, victimization may interfere with cognitive engagement through increased amounts of negative attributions and self-blame (Graham & Juvonen, 1998). Graham, Bellmore, and Mize (2006) proposed a pathway to school maladjustment for victims that was characterized by high levels of stable negative attributions and self-blame. Over time such negative and persisting cognitions may have a negative effect on self-concept, including academic self-concept, and reduce positive affect such that staying motivated and interested in school, hallmarks of cognitive engagement, is difficult. Finally, as described above, victimization can increase feelings of the school as unsafe and reduce feelings of school connectedness, ultimately resulting in decreased affective engagement. Because victimization may potentially affect subtypes of student engagement through different mechanisms, it is important to examine the associations between victimization and student engagement separately by type (cognitive, affective, and behavioral).

As discussed earlier, victimization and emotion regulation are related such that emotion regulation ability has a profound impact on a student's ability to cope with peer victimization. For example, strong emotion regulation ability can alleviate some of the negative effects of peer victimization while poor emotion regulation can actually worsen outcomes following experiences of victimization. Because emotion regulation ability can alter the lingering outcomes of peer victimization, it should be explored as a potential buffer for the negative impact of peer victimization on student engagement.

Emotion Regulation and Student Engagement

A student's emotion regulation ability is one factor that can be trained and strengthened to help her develop agentic student engagement and resilience in the face of adversity, such as the stress that accompanies peer victimization. As demonstrated by the discussion of emotions and student engagement above, emotion regulation is vital to student engagement. Engaged learners are interested, attentive, motivated, and follow school rules (Fredricks et al., 2004). In order to maximize these characteristics, students must be able to effectively manage their emotions while at school and working on school tasks. Presumably, students with strong emotion regulation abilities can better self-regulate behavior to follow school rules and control their emotional reactions during interactions with teachers and peers than are students with poor emotion regulation.

Research directly focused on the associations between emotion regulation and student engagement is sparse. However, research has established strong associations between executive functioning, effortful control, and self-regulation, constructs closely related to emotion regulation and student engagement. Executive functioning includes several higher order

cognitive processes, some of which form the foundation for emotion regulation. Brock and colleagues (2009) found that higher executive functioning abilities predicted higher levels of student engagement among a sample of kindergarteners. It would be logical to presume, then, that better emotion regulation abilities would also predict higher levels of student engagement. A study examining the associations among peer victimization, effortful control, and student engagement found evidence that teacher reports of students' effortful control were positively associated with teachers' ratings of students' independent behavior and active classroom participation (Iyer et al., 2010). Self-regulated learning is believed to be positively associated with students' motivation and cognitive engagement (Boekaerts, 2010; Wolters, 2010). Additionally, MacCann, Fogarty, Zeidner, and Roberts (2011) found a positive association between emotional intelligence, a trait correlated with emotion regulation (Mayer & Salovey, 1995), and the use of adaptive school-related coping strategies that related to greater achievement. Finally, a positive association between middle school students' emotion regulation and school performance, assessed through achievement test results and grades, has been identified (Gumora & Arsenio, 2002); it is possible that student engagement mediates this relationship. Clearly, additional research should be conducted to examine the association between emotion regulation, specifically, and student engagement.

Similar to the associations among peer victimization and subtypes of student engagement, the association between emotion regulation and student engagement can also be examined separately by subtype (cognitive, affective, and behavioral). Attending during class and following school rules directly correlates with behavioral engagement (Fredricks et al., 2004); students with strong emotion regulation abilities are better able to regulate boredom and increase attention to tasks during class (Nett, Goetz, & Hall, 2011). Ability to adaptively regulate

emotional experiences during social relations would likely increase students' positive feelings toward school and school personnel, reflected by higher levels of emotional or affective engagement (Fredricks et al., 2004). Finally, emotion regulation skills were found to be positively associated with academic productivity in a sample of 325 kindergarteners and are hypothesized to support the development of independent learning behavior, an important concept for maintaining motivation and cognitive engagement (Fredricks et al., 2004; Graziano, Reavis, Keane, & Calkins, 2007). Importantly, the social environment at school has a strong effect on students' emotional states. Positive classroom environments, including interactions between and among students and teachers focused on support and student autonomy (Pianta, 2009), increase student engagement and academic competence and subsequent academic achievement (Guay, Boivin, & Hodges, 1999). When the quality of the classroom climate is not ideal, however, during instances of peer victimization, for example, the resulting negative emotional experiences can cause student engagement to suffer (Furrer & Skinner, 2003). Being able to regulate one's emotions effectively may buffer a student against possible negative effects of a negative school climate, such as one where peer victimization is frequent, protecting engagement and academic achievement. The present study attempted to add to the literature by analyzing the efficacy of emotion regulation as a buffer for the negative associations among peer victimization and three subtypes of student engagement (cognitive, affective, and behavioral) separately.

Research Questions and Hypotheses

The current study sought to expand on the existing research on peer victimization and student engagement by examining the role of emotion regulation as a moderator for the associations between peer victimization and student engagement. The associations between

emotion regulation difficulties and peer victimization were examined. The current study aimed to examine peer victimization in middle school students (grades 6-8) because peer relationships and social status are markedly important during early adolescence (Larson & Richards, 1991). Additionally, during this developmental period, students are more capable of using diverse and advanced emotion regulation strategies than they are during childhood. We would expect peer victimization and emotion regulation to have a large impact on students' engagement at this age. The following research questions guided the present investigation.

1) What are the associations among emotion regulation difficulties and relational victimization? Do these associations differ by gender? and 2) What are the associations among emotion regulation difficulties and overt victimization? Do these associations differ by gender?

Previous research has shown that emotion dysregulation is a risk factor for peer victimization. Poor emotion regulation has been linked to social difficulties and peer rejection (Eisenberg, Fabes, Murphy, Carlo, & Karbon, 1995). For example, students who frequently express negative emotions, like anger, are more likely to be victimized (Hanish et al., 2004; Rosen et al., 2012). Additionally, students who have difficulty regulating their response during instances of victimization are more likely to be victimized repeatedly (Spence et al., 2009; Wilton et al., 2000). It was therefore predicted that students with greater emotion regulation difficulties will experience more frequent victimization. Consequently, it was predicted that emotion regulation difficulties are positively associated with both relational and physical victimization.

Very little research has been done to examine the associations between different components of emotion regulation and peer victimization. However, studies that have examined the relationship between emotion regulation broadly and peer victimization have found positive

associations between impulsivity and victimization as well as reactive aggression (Dempsey, Fireman, & Wang, 2006). Negative relationships among emotional intelligence and positive coping strategies and future victimization have also been found (Kochenderfer-Ladd, 2004; Wilton et al., 2000). Therefore, it was predicted that impulsivity would be the strongest predictor of physical victimization, and strategies and clarity would be the strongest predictors of relational victimization.

Potential gender differences in the association between emotion dysregulation and victimization have not been extensively examined. However, gender differences in emotion regulation difficulties have been found (Neumann, van Lier, Gratz, & Koot, 2010). Specifically, girls demonstrated more difficulty in maintaining goal-directed behavior when experiencing negative emotions, using strategies, and reaching emotional clarity than did boys even though their overall difficulty across the six emotion regulation components of the DERS was similar (Weinberg & Klonsky, 2009). Furthermore, social acceptability of emotional expression differs for boys and girls; for example, the ability to neutralize negative emotions was significantly associated with social acceptance for boys, but not girls (Rose & Rudolph, 2006; Young, 2001). Consequently, potential gender differences in the association between emotion regulation difficulties and victimization may exist when the components of emotion regulation are examined. Overall, however, it was expected that the associations between the DERS subscale predictors and victimization would be stronger for boys than for girls.

3) Does emotion regulation ability moderate the association between peer victimization and cognitive engagement? Does this association differ by gender?

Victimization is related to reduced student engagement. Cognitive engagement reflects an interest in learning and perceived relevance of school for the future (Fredricks et al., 2004)

and is highly associated with motivation (Reeve, Deci, & Ryan, 2004). Victimization has been shown to interfere with academic self-concept, motivation, and interest in school (Buhs et al., 2006; Caputo, 2014; Wentzel, 1998). Alternatively, regulating one's affective state can have implications for improving motivation (Winne, Hadwin, & Perry, 2012). Therefore, it was predicted that emotion regulation may buffer against the negative effects of victimization on cognitive engagement. Conversely, poor emotion regulation is likely associated with decreased cognitive engagement following victimization because students with poor emotion regulation may have difficulty coping with the stress of victimization and will have limited resources to manage motivation. It was predicted that emotion regulation ability would moderate the association between victimization and cognitive engagement such that strong emotion regulation will buffer the negative association between victimization and affective engagement, and poor emotion regulation will strengthen the negative association between victimization and cognitive engagement.

Very little research has examined gender differences in the associations among victimization, emotion regulation, and cognitive engagement. Although emotion regulation can differ across gender and even though girls have been found to have higher engagement than boys, two research studies that examined gender differences in the relationship between facilitators of engagement and engagement and academic achievement did not find differences between girls and boys (Gumora & Arsenio, 2002; Skinner, Furrer, Marchand, & Kindermann, 2008). Therefore, no gender differences in the moderation were expected.

4) Does emotion regulation ability moderate the association between peer victimization and affective engagement? Does this association differ by gender?

Affective engagement reflects a student's feelings of belonging in school and positive feelings about the school community (Fredricks et al., 2004). Peer victimization is associated with peer rejection and less bonding to the school community (Haynie et al., 2001). Students with better emotion regulation may be less distressed following instances of victimization than are students with poor emotion regulation abilities because they can cope more adaptively (Wilton, et al., 2000). Students with strong emotion regulation ability can cognitively restructure their experience of victimization, effectively resolve conflicts, and distance or distract themselves from the negative emotions associated with instances of victimization (Kochenderfer-Ladd, 2004). These behaviors can help students achieve and maintain a positive affective state and remain emotionally engaged in school. Students with poor emotion regulation abilities, on the other hand, frequently cope in maladaptive ways following victimization. Such students may respond with anger and violence, for instance, which invites additional victimization (Kochenderfer-Ladd, 2004). Additionally, students with poor emotion regulation abilities do not have the capacity to reappraise their experiences and are likely to ruminate on the negative feelings that result from victimizations (Neumann et al., 2010). Consequently, it was predicted that emotion regulation would moderate the association between victimization and affective engagement such that strong emotion regulation will buffer the negative association between victimization and affective engagement, and poor emotion regulation will strengthen the negative association between victimization and affective engagement.

Very little research has examined gender differences in the associations among victimization, emotion regulation, and affective engagement. Consistent with the moderation involving cognitive engagement, no gender differences were expected in this relationship.

5) Does emotion regulation ability moderate the association between peer victimization and behavioral engagement? Does this association differ by gender?

Behavioral engagement reflects participation in academic activities and following of school rules (Fredricks et al., 2004). Psychological distress from victimization leaves students with fewer resources to attend in class and focus on homework (Gumora & Arsenio, 2002). Students who are victimized are more likely to avoid school and be frequently absent than are students who are not victimized (Buhs et al., 2006). Students with strong emotion regulation abilities may be capable of reappraising their experiences and suppressing negative emotions so that they can focus on goals; students with poor emotion regulation ability have difficulty focusing on tasks when they experience negative emotions and they have limited strategies to regulate their emotions (Neumann et al., 2010). Therefore, it is likely that students who have strong emotion regulation abilities can suppress or process the negative emotions associated with victimization in order to maintain behavioral engagement in school. Conversely, students who have poor emotion regulation abilities likely ruminate on the negative emotions associated with victimization or are unable to overcome the negative emotions in an adaptive manner, resulting in lower behavioral engagement. Therefore, it was predicted that emotion regulation would moderate the association between victimization and behavioral engagement such that strong emotion regulation will buffer the negative association between victimization and behavioral engagement, and poor emotion regulation will strengthen the negative association between victimization and behavioral engagement.

Very little research has examined gender differences in the associations between victimization, emotion regulation, and behavioral engagement. Consistent with the moderations

involving cognitive and affective engagement, no gender differences were expected in this relationship.

When comparing the moderation effect across type of engagement, it was expected that the strength of the moderation effect would be strongest for affective engagement, followed by cognitive engagement, and finally behavioral engagement. In previous research, Skinner and colleagues (2008) found evidence that emotional disaffection, such as anxiety and worry, would be more likely to result from victimization than the components of behavioral disaffection which seem more likely to stem from academic struggles (e.g., being unprepared, inattentive, distracted). Therefore, it is likely that victimization has a more profound impact on affective engagement such that emotion regulation ability would have the opportunity to have a greater impact on the association between victimization and affective engagement than on the association between victimization and behavioral engagement. Victimization is also directly and negatively related to feelings of affective engagement, such as school belonging, as the experience of peer victimization is associated with feelings of loneliness (Fredricks et al., 2004; Graham & Juvonen, 1998). The moderation effect was not expected to be as strong for cognitive engagement as it is for affective engagement because the association between victimization and cognitive engagement does not appear to be as direct as that between victimization and affective engagement. However, the moderation effect was expected to be stronger for cognitive engagement than for behavioral engagement because low life satisfaction, which may follow victimization, has been associated with low cognitive engagement (Lewis, Huebner, Malone, & Valois, 2011). Furthermore, cognitive engagement arguably requires more energy and resources than does behavioral engagement (Fredricks et al., 2004) and is negatively affected by drops in

motivation that may follow postvictimization negative affect and rumination (McLaughlin et al., 2009).

6) Do victims of relational aggression and victims of physical aggression have distinct patterns of difficulties in emotion regulation?

Although previous research identified emotion regulation difficulties as a risk factor for victimization (Wilton, et al., 2000), most studies conceptualized emotion regulation broadly and did not examine the unique roles of specific components of emotion regulation (e.g., clarity, strategy use, etc.) (Neumann et al., 2010). Additionally, previous research has identified emotion dysregulation as an antecedent for both relational and physical victimization but has not examined whether the same emotion regulation difficulties precede each type of victimization. Therefore, this cluster analysis was exploratory in nature; no specific profiles were expected. However, it was expected that profiles with higher Impulsivity scores would have the highest rates of Physical Victimization and profiles with higher Clarity and Strategies scores would have the highest rates of Relational Victimization.

CHAPTER 3

METHODOLOGY

Participants

Participants for the present study were 363 7th (46.8%) and 8th (53.2%) grade middle school students from a large middle school in the midwestern United States. Slightly more than half of the students were female (56.5%) and slightly less than half were male (43.5%). The sample included 56.1% Hispanic students, 16.3% multiracial students, 15.2% White students, 8.3% Black students, 3.0% Asian students, 0.8% Native Hawaiian or other Pacific Islander students, and 0.3% American Indian or Alaskan Native students.

A passive consent procedure was used where parents were notified of the survey in advance and given the opportunity to withdrawal consent for their student(s) by contacting the main office. The school's total enrollment is 541 students. The ethnic makeup of the school includes 67.5% Hispanic, 16.8% White, 7.9% Black, 3.9% Asian, 2.8% multiracial, and 1.1% American Indian students. Almost 82% of the students are low-income, 12% have reported disabilities, and 11.8% are English language learners. The total sample surveyed included 425 students who were present on the day of survey administration and whose parents did not withdrawal them from participation. More students were included in the initial sample because some responses were considered invalid and were excluded from the current report. Responses were considered invalid if responses were given that did not vary from measure to measure, were out of range, or if students otherwise indicated that they did not answer truthfully or did not wish

for their responses to be included. Fifty-six students opted out of the survey and eight students submitted invalid surveys.

Measures

The current study is comprised of three student self-report questionnaires used to assess emotion regulation difficulties, occurrence of peer victimization, and student engagement.

Difficulties in Emotion Regulation Scale (DERS) (Gratz & Roemer, 2004)

In order to assess emotion regulation ability, the DERS was administered. The DERS is a student self-report measure of problems with emotion regulation in six areas: Awareness, Nonacceptance, Clarity, Impulsivity, Strategies, and Goals. The Awareness subscale measures an individual's ability to recognize and attend to one's own emotions. An example item is *When I am upset, I acknowledge my feelings*. The Nonacceptance subscale represents the respondent's inability to accept negative emotions and her experience of negative secondary emotions in response to distress. An example item is *When I'm upset, I become embarrassed for feeling that way*. The Clarity subscale reflects how well respondents understand their emotional experiences. An example item is *I have no idea how I am feeling*. The Impulsivity subscale is a measure of the respondent's difficulty maintaining self-control while experiencing negative emotions. An example item is *When I'm upset, I have difficulty controlling my behaviors*. The Strategies subscale reflects the respondent's feelings of hopelessness when it comes to regulating one's emotions. An example item is *When I'm upset, I believe that there is nothing I can do to make myself feel better*. Finally, the Goals subscale represents difficulty concentrating and focusing on tasks while experiencing negative emotions. An example item is *When I'm upset, I have difficulty focusing on other things* (Gratz & Roemer, 2004). Students respond to 36 items using a

5-point Likert scale ranging from 1 = *Almost Never* to 5 = *Almost Always*. Some items are reverse scored. Higher scores on the DERS and each subscale indicate greater difficulty with emotion regulation overall or in that particular manner, respectively. Low scores overall and across each subscale indicate that the respondent does not experience the specified difficulties in emotion regulation.

The DERS was developed with a sample of undergraduate students and has been validated for use with middle-school-aged students. The measure's psychometric properties are not based on a normative sample, but analyses of the measure's psychometric properties provide evidence to support the reliability and validity of the scale. The DERS has demonstrated high internal consistency, with alphas of .80-.91 for all subscales and .93 for the total scale (Gratz & Roemer, 2004). Thirty-four of the 36 items had item-total correlations above $r = .30$, and all item-total correlations ranged from $r = .16$ to $r = .69$ (Gratz & Roemer, 2004). DERS scores have also demonstrated good test-retest reliability ($p_T = .88$ for the total score and ranged from $p_T = .57$ to $p_T = .89$ for the subscale scores) over a period of 4-8 weeks, using a sample of college students (Gratz & Roemer, 2004). DERS scores demonstrate a high level of construct validity. Overall DERS scores correlated significantly and positively with experiential avoidance and significantly and negatively with emotional expressivity (Gratz & Roemer, 2004).

A study conducted with adolescents found significant associations between DERS scores and externalizing and internalizing problems (Neumann et al., 2010). Exploratory and confirmatory factor analyses of the DERS identified six latent factors, which corresponded to the six proposed subscales of the DERS (Gratz & Roemer, 2004). Eigenvalues ranged from 1.13 to 11.10, and each factor accounted for 3.14 to 30.85 percent of the variance. Factor loadings ranged from .40 to 1.00 (Gratz & Roemer, 2004). Neumann and colleagues (2010) conducted an

exploratory factor analysis using an adolescent sample. In this study, factor loadings for all items ranged from .25 to .81, and Cronbach's alphas for each subscale ranged from .72 to .87 (Neumann et al., 2010). Correlations among the subscales were low to moderate, ranging from -.12 to .54, implying that the subscales assess unique constructs (Gratz & Roemer, 2004; Neumann et al., 2010). For the current sample, Cronbach's alpha was .90 for the total scale, which is good.

Social Experience Questionnaire—Self-Report (SEQ-S) (Crick & Grotpeter, 1996)

In order to measure students' experiences of peer victimization, a modified version SEQ-S, adapted for use with older children, was administered. The SEQ-S is a student self-report survey that assesses relational victimization, overt victimization, and receipt of prosocial acts. Students respond to 15 items on a Likert scale. Response options range from 1 = *Never* to 5 = *All the Time*. The three subscales, Relational Victimization, Overt Victimization, and Receipt of Prosocial Acts, consist of five items each. The Relational Victimization subscale consists of items meant to assess the frequency with which respondents experience attempts or threats from other peers to harm their peer relationships. One example is *How often does a peer spread rumors or gossip about you to make others not like you anymore?* The Overt Victimization subscale consists of questions that assess the frequency with which respondents experience attempts or threats of physical harm from peers. An example of an Overt Victimization item is *How often does another peer threaten to beat you up if you don't do what they want you to do?* Finally, the Receipt of Prosocial Acts subscale measures the frequency with which respondents receive targeted acts of caring from a peer. An example item from this subscale is *How often does another peer try to cheer you up when you feel sad or upset?* The present study utilized the

two victimization subscales in the analyses; the items from the Receipt of Prosocial Acts subscale were retained to serve as positive buffer items as well as a potential covariate to determine whether the receipt of prosocial acts offsets the negative consequences of victimization.

The SEQ-S psychometrics are not based on a normative sample; however, researchers report internal reliability between .77 and .91 (Crick & Bigbee, 1998; Crick & Grotpeter, 1996) and test-retest reliability between .57 and .62. A principal components factor analysis of the instrument provided a good fit with the three-construct model (Crick & Bigbee, 1998). Eigenvalues ranged from 0.7 to 6.9 and each factor accounted for at least 4.5% and up to 45.7% of the variance. Factor loadings ranged from .69 to .88 (Crick & Bigbee, 1998). Storch and colleagues (2005) conducted a confirmatory factor analysis using a sample of 1,158 adolescents aged 13-17 years and produced results that supported Crick and Grotpeter's (1996) three-factor structure. An additional study examined the factor structure of the SEQ-S across three time points for elementary-aged boys and girls. The results of confirmatory factor analyses indicated a good fit of the three-factor model at each time point and suggested potential invariance across gender and grade as well (Desjardins, Yeung Thompson, Sukhawathanakul, Leadbeater, & MacDonald, 2013). The measure demonstrates good internal validity as reports of overt and relational victimization correlate positively with each other ($r = .69, p < .001$), but each correlates negatively with the Receipt of Prosocial Acts subscale ($r = -.34, p < .001$ and $r = -.35, p < .001$, respectively) (Crick & Bigbee, 1998). This measure also correlated significantly with a peer report of victimization, the SEQ-P, for both boys and girls, with r values ranging from .31 to .39, demonstrating some convergent validity (Crick & Bigbee, 1998). For the current sample, Cronbach's alpha was .71 for the total scale, which is acceptable.

School Engagement Scale (SES) (Fredricks, Blumenfeld, Friedel, & Paris, 2005)

The School Engagement Scale was administered to obtain information about students' engagement in school across three types: Affective, Cognitive, and Behavioral. It consists of 15 items designed to assess students' behaviors and attitudes related to school. The Affective Engagement scale consists of six items. The Cognitive Engagement scale consists of five items. The Behavioral Engagement scale consists of four items. Each scale is scored separately. The Affective Engagement score reflects the level of interest students have in school, the amount of value they place on education, and amount of positive emotions students feel about school. An example item that assesses affective engagement is *I feel happy at school*. The Cognitive Engagement score represents a student's intrinsic motivation for learning. An example item that assesses cognitive engagement is *When I read a book, I ask myself questions to make sure I understand what it is about*. Finally, the Behavioral Engagement score reflects the level with which students participate in the school community and behave in ways consistent with school rules. An example item used to assess behavioral engagement is *When I am in class, I just pretend I am working* (this item is reverse scored). Students respond to items using one of two 5-point Likert scales, including the following ranges and qualifiers: 1 = *Never* to 5 = *All the Time* or 1 = *Not At All True* to 5 = *Very True*.

Many of the items in the School Engagement Scale were taken from existing measures of motivation and classroom climate (Fredricks & McColskey et al., 2010). A standardization sample does not exist for the SES, but the developers examined the reliability and validity of the measure and its predecessor, the School Engagement Measure—MacArthur (Fredricks, Blumenfeld, Friedel, & Paris, 2005). The measure demonstrates strong internal consistency.

Cronbach's Alphas for each scale range from .55 to .86 (Fredricks & McColskey, 2012; Fredricks & McColskey et al., 2010). Convergent validity has also been established for the measure. For example, the developers and other researchers found that self-reported levels of engagement from the survey correlated significantly and positively with teacher rated participation and engagement, observations of student engagement, school value and attachment, social skills, and class attendance (Fredricks & McColskey et al., 2010). Divergent validity has also been found for the scale; the engagement subscales correlated negatively with externalizing behaviors (Fredricks & McColskey et al., 2010). A factor analysis of the items resulted in three scales (Affective, Cognitive, and Behavioral) that reflected the theoretical framework (Fredricks & McColskey et al., 2010). The survey items have been validated with upper elementary school, urban, low-income, ethnically diverse students (Fredricks & McColskey, 2012). For the current sample, Cronbach's alpha was .74 for the total scale, which is acceptable.

Procedure

Data for the current study were collected from groups of students as part of a school-wide evaluation during one school day in the spring of 2015. Surveys were administered to groups of approximately 25 students by the classroom teacher. The research team provided each teacher with a script with clear directions for the completion of each measure to read to the group. District policies were followed regarding parental knowledge and consent; specifically, parents were notified of the data collection via a letter that explained the purpose of the data collection and its benefits and potential risks. Parents were to notify the school's office if they did not want their child(ren) to participate. A total of 116 students did not participate in the assent procedure;

it is unclear how many of these students had parents withdraw consent versus how many were absent from school on the day of data collection.

Each administration included three surveys, presented in a counterbalanced order, and a brief demographics questionnaire (i.e., ethnicity, age, gender, grade level, and average grades) and took about an hour to complete. Prior to data collection, students were given a brief overview of the study, procedures, and data storage practices. Students were also told that their participation was voluntary and were asked to sign a student assent form, confirming that they understood the nature of the study and agreed to take part in it. Aside from the students' assent signatures, no identifying information was collected. In total, 67% of the students in the school gave assent and participated in the survey. Assent forms and survey data were stored separately (so that the data were completely anonymous) and according to ethical standards.

The university's Institutional Review Board provided approval to use the extant data from the school evaluation for research purposes.

CHAPTER 4

RESULTS

Missing Data

The current sample had only a small portion of missing data. Less than 1% of data was missing across the demographic items. No more than 2.2% of data was missing across all DERS and CSEQ items, and 1.1% of the data or less was missing across the SES items. The DERS total score had 2.5% missing data and its associated subscales each had less than 1% missing data. The CSEQ total victimization score and both subscales had less than 1% missing data. Finally, the total SES score and all subscales each had less than 1.5% missing data. All analyses were completed using the Mplus statistical software, 5th version (Muthén & Muthén, 1998-2007), which utilizes a robust method, maximum likelihood estimation, to replace missing data before running analyses (Baraldi & Enders, 2010).

Preliminary Analyses

Means and standard deviations of all main variables for the total sample and separated by gender are presented in Tables 1-4. Tables 5 and 6 display the intercorrelations among study variables. Finally, Table 7 displays the results of a series of multiple independent *t* tests conducted to investigate any potential gender differences in each of the variables (Relational Victimization, Physical Victimization, Total Victimization, Awareness, Nonacceptance, Clarity, Impulsivity, Strategies, Goals, Total DERS Score, Cognitive Engagement, Affective

Table 1

Means and Standard Deviations of Study Variables

	Total		Boys		Girls	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Difficulty in Emotion Regulation						
Nonacceptance	2.20	1.03	1.91	0.83	2.41	1.11
Goals	2.83	1.11	2.67	1.13	2.95	1.09
Impulsivity	2.27	0.99	2.21	1.03	2.31	0.95
Awareness	3.16	0.88	3.23	0.80	3.10	0.94
Strategies	2.41	1.03	2.08	0.88	2.67	1.07
Clarity	2.39	0.83	2.23	0.77	2.52	0.86
Total Difficulty	2.93	0.82	2.75	0.74	3.07	0.85
Children's Social Experiences						
Physical Victimization	1.62	0.65	1.64	0.68	1.60	0.64
Relational Victimization	1.86	0.78	1.80	0.72	1.91	0.82
Total Victimization	1.74	0.65	1.72	0.65	1.75	0.65
Prosocial Behavior	3.52	0.86	3.63	0.86	3.63	0.84
Student Engagement						
Affective Engagement	2.67	0.81	2.74	0.85	2.62	0.77
Cognitive Engagement	2.08	0.77	2.10	0.77	2.06	0.76
Behavioral Engagement	3.79	0.68	3.71	0.74	3.86	0.63
Total Engagement	2.77	0.62	2.78	0.65	2.76	0.59

Note. Total $N=363$ (Male $n=158$, Female $n=205$)

Table 2

Means and Standard Deviations of Study Variables for Students who Reported Being Victimized						
Total Victimization > 1.0						
	Total		Boys		Girls	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Difficulty in Emotion Regulation						
Nonacceptance	2.33	1.04	2.00	0.45	2.59	1.10
Goals	2.97	1.10	2.77	1.08	3.13	1.10
Impulsivity	2.44	1.03	2.37	1.06	2.49	1.00
Awareness	3.17	0.90	3.24	0.80	3.11	0.97
Strategies	2.54	1.04	2.14	0.88	2.87	1.05
Clarity	2.46	0.83	2.27	0.71	2.62	0.88
Total Difficulty	3.06	0.81	2.84	0.74	3.24	0.83
Children's Social Experiences						
Physical Victimization	1.84	0.63	1.83	0.66	1.86	0.60
Relational Victimization	2.06	0.80	1.94	0.75	2.17	0.82
Total Victimization	1.95	0.63	1.89	0.65	2.01	0.61
Prosocial Behavior	3.42	0.89	3.26	0.85	3.56	0.90
Student Engagement						
Affective Engagement	2.62	0.80	2.69	0.82	2.55	0.77
Cognitive Engagement	2.05	0.77	2.04	0.74	2.06	0.78
Behavioral Engagement	3.69	0.69	3.59	0.73	3.78	0.64
Total Engagement	2.72	0.61	2.72	0.64	2.72	0.60

Note. Total $N=264$ (Male $n=120$, Female $n=144$)

Table 3

Means and Standard Deviations of Study Variables for Students who Reported Being Physically Victimized

	Physical Victimization > 1.0					
	Total		Boys		Girls	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Difficulty in Emotion Regulation						
Nonacceptance	2.20	1.03	1.91	0.83	2.41	1.11
Goals	2.83	1.11	2.67	1.13	2.95	1.09
Impulsivity	2.27	0.99	2.21	1.03	2.31	0.95
Awareness	3.16	0.88	3.23	0.80	3.10	0.94
Strategies	2.41	1.03	2.08	0.88	2.67	1.07
Clarity	2.39	0.83	2.23	0.77	2.52	0.86
Total Difficulty	2.93	0.82	2.75	0.74	3.07	0.85
Children's Social Experiences						
Physical Victimization	1.62	0.65	1.64	0.68	1.60	0.64
Relational Victimization	1.86	0.78	1.80	0.72	1.91	0.82
Total Victimization	1.74	0.65	1.72	0.65	1.75	0.65
Prosocial Behavior	3.52	0.86	3.63	0.86	3.63	0.84
Student Engagement						
Affective Engagement	2.67	0.81	2.74	0.85	2.62	0.77
Cognitive Engagement	2.08	0.77	2.10	0.77	2.06	0.76
Behavioral Engagement	3.79	0.68	3.71	0.74	3.86	0.63
Total Engagement	2.77	0.62	2.78	0.65	2.76	0.59

Note. Total $N=363$ (Male $n=158$, Female $n=205$)

Table 4

Means and Standard Deviations of Study Variables for Students who Reported Being
Relationally Victimized

	Physical Victimization > 1.0					
	Total		Boys		Girls	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Difficulty in Emotion Regulation						
Nonacceptance	2.29	1.04	1.96	0.85	2.54	1.10
Goals	2.93	1.09	2.71	1.10	3.10	1.06
Impulsivity	2.34	1.00	2.23	1.02	2.42	0.97
Awareness	3.12	0.87	3.20	0.76	3.05	0.94
Strategies	2.50	1.04	2.10	0.87	2.80	1.07
Clarity	2.43	0.86	2.26	0.77	2.56	0.90
Total Difficulty	3.00	0.83	2.78	0.74	3.17	0.85
Children's Social Experiences						
Physical Victimization	1.71	0.66	1.72	0.70	1.70	0.64
Relational Victimization	2.03	0.74	1.95	0.69	2.09	0.77
Total Victimization	1.87	0.63	1.84	0.64	1.90	0.62
Prosocial Behavior	3.48	0.87	3.30	0.88	3.62	0.84
Student Engagement						
Affective Engagement	2.67	0.81	2.72	0.83	2.63	0.79
Cognitive Engagement	2.08	0.77	2.08	0.78	2.09	0.76
Behavioral Engagement	3.76	0.69	3.65	0.71	3.85	0.66
Total Engagement	2.76	0.62	2.76	0.64	2.77	0.60

Note. Total $N=301$ (Male $n=131$, Female $n=170$)

Table 5

Intercorrelations among Study Variables

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
1. Gender	1															
2. Nonacceptance	.24**	1														
3. Goals	.13*	.51**	1													
4. Impulsivity	.05	.48**	.61**	1												
5. Awareness	-.07	.00	-.04	.08	1											
6. Strategies	.28**	.72**	.68**	.63**	.09	1										
7. Clarity	.17**	.45**	.33**	.35**	.38**	.52**	1									
8. Total Difficulty	.20**	.77**	.75**	.77**	.30**	.90**	.67**	1								
9. Physical Vict.	-.03	.25**	.20**	.37**	.12*	.30**	.22**	.35**	1							
10. Relational Vict.	.07	.40**	.32**	.35**	-.01	.45**	.30**	.44**	.66**	1						
11. Prosocial Beh.	.16**	-.08	-.11*	-.16**	-.34**	-.19**	-.23**	-.25**	-.28**	-.24**	1					
12. Total Vict.	0.02	.36**	.29**	.39**	0.05	.42**	.28**	.44**	.90**	.92**	-.29**	1				
13. Behavioral Eng.	.11*	-.20**	-.32**	-.42**	-.20**	-.27**	-.15**	-.37**	-.35**	-.24**	.20**	-.32**	1			
14. Emotional Eng.	-.07	-.15**	-.24**	-.24**	-.28**	-.31**	-.28**	-.35**	-.18**	-.17**	.34**	-.19**	.41**	1		
15. Cognitive Eng.	-.02	.04	-.11*	-.11*	-.26**	-.11*	-.12*	-.15**	-.06	-.03	.18**	-.05	.39**	.55**	1	
16. Total Eng.	-.02	-.12	-.27**	-.30**	-.32**	-.29**	-.24**	-.36**	-.23**	-.18**	.31**	-.22**	.67**	.88**	.82**	1

Note. * $p < .05$; ** $p < .01$

Table 6

Intercorrelations among Study Variables Split by Gender

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
1. Nonacceptance	1	.62**	.52**	-.08	.72**	.27**	.76**	.41**	.39**	-.22**	.43**	-.35**	-.18*	.06	-.18*
2. Goals	.44**	1	.66**	-.06	.77**	.23**	.82**	.25**	.32**	-.11	.31**	-.39**	-.36**	-.14	-.37**
3. Impulsivity	.48**	.56**	1	.01	.65**	.27**	.80**	.42**	.40**	-.22**	.44**	-.47**	-.26**	-.14	-.32**
4. Awareness	.06	-.01	.12	1	-.01	.47**	.26**	.12	.02	-.38**	.07	-.08	-.28**	-.10	-.26**
5. Strategies	.68**	.64**	.65**	.18**	1	.31**	.88**	.31**	.43**	-.22**	.40**	-.39**	-.36**	-.23**	-.35**
6. Clarity	.50**	.38**	.41**	.35**	.60**	1	.55**	.22**	.26**	-.25**	.26**	-.14	-.28**	-.12	-.22**
7. Total Difficulty	.76**	.70**	.77**	.37**	.91**	.73**	1	.43**	.46**	-.32**	.48**	-.46**	-.41**	-.09	-.42**
8. Physical Vict.	.18*	.17*	.34**	.13	.32**	.23**	.32**	1	.72**	-.34**	.92**	-.46**	-.25**	-.21**	-.35**
9. Relational Vict.	.40**	.31**	.31**	-.02	.46**	.31**	.42**	.62**	1	-.29**	.93**	-.39**	-.24**	-.15	-.30**
10. Prosocial Beh.	-.07	-.15*	-.13	-.30**	-.27**	-.27**	-.28**	-.23**	-.24**	1	-.34**	.21**	.33**	.14	-.29**
11. Total Vict.	.33**	.28**	.35**	0.05	.44**	.30**	.42**	.88**	.92**	-.26**	1	-.46**	-.26**	-.19*	-.35**
12. Behavioral Eng.	-.17*	-.28**	-.38**	-.28**	-.27**	-.20**	-.37**	-.23**	-.14*	.17*	-.20**	1	.39**	.40**	.67**
13. Emotional Eng.	-.12	-.13	-.21**	-.31**	-.27**	-.25**	-.30**	-.13	-.12	.38**	-.13	.45**	1	.62**	.89**
14. Cognitive Eng.	.06	-.09	-.11	-.29**	-.09	-.15*	-.14**	-.05	-.05	.22**	-.06	.39**	.50**	1	.84**
15. Total Eng.	-.09	-.19**	-.28**	-.37**	-.26**	-.26**	-.33**	.12	-.08	.35**	-.11	.69**	.87**	.80**	1

Note. * $p < .05$; ** $p < .01$; correlations for boys are above the diagonal and correlations for girls are below the diagonal

Table 7

Gender Differences Across Study Variables

Variable	t-score	(df)	sig
Nonacceptance**	-4.70	(354)	<.001
Goals**	-4.91	(354)	<.001
Impulsivity*	-2.40	(356)	.02
Awareness*	-2.39	(324)	.02
Strategies	-0.90	(354)	.37
Clarity	-0.89	(311)	.37
Total Difficulty	1.36	(358)	.17
Physical Victimization	1.39	(354)	.16
Relational Victimization**	-5.54	(354)	<.001
Prosocial Behavior**	-5.70	(352)	<.001
Total Victimization**	-3.29	(358)	<.001
Behavioral Engagement**	-3.35	(349)	<.001
Affective Engagement**	-3.75	(352)	<.001
Cognitive Engagement**	-3.82	(344)	<.001
Total Engagement	0.58	(359)	.56

Note. * $p < .05$; ** $p < .01$

Engagement, Behavioral Engagement, and Total Engagement). Because several significant gender differences were found across the study variables, gender was included as a moderator in many of the analyses.

Most of the independent variables (Awareness, Goals, Strategies, Clarity, Nonacceptance, Impulsivity, Total DERS Score, Physical Victimization, Relational Victimization, and Total Victimization) were linearly related to the dependent variables (Cognitive Engagement, Affective Engagement, Behavioral Engagement, Physical Victimization, and Relational Victimization, with the following exceptions. Cognitive Engagement was not correlated with either type of victimization, and the DERS Awareness subscale was not correlated with Relational Victimization. The results of analyses predicting Cognitive Engagement should, therefore, be cautiously interpreted. The analyses met the homoscedasticity and normal distribution of error assumptions of regression. Additionally, the dependent variables and all independent variables, aside from Gender, were continuous. Durbin-Watson statistics for all regressions ranged from 1.75 to 2.22, indicating independence of observations. Most variance inflation factors (VIF) were below 3.36, but some VIF associated with interaction terms reached up toward 17.71, suggesting that multicollinearity may be problematic. The correlations between independent variables were examined to further explore multicollinearity; no variables were correlated at a Pearson's r greater than .72. Therefore, it was concluded that multicollinearity was not an issue. Finally, full model and partial plots of the standardized residuals against the unstandardized predicted values revealed rectangular patterns, indicating that the data show homoscedasticity.

Box plots of each variable were examined to detect univariate outliers. Chronic outliers were only identified among the total victimization variable. All three chronic outliers had average total victimization scores of 4 or 5, indicating they experienced both physical and relational victimization “all the time.” Because chronic victims are fairly rare (fewer than 10% of students report being victimized at this rate), this result is supported by theory and the three chronic outliers were retained. Because no other extreme outliers were found and regression is generally robust to threats to normality, these analyses were run without any transformations.

Analyses for Questions 1 through 5 only included students who reported victimization (i.e., those who had an average score greater than 1). Because the research purposes of these questions were to explore which emotion regulation components most strongly predicted victimization and how emotion regulation was associated with outcomes of victims, students who were not victimized were excluded from the analyses. However, all students were included in the analyses for Research Question 6 because the purpose of this question was to examine how victimization experiences differed across emotion regulation profiles. Therefore, the interest also focused on students who do not report being victimized.

Research Question 1

The associations among Gender, the six types of emotion regulation difficulties, and Relational Victimization were investigated with a moderate multiple regression analysis. The six DERS subscales were entered as predictors, Gender was entered as a moderator, and Relational Victimization was entered as the outcome variable. See Table 8 for results of the regression analyses.

Table 8

Regressions with Gender and Difficulties in Emotion Regulation in Relation to Relational

Victimization

	β	$SE \beta$	R^2	$Sig.$
			0.242	<.001
Gender	0.054	0.058		.353
Nonacceptance	0.109	0.108		.313
Goals	-0.034	0.107		.748
Impulsivity	-0.034	0.096		.724
Awareness	-0.087	0.096		.369
Strategies*	0.323*	0.129		.012
Clarity	0.116	0.138		.400
Gender by Nonacceptance	-0.039	0.094		.681
Gender by Goals	-0.081	0.096		.397
Gender by Impulsivity	0.211	0.114		.064
Gender by Awareness	0.083	0.081		.305
Gender by Strategies	0.064	0.133		.632
Gender by Clarity	-0.029	0.100		.770

Note. Gender was dummy coded (0=Female, 1=Male); * $p < .05$; ** $p < .01$; $N = 292$

The full regression model predicting Relational Victimization was significant ($R^2=0.242$, $p<.001$). The DERS subscale Strategies was significantly and positively associated with Relational Victimization ($\beta=0.323$, $p=.012$). The full model, including all the types of difficulty in emotion regulation and Gender, explained a large portion of the variance in Relational Victimization ($R^2=.242$).

Research Question 2

The associations among Gender, the six types of emotion regulation difficulties, and Physical Victimization were investigated with a moderate multiple regression analysis. The six DERS subscales were entered as predictors, Gender was entered as a moderator, and Physical Victimization was entered as the outcome variable. See Table 9 for results of this regression.

The full regression model predicting Physical Victimization was significant ($R^2=0.178$, $p=.001$). The interaction between Gender and the DERS subscale Nonacceptance was significant ($\beta=0.330$, $p=.003$). For girls, Nonacceptance was not significantly associated with Physical Victimization ($\beta=-0.127$, $p=.120$). An additional regression was conducted to identify the simple slope of the association between Nonacceptance and Physical Victimization for boys. For boys, Nonacceptance was significantly and positively associated with Physical Victimization ($\beta=0.476$, $p=.011$). Figure 1 displays a graphical representation of this interaction. No Gender differences were found between the other DERS subscales and Physical Victimization. The DERS subscale Impulsivity was significantly and positively associated with physical victimization ($\beta=0.197$, $p=.026$) for boys and girls. The full model, including all the types of difficulty in emotion

regulation and Gender, explained a large portion of the variance in Physical Victimization ($R^2=.242$).

Table 9

Regressions with Gender and Difficulties in Emotion Regulation in Relation to Physical Victimization

	β	$SE \beta$	R^2	$Sig.$
			0.178	.001
Gender	0.029	0.070		.680
Nonacceptance	-0.127	0.082		.120
Goals	-0.181	0.094		.055
Impulsivity*	0.197*	0.089		.026
Awareness	0.080	0.099		.422
Strategies	0.223	0.121		.067
Clarity	0.056	0.128		.663
Gender by Nonacceptance**	0.330**	0.111		.003
Gender by Goals	-0.001	0.103		.991
Gender by Impulsivity	0.058	0.121		.635
Gender by Awareness	0.060	0.094		.522
Gender by Strategies	-0.122	0.153		.425
Gender by Clarity	-0.005	0.111		.964

Note. Gender was dummy coded (0=Female, 1=Male); * $p<.05$; ** $p<.01$; $N= 256$

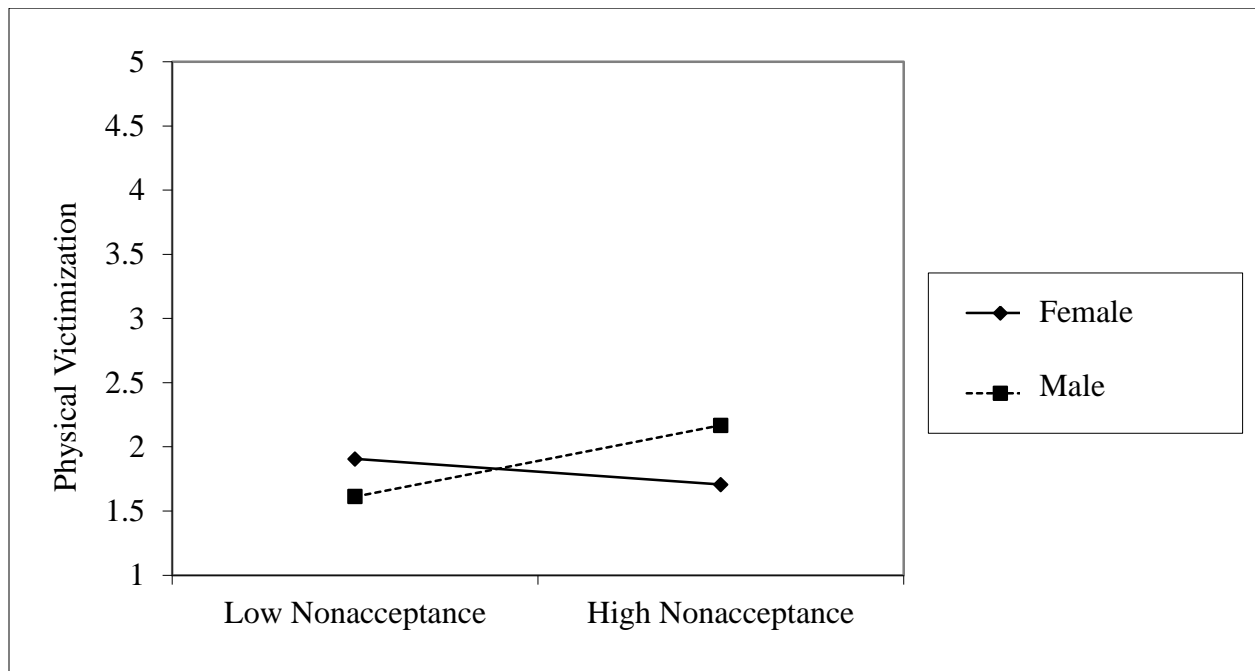


Figure 1. The Interaction Effect of Gender and Nonacceptance on Physical Victimization.

Post-hoc Analyses for Research Questions 1 and 2

Separate ordinary least squares (OLS) regressions were conducted using each DERS subscale scores and the Physical and Relational Victimization scores to explore the individual associations among the components of emotion regulation and the types of victimization. Six OLS regressions were performed with each DERS subscale (Nonacceptance, Goals, Clarity, Awareness, Strategies, and Impulsivity) individually predicting Relational Victimization, and six

OLS regressions were performed with each DERS subscale individually predicting Physical Victimization.

When analyzed separately, all of the DERS subscales, aside from Awareness ($R^2=.01$, $p=.29$; $\beta= 0.05$, $p=.59$), significantly predicted Relational Victimization. Similar to the results from the multivariate regression, Strategies was positively associated with Relation Victimization ($R^2=.20$, $p<.001$; $\beta= 0.41$, $p<.001$). In contrast to the multivariate results, Impulsivity ($R^2=.13$, $p=.002$; $\beta= 0.24$, $p=.003$), Clarity ($R^2=.10$, $p=.008$; $\beta= 0.31$, $p<.001$), Goals ($R^2=.09$, $p=.004$; $\beta= 0.24$, $p=.005$), and Nonacceptance ($R^2=.14$, $p=.001$; $\beta= 0.34$, $p<.001$) were also positively associated with Relational Victimization.

For Physical Victimization, the post-hoc results aligned more closely with the results of the planned multivariate analyses. When analyzed separately, three DERS subscales significantly predicted Physical Victimization. Similar to the results from the multivariate regression, Impulsivity was positively associated with Relation Victimization ($R^2=.09$, $p=.02$; $\beta= 0.22$, $p=.007$) and a significant Gender by Nonacceptance interaction was found ($R^2=.09$, $p=.04$; $\beta= 0.54$, $p<.001$), where Nonacceptance was a significant predictor of Physical Victimization for boys only ($R^2=.09$, $p=.04$; $\beta= 0.28$, $p=.001$). Awareness ($R^2=.03$, $p=.22$; $\beta= 0.16$, $p=.05$), Clarity ($R^2=.05$, $p=.12$; $\beta= 0.16$, $p=.04$), Goals ($R^2=.03$, $p=.12$; $\beta= 0.02$, $p=.80$), and Nonacceptance ($R^2=.09$, $p=.04$; $\beta= 0.03$, $p=.69$) were not significantly associated with Physical Victimization. In contrast to the multivariate results, Strategies ($R^2=.08$, $p=.03$; $\beta= 0.20$, $p=.04$) was found to be positively and significantly associated with Physical Victimization when separated from the rest of the DERS subscales.

Research Question 3

The moderation effect of emotion regulation on the association between peer victimization and Affective Engagement was investigated with a moderate multiple regression analysis. The Total Victimization Score was entered as a predictor, Gender and the Total DERS Score were entered as moderators, and Affective Engagement was entered as the outcome variable. See Table 10 for results of the regression analyses.

The full regression model predicting Relational Victimization was significant ($R^2=0.159$, $p<.001$). The Total DERS score was significantly and negatively associated with Affective Engagement ($\beta=-0.329$, $p<.001$). No other independent variables were unique predictors, including any of the interaction terms. The full model, including Total Victimization, Total Difficulty in Emotion Regulation, and Gender, explained a moderate portion of the variance in Affective Engagement ($R^2=.159$).

Research Question 4

The moderation effect of emotion regulation on the association between peer victimization and Cognitive Engagement was investigated with a moderate multiple regression analysis. The Total Victimization Score was entered as a predictor, Gender and the total DERS Score were entered as moderators, and Cognitive Engagement was entered as the outcome variable. See Table 11 for results of the regression analyses.

The full regression model predicting Relational Victimization was not significant ($R^2=0.039$, $p=.066$). Therefore, the associations among Cognitive Engagement and individual predictors were not examined.

Table 10

Regressions with Gender, Total Difficulties in Emotion Regulation, and Total Victimization in
Relation to Affective Engagement

	β	$SE \beta$	R^2	$Sig.$
			0.159	<.001
Gender	-0.004	0.056		.946
Total Difficulties in ER**	-0.329**	0.076		<.001
Total Victimization	-0.069	0.088		.434
DER by Victimization	0.089	0.095		.345
Gender by DER	-0.061	0.080		.448
Gender by Victimization	-0.026	0.091		.779
Gender by DER by Victimization	-0.061	0.086		.478

Note. Gender was dummy coded (0=Female, 1=Male); ** $p < .01$; $N = 313$

Table 11

Regressions with Gender, Total Difficulties in Emotion Regulation, and Total Victimization in Relation to Cognitive Engagement

	β	$SE \beta$	R^2	$Sig.$
			0.039	.066
Gender	0.007	0.060		.908
Total Difficulties in ER	-0.178	0.080		.025
Total Victimization	0.132	0.066		.044
DER by Victimization	-0.028	0.078		.721
Gender by DER	0.096	0.086		.267
Gender by Victimization	-0.218	0.096		.023
Gender by DER by Victimization	0.016	0.086		.853

Note. Gender was dummy coded (0=Female, 1=Male); $N= 312$

Research Question 5

The moderation effect of emotion regulation on the association between peer victimization and Behavioral Engagement was investigated with a moderated multiple regression analysis. The Total Victimization Score was entered as a predictor, Gender and the Total DERS

Score were entered as moderators, and Behavioral Engagement was entered as the outcome variable. See Table 12 for results of the regression analyses.

The full regression model predicting Behavioral Engagement was significant ($R^2=0.231$, $p<.001$). The Total DERS score was significantly and negatively associated with Behavioral Engagement ($\beta=-0.341$, $p<.001$). No other independent variables were unique predictors, including any of the interaction terms. The full model, including Total Victimization, Total Difficulty in Emotion Regulation, and Gender, explained a large portion of the variance in Behavioral Engagement ($R^2=.231$).

Research Question 6

A latent class analysis (LCA) was performed on the six DERS subscale scores (Nonacceptance, Goals, Impulsivity, Awareness, Strategies, and Clarity) to create classes of students based on profiles of difficulties in emotion regulation. Next, a MANOVA was conducted to compare rates of Relational and Physical Victimization across the identified classes.

The LCA was conducted utilizing maximum likelihood estimation with robust standard errors via MPlus (Muthén & Muthén, 1998-2007). The following fit indices were utilized to determine the number of latent classes: the Bayesian information criterion (BIC), the Vuong-Lo-Mendell-Rubin likelihood ratio test (VLMR LRT), the bootstrap likelihood ratio test (bootstrap LRT), and the entropy value. Models were considered to have converged if the maximum log likelihood was replicated at least five times. Better model fit was determined by a lower BIC and a higher entropy value (near 1.0). Both the VLMR LRT and the bootstrap LRT test whether the current model class size (K) is significantly better than a class size of one less (K-1).

Table 12

Regressions with Gender, Total Difficulties in Emotion Regulation, and Total Victimization in Relation to Behavioral Engagement

	β	$SE \beta$	R^2	$Sig.$
			0.231	<.001
Gender	-0.167	0.058		.004
Total Difficulties in ER**	-0.341**	0.072		<.001
Total Victimization	-0.092	0.120		.442
DER by Victimization	0.093	0.119		.434
Gender by DER	-0.006	0.086		.941
Gender by Victimization	-0.119	0.112		.289
Gender by DER by Victimization	-0.137	0.103		.184

Note. Gender was dummy coded (0=Female, 1=Male); * $p < .05$; ** $p < .01$; $N = 308$

Table 13 presents the fit indices and subgroup proportions (based upon estimated class probability) for models with one to four latent classes. The four-class model did not converge and the three-class model made theoretical sense. Therefore, the three-class model was retained and used for the MANOVA analysis. Figure 2 presents a plot of the three latent classes.

In the final model of three latent classes, with classes in order of largest to smallest could be described as: Class 1, moderately poor awareness (Poor Awareness) (49%; $n=178$); (b) Class 2, moderate general emotion regulation difficulty (Moderate Difficulty) (32%; $n=114$); and (c) Class 3, severe general emotion regulation difficulty (Severe Difficulty) (19%; $n=68$).

Based on model results, about half of the students had little difficulty with the majority of the components of emotion regulation, but struggled with emotional Awareness. Almost one third of the students had moderate difficulty with all six components of emotion regulation, and nearly one fifth of students had severe difficulty with all six components of emotion regulation, especially generating and using effective strategies to manage negative emotions.

Table 13

Results of Latent Profile Analysis on Total Sample ($N=360$)

Solution class	Log-likelihood	BIC	VLMR LRT p	Bootstrap LRT p	Entropy value	Subgroup prevalence (%)			
						1	2	3	4
1	-2990.20	6051.10	--	--	--	100			
2	-2667.08	5446.09	<.001	<.001	.85	61	39		
3	-2577.37	5307.93	.003	<.001	.85	49	32	19	
4	-2550.17	5294.77	.224	<.001	.81	40	20	27	13

Note. BIC = Bayesian information criterion, VLMR LRT = Vuong-Lo-Mendell-Rubin

likelihood ratio test, bootstrap LRT = bootstrap likelihood ratio test.

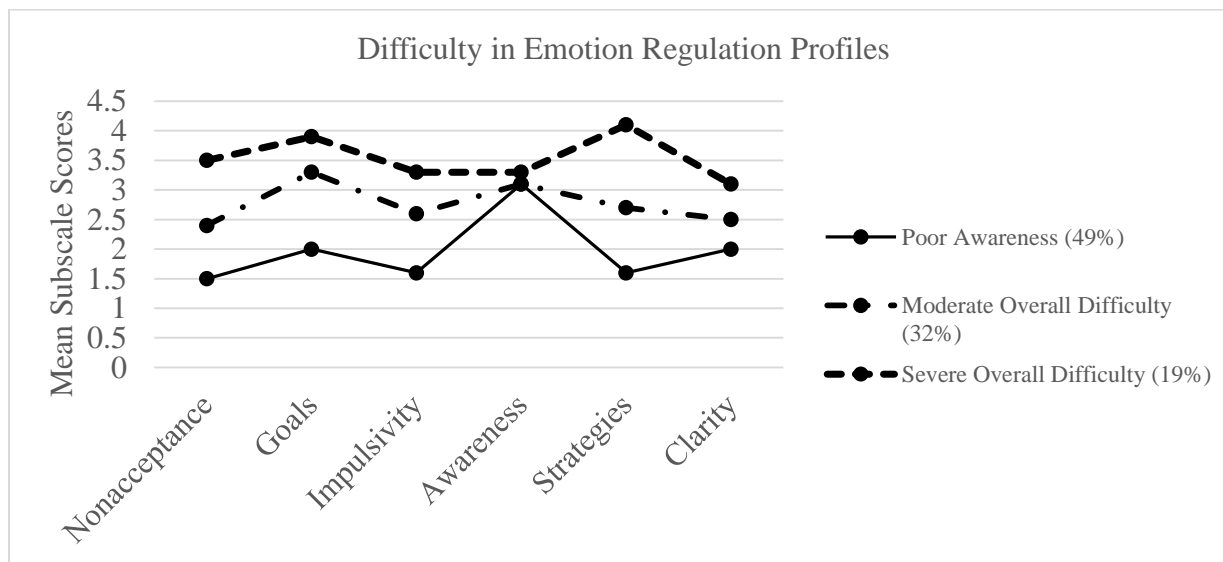


Figure 2. Retained Latent Classes of Emotion Regulation Profiles.

A MANOVA was conducted in SPSS (IBM, 2013) to determine if rates of Physical and Relational Victimization differed across classes of emotion regulation profiles. All students were placed into a latent class. Emotion regulation profile class was input as the independent variable and Relational and Physical Victimization were input as dependent variables. Box's M test for equality of covariance was significant. Therefore, Pillai's trace test was used to examine the significance of the omnibus effect. There was a statistically significant difference in Victimization based on a student's emotion regulation profile class, $F(2,356)=1438.54, p<.001, \beta=1.0, \text{partial } \eta^2 = .89$.

Next, the between-group effects were examined. There was a statistically significant difference in Relational Victimization based on a student's emotion regulation profile class,

$F(2,357)=35.83, p<.001, \beta=1.0, \text{partial } \eta^2 =.17$. There was also a statistically significant difference in Physical Victimization based on a student's emotion regulation profile class, $F(2,357)=16.42, p<.001, \beta=1.0, \text{partial } \eta^2 =.08$. Levene's test for equality of variances was significant. Therefore, Games-Howell post-hoc tests were used for follow-up comparisons between classes. Mean relational victimization scores were statistically significantly different between Class 1 (Poor Awareness) and Class 2 (Moderate Difficulty) ($p<.001$), Class 1 (Poor Awareness) and Class 3 (Severe Difficulty) ($p<.001$), and Class 2 (Moderate Difficulty) and Class 3 (Severe Difficulty) ($p=.006$). Mean Physical Victimization scores were statistically significantly different between Class 1 (Poor Awareness) and Class 2 (Moderate Difficulty) ($p=.002$), and Class 1 (Poor Awareness) and Class 3 (Severe Difficulty) ($p<.001$) but not between Class 2 (Moderate Difficulty) and Class 3 (Severe Difficulty) ($p=.092$). These differences can be visualized in Figure 3 below. Note that the parentheses in Figure 3 indicate a significant difference between classes.

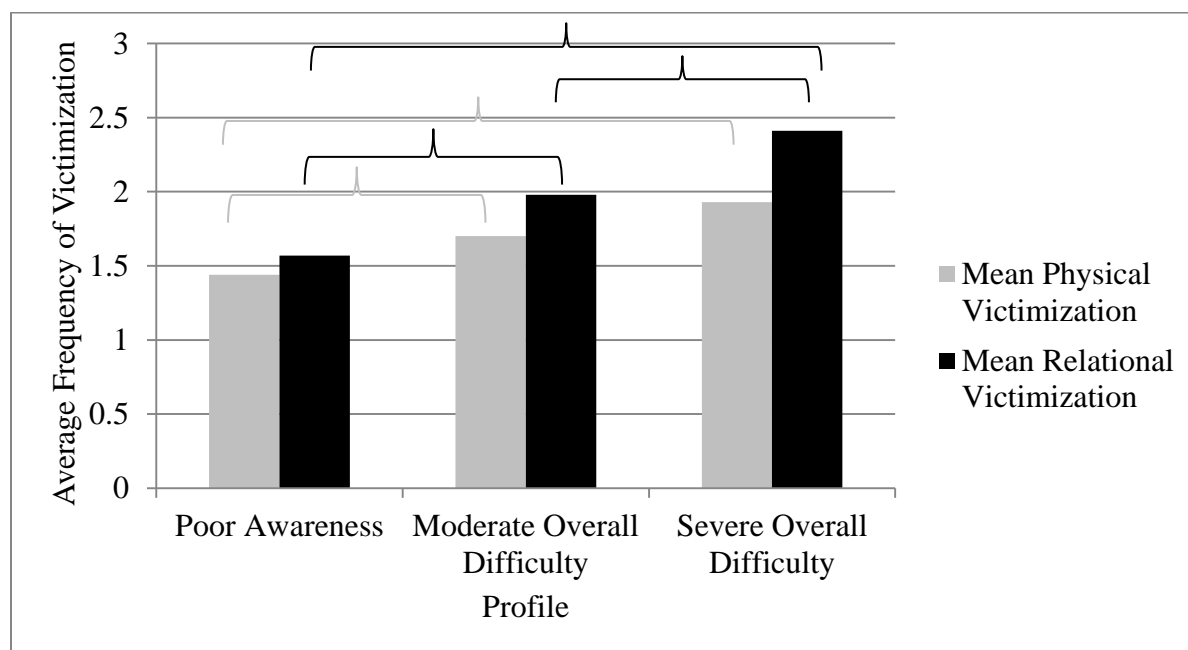


Figure 3. Emotion Regulation Profile Class Differences in Relational and Physical Victimization.

CHAPTER 5

DISCUSSION

Preliminary Analyses

The current study explored the associations among peer victimization, emotion regulation, and student engagement in a sample of early adolescents from a midwestern school. Preliminary analyses were conducted to examine gender differences and intercorrelations among the study variables. Gender differences were found in difficulty in emotion regulation subscales, victimization subscales, and student engagement subscales.

Regarding gender differences with difficulty in emotion regulation, girls reported more difficulty accepting their negative feelings, maintaining goal directed behavior while upset, and controlling their impulses while experiencing negative emotions than boys. Past research has found that boys inhibit the expression of most emotions while girls inhibit the expression of socially unaccepted emotions for their gender role (e.g., anger) (Brody, 1985). Perhaps many of the students in this sample interpreted the word “upset,” which appeared in many of the DERS items, to mean *angry*, a pattern of behavior which would explain this result in the context of past research findings. Because expressing anger is more socially acceptable for boys than it is for girls, it is possible that the girls in the sample have more difficulty accepting that they are upset, or angry, than do the boys. The finding that girls reported more difficulty in maintaining goal-directed behavior than did boys is consistent with some prior research (Gratz & Roemer, 2004; Neumann et al., 2010). Again, it is possible that girls set higher standards for their own

behavioral control such that they recognize lapses in control more easily than boys do or that girls have a lower threshold for deciding an act was a lapse in control than do boys.

The remaining finding, that girls had more difficulty controlling their impulses than boys, was surprising and not supported by previous research. First, researchers have not identified significant gender differences in the Impulsivity subscale of the DERS (Gratz & Roemer, 2004; Neumann et al., 2010). Second, boys are sometimes identified as more impulsive than are girls (Chapple & Johnson, 2007; Gaub & Carlson, 1997). However, recently researchers have proposed that the observed gender difference in impulsivity may result from differences in sensation seeking and sensitivity to punishment rather than effortful control (Cross, Copping, & Campbell, 2011). Specifically, researchers have found men to be more sensation seeking and less sensitive to punishment than women. Cross and colleagues speculated that women engaged in less impulsive behavior not because they were more in control than men, but because they were more motivated to avoid impulsivity. In the context of this theory, the girls in the current sample may have reported more impulsivity than did boys because they more sensitively monitored their impulsive behavior (for fear of punishment) than did boys. In addition to the above gender differences, boys reported more difficulty with being conscious of and identifying their own feelings than did girls. This finding is consistent with past research findings that indicate that girls more accurately identify and label emotional stimuli than do boys (Gratz & Roemer, 2004; Hall & Matsumoto, 2014; McClure, 2000; Montagne, Kessels, Frigerio, de Haan, & Perrett, 2005).

Boys and girls also differed significantly on reported frequencies of Relational Victimization, Prosocial Behavior, and Total Victimization. Consistent with past research

(Bradshaw, Waasdorp, & O’Brennan, 2013; Crick, 1997; Crick & Bigbee, 1998), girls reported greater frequencies of Relational Victimization than did boys. Girls also reported higher levels of Total Victimization on average than did boys, which differs from the previous research findings that boys and girls experience similar levels of victimization overall (Dao et al., 2006) or that boys experience more victimization than do girls (Silva, Pereira, Mendonca, Nunes, & de Oliveira, 2013). Additionally, girls reported more frequent Receipt of Prosocial Behaviors than did boys. Based on past literature, it is unclear whether there is a stable gender difference in the receipt of prosocial acts. However, girls are traditionally more likely to behave in a prosocial manner than are boys, and individuals who behave in prosocial ways are more likely to receive prosocial support in return (Hastings, Utendale, & Sullivan, 2007; Pursell, Laursen, Rubin, Booth-LaForce, & Rose-Krasnor, 2008). Therefore, it would be logical for girls in the current sample to both engage in and receive more prosocial acts than the boys.

Finally, girls and boys differed significantly on all types of engagement, though not total engagement levels. Specifically, girls reported lower levels of Affective and Cognitive Engagement than did boys, a pattern that does not reflect previous findings (Gentry, Gable, & Rizza, 2002). Conversely, consistent with previous research, girls reported higher levels of Behavioral Engagement on average than did boys (Hughes et al., 2008).

Consistent with previous research, each DERS subscale, except Awareness, was significantly and positively correlated with all of the other DERS subscales (Bardeen, Fergus, & Orcutt, 2012; Neumann et al., 2010). Likewise, Physical and Relational Victimization were significantly and positively correlated with each other but significantly and negatively correlated with Receipt of Prosocial Behavior. Because Prosocial Behavior was negatively correlated with

each type of victimization (indicating that as students were victimized more frequently, they also experienced fewer prosocial acts), it was not included as a covariate. The three student engagement subscales were also significantly and positively correlated with each other, as was expected.

Both types of victimization were significantly and negatively correlated with Behavioral and Affective Engagement but were not significantly correlated with cognitive engagement, contrary to expectations. Physical Victimization was positively and significantly correlated with all DERS subscales and the total score; Relational Victimization was positively and significantly correlated with the total DERS score and all subscales aside from Awareness. Ignoring the insignificant correlation between Awareness and Relational Victimization, these correlation patterns were all expected. Finally, as expected, Behavioral and Affective Engagement were negatively and significantly correlated with all DERS subscales and the total score. Cognitive Engagement was negatively and significantly correlated with the total DERS score and all subscales aside from Nonacceptance, an association that was unexpected.

Primary Analyses

The first set of research questions examined the associations among Gender, the six types of emotion regulation difficulties and the two types of peer victimization. It was predicted that all six types of emotion regulation difficulties would be positively and significantly associated with both types of victimization. More specifically, it was predicted that Impulsivity would be the strongest predictor of Physical Victimization, and Strategies and Clarity would be the strongest predictors of Relational Victimization. Regarding Gender, it was expected that the

associations between the DERS subscale predictors and victimization would be stronger for boys than for girls.

Overall, the first set of predictions were partially supported. Specifically, as was predicted, Impulsivity was the strongest predictor of Physical Victimization, and Strategies was the strongest predictor of Relational Victimization. Furthermore, as expected, both of these associations were positive. Impulsivity has been consistently identified as a risk factor for peer victimization. For example, researchers have found that girls who are impulsive are more likely to be chronic victims (Dempsey, Fireman, & Wang, 2006). Additionally, students with ADHD report higher frequencies of all types of victimization than students without ADHD (Wiener & Mak, 2008). Impulsivity is also strongly positively correlated with aggression, another risk factor for peer victimization (Apter et al., 1990; García-Forero, Gallardo-Pujol, Maydeu-Olivares, & Andrés-Pueyo, 2009; Pope & Bierman, 1999). Impulsive and aggressive individuals likely respond to peer discord through ineffective and physical means, instigating peers to physically victimize them in return. Researchers have also found that adaptive coping, including conflict resolution, reduces the likelihood of future victimization while maladaptive coping, such as aggression and hysterical crying, prompts further victimization (Kochenderfer-Ladd, 2004; Wilton et al., 2000). Consistent with these findings, students who do not have access to many adaptive emotion regulation strategies will likely not be able to manage their emotions and respond to victimization in productive ways. Additionally, because strategy use in general relies on information processing skills, students who have fewer emotion regulation strategies likely also have limited social-problem-solving strategies (Lemerise & Arsenio, 2000). Therefore, it is logical that these students would experience the highest rates of Relational Victimization.

Contrary to expectations, Clarity did not significantly predict Relational Victimization. It was expected that the Clarity subscale would be associated with Relational Victimization because those students who struggle to understand their own emotions may also have difficulty understanding peers' emotions, which would interfere with peer relations and social problem solving. Prior research has found that, at least among adolescent girls, deficits in emotional clarity did predict relational victimization (Hamilton et al., 2016). Hamilton and colleague's study used a different, and perhaps more extensive, measure of emotional clarity. This methodological difference may explain the differential findings between the past and current studies if the previous researchers were able to get a more valid and reliable measure of clarity.

Only one significant gender interaction was found: Nonacceptance was a significant and positive predictor of Physical Victimization for boys, but not girls. Emotional nonacceptance reflects an unwillingness to experience emotional states or the tendency to evaluate one's emotions in a negative way. Emotional nonacceptance has been linked to maladaptive coping behaviors in order to avoid facing one's feelings (Adams, Tull, & Gratz, 2012; Gratz, Bornovalova, Delany-Brumsey, Nick, & Lejuez, 2007). Peer victimization has been linked to increased daily negative emotions (Morrow, Hubbard, Barhight, & Thomson, 2012). Students who refuse to acknowledge and process through their emotions are unlikely to adaptively manage them. Instead, they may express these negative emotions in uncontrolled and explosive ways. From a young age, girls are more likely to display sadness while boys are more likely to display anger (Chaplin, Cole, & Zahn-Waxler, 2005). Based on the above information, it is logical to conclude that when boys attempt to avoid their negative emotions following victimization, they may express negative emotions uncontrollably.

If boys are more likely to express anger while girls express sadness, perhaps boys react in aggressive ways that attract more physical victimization while girls act in sympathetic ways that attract prosocial behavior. Indeed researchers have found that coping through aggressive acts moderates the relationship between reluctance to express emotion and physical victimization, such that poor ability to cope with anger was a risk factor for physical victimization for boys (Sullivan, Helms, Kliewer, & Goodman, 2010). Sullivan and colleagues also found that high levels of anger were needed to attract physical victimization and speculated that girls did not reach this level as often as boys, explaining the gender effect.

Although not significantly different, consistent with predictions, the association between Strategies and Relational Victimization was stronger for boys than for girls. In contrast, the association between Impulsivity and Physical Victimization was stronger for girls than for boys. A stronger association between Impulsivity and Physical Victimization may have been found for girls because impulsive behaviors are less expected and socially accepted (Hasson & Fine, 2012) for girls than for boys and therefore draw more victimization for girls. Researchers who examined victimization among students with ADHD also found higher rates of victimization among girls with ADHD diagnoses (Wiener & Mak, 2008).

The second set of research questions examined whether difficulties in emotion regulation moderated the association between peer victimization and student engagement. It was predicted that difficulty in emotion regulation (represented by the Total DERS Score) would significantly moderate the association between total peer victimization and all three types of student engagement. Specifically, it was predicted that higher total levels of difficulty in emotion regulation would strengthen the negative association between total victimization and all three

types of student engagement while lower total levels of difficulty in emotion regulation would weaken the negative association between total victimization and all three types of student engagement. Furthermore, it was predicted that the strength of the moderation would be strongest for Affective Engagement, followed by Cognitive Engagement, and finally Behavioral Engagement. No specific hypotheses were made regarding gender differences.

Contrary to expectations, total difficulty in emotion regulation did not moderate the association between total victimization and the three types of student engagement. The only significant predictor across each of the three regression analyses was the Total DERS Score, which was negatively associated with Affective and Behavioral Engagement. The overall model including Cognitive Engagement was not significant; therefore, the associations among individual predictors and Cognitive Engagement were not examined. Finally, no significant gender differences were found.

Contrary to the present results, past research has found that peer victimization can increase students' depressive symptoms, which in turn interfere with their academic achievement (Schwartz et al., 2005) and that peer victimization disrupts school attachment which is associated with poor academic achievement as well as poor behavioral engagement (Wei & Williams, 2004). Because strong emotion regulation skills can be used to alleviate internalizing symptoms and are associated with self-regulation skills that support student engagement while poor emotion regulation skills can prolong the experience negative emotions and social rejection, it was predicted that emotion regulation would moderate the observed relationship between victimization and student engagement. Surprisingly, a significant association between victimization and student engagement was not found. Rather, emotion regulation alone

significantly predicted Behavioral and Affective Engagement. As expected emotion regulation difficulty was negatively associated with Affective and Behavioral Engagement. Students who had difficulty recognizing and understanding their emotions and managing their feelings and behavior while upset also have a hard time engaging with people at school and following school rules.

The third type of analysis examined whether there were differences in rates of Physical and Relational Victimization across different profiles of emotion regulation difficulty. As profiles of emotion regulation difficulty have not yet been identified or explored in regards to victimization, no specific predictions were made. Generally, it was expected that participants with profiles including high levels of difficulty across the majority of the six DERS subscales would report higher frequencies of Physical and Relational Victimization than other participants. It was also expected that participants who reported the highest frequencies of Physical Victimization would have profiles with high levels of difficulty under the Impulsivity subscale and that participants who reported the highest frequencies of Relational Victimization would have profiles described by high levels of difficulties captured by the Strategies and Clarity subscales.

The LCA identified three classes of difficulty in emotion regulation profiles. Significant differences in rates of victimization were found across classes. The three distinct profiles of emotion regulation difficulties identified were Severe Difficulty, Moderate Difficulty, and Poor Awareness. Each group had high scores on the Awareness subscale, indicating that they each had difficulty recognizing their feelings and the antecedents of their feelings. Aside from poor awareness, the Poor Awareness class did not have high scores in any other DERS subscale. The

Moderate Difficulty class had more difficulty in emotion regulation, overall, than the Poor Awareness class, with moderate scores on each of the six subscales. Finally, the Severe Difficulty class had high scores (greater than a Likert score of 3) for each subscale and had a higher score in each subscale than the other two classes.

The Severe Difficulty group reported significantly higher rates of Relational Victimization than the Moderate Difficulty and Poor Awareness groups and significantly higher rates of Physical Victimization than the Poor Awareness group. These group differences were expected because the Severe Difficulty group had the greatest difficulty in emotion regulation across each subscale. Continuing the trend of those with greater difficulties in emotion regulation reporting higher rates of victimization, the Moderate Difficulty group reported higher rates of Relational and Physical Victimization than the Poor Awareness group.

As seen in Figure 2, each group scored high on the Awareness subscale, indicating that they all had difficulty attending to their emotional state. Perhaps emotional awareness is a component of emotion regulation with which most middle school students struggle. As discussed in the introduction, middle school is a developmental period during which students face new social, academic, and other stressors; they take on greater personal responsibility and their social relationships become more complex. Many middle school students are also undergoing physical changes associated with puberty that cause fluctuations in their hormone levels and may affect their emotional state. It is possible that middle school students experience such frequent shifts that they have difficulty monitoring how they are feeling. Additionally, because they face many novel emotionally-arousing situations, it is also possible that they do not

yet have enough experience to link an event to how they are feeling and put a name to the emotion.

An alternative explanation for the high Awareness scores observed across all profiles has to do with the scale's structure. The Awareness subscale differed from the other DERS subscales in that its items did not begin with the stem, "When I am upset, ...". Because the Awareness items did not have this stem, students may have been more likely to think about their emotional awareness during a greater range of time than they thought about the other components of emotion regulation. As a result, students may have thought about times when it was not necessary to pay attention to how they were feeling, reporting higher levels of failing to be aware of their emotions than levels of difficulty with the other skills. Overall, it may be inappropriate to compare the Awareness subscale scores to the other subscale scores because students are prompted to only think about times when they are upset before answering items on the other subscales.

Implications

The results of the current study have important implications for developing time-effective and targeted interventions for victims of peer aggression. Specifically, school practitioners can improve students' well-being by using the unique associations between different types of victimization and different components of emotion regulation uncovered here to inform interventions. School practitioners should also be made aware of the negative association between difficulties in emotion regulation and affective and behavioral engagement.

First, based on the current results, it may be most efficient for schools to determine, through rating scales or interviews, what type(s) of victimization an identified student is

experiencing. Next, practitioners could assess the student's emotion regulation skills to ensure that the student does indeed have the skill deficits observed to be associated with certain types of victimization in this study. Based on particular skills deficits, students can be sorted into groups that are focused on developing those specific emotion regulation skills so that students can spend the minimum amount of time receiving intervention and missing valuable instructional time as possible. Additionally, because few significant gender interactions were found, the present study does not provide strong evidence that girls and boys would need to be provided separate interventions.

Second, at a universal level, the results of the current study provide support for screening students emotion regulation abilities at the beginning of middle school, or even earlier, to prevent peer victimization and impaired student engagement. If deficits in emotion regulation skills are identified, students can receive intervention prior to experiencing victimization in middle school or suffering from low engagement and starting down the track to school dropout. This process would also use staff time efficiently as staff could provide interventions to large groups of students and prevent serious negative academic and social-emotional outcomes rather than providing interventions to students one-on-one once a student's academic and/or social-emotional issues have become more chronic and disruptive to their life.

Third, the results of the present study's latent class analysis confirms the intuitive hypothesis that students who have the largest deficits in emotion regulation also experience the most frequent victimization. This relationship was supported for both types of victimization. The results of the current student could be used as evidence to support the development of tiered interventions for groups of students with different emotion regulation profiles. Furthermore, if

prevention resources are scarce, students who are identified as having the severe difficulties in emotion regulation profile can be targeted first for interventions to prevent future victimization.

Limitations

The current study has several limitations. First, all study variables were collected at the same time; therefore, inferences regarding causality cannot be made. Any attributions of causality should be interpreted with caution. Future studies can address this limitation by using a longitudinal design to collect data on students' emotion regulation difficulties, victimization, and engagement. Using longitudinal methodology, students' victimization and emotion regulation at Time 1 could be used to predict their engagement at Time 2. Such analyses would better test whether victimization impacts student engagement and whether emotion regulation moderates the association between victimization and engagement.

A second limitation is that the ethnic makeup of the sample is fairly homogeneous with over 50% Hispanic students. Because of cultural differences surrounding education and emotion, Hispanic students may differ from non-Hispanic students in rates of student engagement, emotion regulation profiles, and gender differences among variables. For example, some of the gender effects in student engagement observed in the current sample were surprising and may have manifested from the cultural makeup of the students. Specifically, depending on the level of acculturation of students in the current sample, the fact that boys reported higher levels of cognitive and affective engagement than did girls could be because Hispanic families encourage boys to pursue education more strongly than they do girls. Differences in emotion regulation have also been found between Hispanic and non-Hispanic samples (Morelen & Thomassin, 2013) and may be reflected in the present results. Unfortunately, the acculturation of

the students in the current sample was not assessed so it is impossible to determine with certainty if their responses reflect Hispanic cultural norms.

Two additional limitations result from the study design. First, students completed the surveys in groups and were supervised by their classroom teacher rather than a member of the research team. This scenario could mean that students' responses may have been influenced by those around them, or that students may not have received needed clarification on any of the items from someone with intimate knowledge of the surveys. The above results should be interpreted in light of these limitations. Second, all DERS subscales were included together as predictors in the regressions for Research Questions 1 and 2. Because the DERS subscales are positively correlated, their individual associations with relational and physical victimization may have been obscured. Indeed, as described in the Results section, many of the DERS subscales were significantly associated with physical and/or relational victimization when the DERS subscales were analyzed in separate regression models. However, because the purpose of Research Questions 1 and 2 was to identify the strongest predictors of relational and physical victimization, this limitation is acceptable, as the DERS subscales that were significantly associated with relational and physical victimization in the multivariate regressions could be interpreted as the strongest unique predictors.

Future Directions

Future research on this topic should examine whether emotion regulation ability mediates the relationship between victimization and student engagement. Based on a literature review, it was hypothesized that emotion regulation ability would moderate the association between victimization and student engagement. The current results did not support this hypothesis.

Considering that only total difficulties in emotion regulation significantly predicted any of the types of student engagement when included in a model with total victimization rates, it may be that emotion regulation ability mediates the association between victimization and engagement.

Future research should also explore whether different intervention programs are needed for students with different emotion regulation profiles. Relatedly, researchers could also examine whether the DERS makes a suitable screener for emotion regulation difficulties and associated problems like victimization. In the current study, only those participants who fell in the Severe Difficulty class reported problematic rates of victimization. If the DERS was used as a screener, these students could have been identified and given emotional skills lessons that may have lessened or prevented future victimization.

Finally, future research should seek to identify the emotion regulation profiles associated with other bullying participant roles (e.g., those who bully, reinforcers or assistants to those who bully, defenders of victims, and passive outsiders). By examining the emotion regulation profiles associated with these roles, clinicians and school staff could learn what profiles are associated with less negative involvement in bullying scenarios and more defending behavior and then intervene to develop those optimal profiles among students.

REFERENCES

- Adams, C. E., Tull M. T., & Gratz, K. L. (2012). The role of emotional nonacceptance in the relation between depression and recent cigarette smoking. *The American Journal on Addictions, 21*(4), 293-301.
- Apter, A., van Praag, H. M., Plutchik, R., Sevy, S., Korn, M., & Brown, S. (1990). Interrelationships among anxiety, aggression, impulsivity, and mood: A serotonergically linked cluster? *Psychiatry Research, 32*(2), 191-199.
- Baraldi, A. N., & Enders, C. K. (2010). An introduction to modern missing data analyses. *Journal of School Psychology, 48*(1), 5-37.
- Bardeen, J. R., Fergus, T. A., & Orcutt, H.K. (2012). An examination of the latent structure of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathological Behavior Assessment, 34*, 382–392. doi: 10.1007/s10862-012-9280-y
- Boekaerts, M. (2010). The crucial role of motivation and emotion in classroom learning. In H. Dumont, F. Benavides, & D. Istance (Eds.), *The nature of learning: Using research to inspire practice* (pp. 91-111). Paris: OECD.
- Bradshaw, C. P., Sawyer, A. L., & O'Brennan, L. M. (2007). Bullying and peer victimization at school: Perceptual differences between students and school staff. *School Psychology Review, 36*, 361–382.
- Bradshaw, C.P, Waasdorp, T.E., & O'Brennan, L.M. (2013). A latent class approach to examining forms of peer victimization. *Journal of Educational Psychology, 105*(3), pp. 839-849. doi: 10.1037/a0032091
- Brock, L. L., Rimm-Kaufman, S. E., Nathanson, L., & Grimm, K. J. (2009). The contributions of 'hot' and 'cool' executive function to children's academic achievement, learning-related behaviors, and engagement in kindergarten. *Early Childhood Research Quarterly, 24*(3), 337-349.
- Brody, L. R. (1985). Gender differences in emotional development: A review of theories and research. *Journal of Personality, 53*, 102–149. doi: 10.1111/j.1467-6494.1985.tb00361.x
- Bronson, M.B. 2000. *Self-Regulation in Early Childhood: Nature and Nurture*. New York: Guilford.

- Buhs, E. (2005). Peer rejection, negative peer treatment, and school adjustment: Self-concept and classroom engagement as mediating processes. *Journal of School Psychology, 43*, 407–424.
- Buhs, E. S., Ladd, G. W., & Herald, S. L. (2006). Exclusion and victimization: Processes that mediate the relation between peer group rejection and children's classroom engagement and achievement? *Journal of Educational Psychology, 98*(1), 1-13.
- Caputo, A. (2014). Psychological correlates of school bullying victimization: Academic self-concept, learning motivation and test anxiety. *International Journal of Educational Psychology, 3*(1), 69-99.
- Card, N. A., & Hodges, E. V. E. (2008). Peer victimization among schoolchildren: Correlation, causes, consequences, and considerations in assessment and intervention. *School Psychology Quarterly, 32*(4), pp. 451-461. doi: 10.1037/a0012769
- Chaplin, T. M., & Adlao, A. (2013). Gender differences in emotion expression in children: A meta-analytic review. *Psychological Bulletin, 139*(4), 735-765.
- Chaplin, T. M., Cole, P. M., & Zahn-Waxler, C. (2005). Parental socialization of emotion expression: Gender differences and relations to child adjustment. *Emotion, 5*(1), 80-88.
- Chapple, C. L., & Johnson, K. A. (2007). Gender differences in impulsivity. *Youth Violence and Juvenile Justice, 5*(3), 221-234. doi: 10.1177/1541204007301286
- Craig W. M. (1998). The relationship among bullying, victimisation, depression, anxiety, and aggression in elementary school children. *Personality and Individual Differences, 24*, 123–130.
- Crick, N. R. (1997). Engagement in gender normative versus nonnormative forms of aggression: Links to social-psychological adjustment. *Developmental Psychology, 33*, 610–617.
- Crick, N.R. & Bigbee, M.A. (1998). Relational and overt forms of peer victimization: A multiinformant approach. *Journal of Consulting and Clinical Psychology, 66*(2), 337-347.
- Crick N. R., & Grotpeter, J. K. (1995). Relational aggression gender and social-psychological adjustment. *Child Development, 66*, 710–722
- Crick, N.R., & Grotpeter, J. K. (1996). Children's treatment by peers: Victims of relational and overt aggression. *Developmental Psychopathology, 8*, 367-380.
- Cross, C. P., Copping, L. T., & Campbell, A. (2011). Gender differences in impulsivity: A meta-analysis. *Psychological Bulletin, 137*(1), 97-130. doi: 10.1037/a0021591

- Dao, T. K., Kerbs, J. J., Rollin, S. A., Potts, I., Gutierrez, R., Choi, K., Creason, A. H., Wolf, A., & Prevatt, F. (2006). The association between bullying dynamics and psychological distress. *Journal of Adolescent Health, 39*(2), 277-282.
- Dempsey, J. P., Fireman, G. D., & Wang, E. (2006). Transitioning out of peer victimization in school children: Gender and behavioral characteristics. *Journal of Psychopathology and Behavioral Assessment, 28*(4), 271-280.
- Desjardins, T., Yeung Thompson, R. S., Sukhawathanakul, P., Leadbeater, B. J., & MacDonald, S. W. (2013). Factor structure of the Social Experience Questionnaire across time, gender, and grade among early elementary school children. *Psychological Assessment, 25*(4), 1058-1068.
- Diamond, A. (2002). Normal development of prefrontal cortex from birth to young adulthood: Cognitive functions, anatomy, and biochemistry. In D. T. Stuss & R. T. Knight (Eds.), *Principles of frontal lobe function* (pp. 466-503). New York, NY: Oxford University Press.
- Eisenberg, N., Fabes, R. A., Murphy, B., Carlo, G., & Karbon, M. (1995). The role of emotionality and regulation in children's social functioning: A longitudinal study. *Child Development, 66*, 1360-1384.
- Erath, S. A., Flanagan, K. S., & Bierman, K. L. (2008). Early adolescent school adjustment: Associations with friendship and peer victimization. *Social Development, 17*(4), 853-870.
- Espelage, D.L., Low, S., & De La Rue, L. (2012). Relations between peer victimization subtypes, family violence, and psychological outcomes during early adolescence. *Psychology of Violence*. doi: 10.1037/a0027386
- Fredricks, J. A., Blumenfeld, P. C., Friedel, J., & Paris, A. (2005). School engagement. In K. A. Moore & L. Lippman (Eds.), *Conceptualizing and measuring indicators of positive development: What do children need to flourish* (pp. 305-321). New York: Kluwer Academic/Plenum Press.
- Fredricks, J. A., Blumenfeld, P. C., & Paris, A. (2004). School engagement: potential of the concept: state of the evidence. *Review of Educational Research, 74*, 59-119.
- Fredricks, J., & McColskey, W. (2012). The measurement of student engagement: a comparative analysis of various methods and student self-report instruments. In S.L. Christenson et al. (Eds.), *Handbook of research on student engagement* (pp. 763-782). New York: Springer Science and Business Media, LLC. doi:10.1007/978-1-4614-2018-7_37
- Fredricks, J., & McColskey, W., with Meli, J., Mordica, J., Montrosse, B., & Mooney, K. (2010). *Measuring student engagement in upper elementary through high school: A description*

- of 21 instruments* (Issues & Answers Report, REL 2010–No. 098). Washington, DC: U.S. Department of Education, Institute of Education Sciences, National Center for Education Evaluation and Regional Assistance, Regional Educational Laboratory Southeast. Retrieved from <http://ies.ed.gov/ncee/edlabs> .
- Furrer, C., & Skinner, E. (2003). Sense of relatedness as a factor in children's academic engagement and performance. *Journal of Educational Psychology, 95*, 148-162.
- García-Forero, C., Gallardo-Pujol, D., Maydeu-Olivares, A., & Andrés-Pueyo, A. (2009). Disentangling impulsiveness, aggressiveness and impulsive aggression: An empirical approach using self-report measures. *Psychiatry Research, 168*, 40-49.
- Gaub, M., & Carlson, C. L. (1997). Gender differences in ADHD: A meta-analysis and critical review. *Journal of the American Academy of Child and Adolescent Psychiatry, 36*(8), 1036-1045. doi: <http://dx.doi.org/10.1097/00004583-199708000-00011>
- Gentry, M., Gable, R. K., & Rizza M .K. (2002). Students' perceptions of classrooms activities: Are there grade level and gender differences? *Journal of Educational Psychology, 94*, 539-544.
- Giedd J.N., Blumenthal J., Jeffries N. O., Castellanos F. X., Liu H., Zijdenbos A., Paus T., Evans A. L., & Rapoport J. (1999). Brain development during childhood and adolescence: A longitudinal MRI study. *Nature Neuroscience, 2*, 861–863.
- Goleman, D. (1997). *Emotional intelligence: Why it can matter more than IQ*, New York: Bantam Books.
- Graham, S., Bellmore, A., & Mize, J. (2006). Aggression, victimization, and their co-occurrence in middle school. *Journal of Abnormal Child Psychology, 34*, 363-378.
- Graham, S. & Juvonen, J. (1998). Self-blame and peer victimization in middle school: An attributional analysis *Developmental Psychology, 34*(3), pp. 587-599.
- Gratz, K. L., Bornovalova, M. A., Delany-Brumsey, A., Nick, B., & Lejuez, C. W. (2007). A laboratory-based study of the relationship between childhood abuse and experiential avoidance among inner-city substance users: The role of emotional nonacceptance. *Behavior Therapy, 38*, 256-268.
- Gratz, K. L., & Roemer, L. (2004). Multidimensional assessment of emotion regulation and dysregulation: Development, factor structure, and initial validation of the Difficulties in Emotion Regulation Scale. *Journal of Psychopathology and Behavioral Assessment, 26*, pp. 41–54.

- Graziano, P., Reavis, R., Keane, S., & Calkins, S. (2007). The role of emotion regulation and the student-teacher relationship in children's academic success. *Journal of School Psychology, 45*, 3-19.
- Gross, J.J. (1998). The emerging field of emotion regulation: An integrative review. *Review of General Psychology, 2*, pp. 271-299. doi:10.1037//1089-2680.2.3.271
- Gross, J.J. (2013). Emotion regulation: Taking stock and moving forward. *Emotion*.
- Gross, J.J., Sheppes, G., & Urry, H.L. (2011). Emotion generation and emotion regulation: A distinction we should make (carefully). *Cognition and Emotion, 25*, 765-781. doi:10.1080/02699931.2011.555753
- Gross, J.J., & Thompson, R.A. (2007). Emotion regulation: Conceptual foundations. In J.J. Gross (Ed.), *Handbook of Emotion Regulation* (pp. 3-24). New York, NY: Guilford Publications.
- Guay, F., Boivin, M., & Hodges, V.E. (1999). Predicting change in academic achievement: A model of peer experiences and self-system processes. *Journal of Educational Psychology, 91*(1), pp. 105-115.
- Gumora, G., & Arsenio, W. F. (2002). Emotionality, emotion regulation, and school performance in middle school children. *Journal of School Psychology, 40*(5), 395-413.
- Hall, J. A., & Matsumoto, D. (2014). Gender differences in judgements of multiple emotions from facial expressions. *Emotion, 4*(2), 201-206.
- Hamilton, J. L., Kleiman, E. M., Rubenstein, L. M., Stange, J. P., Flynn, M., Abramson, L. Y., & Alloy, L. B. (2016). Deficits in emotional clarity and vulnerability to peer victimization and internalizing symptoms among early adolescents. *Journal of Youth and Adolescence, 45*(1), 183-194.
- Hanish, L. D., Eisenberg, N., Fabes, R. A., Spinrad, T. L., Ryan, P., & Schmidt, S. (2004). The expression and regulation of negative emotions: Risk factors for young children's peer victimization. *Development and Psychopathology, 16*, 335-353.
- Hasson, R. & Fine, J. G. (2012).. Gender differences in children with ADHD on Continuous Performance Tests: A meta-analytic review. *Journal of Attention Disorders, 16*(3), 190-198.
- Hastings, P. D., Utendale, W. T., & Sullivan, C. (2007). The socialization of prosocial development. In J. E. Grusec & P. D. Hastings (Eds.) *Handbook of socialization* (pp.638-664). New York: Guilford.
- Haynie, D. L., Nansel, T., Eitel, P., Davis-Crump, A., Saylor, K., Yu, K., & Simons-Morton, B. (2001). Bullies, victims, bully/victims: Distinct groups, of at-risk youths. *Journal of Early Adolescence, 21*, 29-49.

- Hoglund, W. L. G. (2007). School functioning in early adolescence: Gender-linked responses to peer victimization. *Journal of Educational Psychology, 99*(4), 683-689.
- Hughes, J. N., Luo, W., Kwok, O., & Loyd, L. K. (2008). Teacher-student support, effortful engagement, and achievement: A 3-year longitudinal study. *Journal of Educational Psychology, 100*(1), p 1-14. doi: 10.1037/0022-0663.100.1.1
- Hunter, S. C., Boyle, J. M. E., & Warden, D. (2004). Help seeking amongst child and adolescent victims of peer-aggression and bullying: The influence of school-stage, gender, victimisation, appraisal, and emotion. *British Journal of Educational Psychology, 74*(3), 375-390.
- IBM Corporation (2013). *IBM SPSS Statistics for Windows, Version 22.0*. Armonk, NY: IBM Corp.
- Iyer, R. V., Kochenderfer-Ladd, B., Eisenberg, N., & Thompson, M. (2010). Peer victimization and effortful control: Relations to school engagement and academic achievement. *Merrill-Palmer quarterly, 56*(3), 361-387.
- Juvonen, J., Wang, Y., & Espinoza, G. (2011). Bullying experiences and compromised academic performance across middle school grades. *The Journal of Early Adolescence, 31*, 152-173.
- Kochenderfer-Ladd, B. (2004). The role of emotions in adaptive and maladaptive coping with peer victimization. *Social Development, 3*, 329-349.
- Larson, R. W., & Richards, M. H., (1991). Boredom in the middle school years: Blaming schools versus blaming students. *American Journal of Education, 99*, 418-443.
- Lemerise, E. A., & Arsenio, W. F. (2000). An integrated model of emotion processes and cognition in social information processing. *Child Development, 71*(1), 107-118.
- Lewis, A. D., Huebner, E. S., Malone, P. S., & Valois, R. F. (2011). Life satisfaction and student engagement in adolescence. *Journal of Youth and Adolescence, 40*, 249-262.
- Linnenbrink, E. A. (2007). The role of affect in student learning: A multi-dimensional approach to considering the interaction of affect, motivation, and engagement. In P. A. Schutz & R.

- Pekrun (Eds.), *Educational psychology series* (pp. 107–124). San Diego, CA: Elsevier Academic.
- MacCann, C., Fogarty, G. J., Zeidner, M., & Roberts, R. D. (2011). Coping mediates the relationship between emotional intelligence and academic achievement. *Contemporary Educational Psychology, 36*(1), 60-70.
- Marks, H. M. (2000). Student engagement in instructional activity: patterns in the elementary, middle, and high school years. *American Educational Research Journal, 37*, 153–184.
- Matthews, J. S., Ponitz, C. C., & Morrison, F. J. (2009). Early gender differences in self-regulation and academic achievement. *Journal of Educational Psychology, 101*(3), 689-704.
- Mayer, J. D., & Salovey, P. (1995). Emotional intelligence and the construction and regulation of feelings. *Applied and Preventive Psychology, 4*, 197-208.
- McClure, E. B. (2000). A meta-analytic review of gender differences in facial expression processing and their development in infants, children, and adolescents. *Psychological Bulletin, 126*(3), 424-453.
- McLaughlin, K.A., Hatzenbuehler, M.L., & Hilt, L.M. (2009). Emotion dysregulation as a mechanism linking peer victimization to internalizing symptoms in adolescents. *Journal of Counseling and Clinical Psychology, 77*(5), pp.894-904. doi: 10.1037/a0015760
- McRae, K., Gross, J. J., Weber, J., Robertson, E. R., Sokol-Hessner, P., Ray, R. D., Gabrieli, J. D. E., & Ochsner, K. N. (2012). The development of emotion regulation: an fMRI study of cognitive reappraisal in children, adolescents and young adults. *Social Cognitive & Affective Neuroscience, 7*(1), 11–22. doi: 10.1093/scan/nsr093.
- Montagne, B., Kessels, R. P. C., Frigerio, E., de Haan, E. H. F., & Perrett, D. I. (2005). Gender differences in the perception of affective facial expressions: Do men really lack emotional sensitivity? *Cognitive Processing, 6*(2), 136-141.
- Morelen, D., & Thomassin, K. (2013). Emotion socialization and ethnicity: An examination of practices and outcomes in African American, Asian American, and Latino-American families. *Yale Journal of Biology and Medicine, 86*(2), 168-178.

- Morrow, M. T., Hubbard, J. A., Barhight, L. J., & Thomson, A. K. (2012). Fifth-grade children's daily experiences of peer victimization and negative emotions: Moderating effects of gender and peer rejection. *Journal of Abnormal Child Psychology*, *42*(7), 1089-102.
- Muthén, L.K., & Muthén, B.O. (1998-2007). Mplus User's Guide (5th ed.). Los Angeles, CA: Muthén & Muthén.
- National Center for School Engagement. (2006). Quantifying school engagement: Research report. Retrieved January, 28, 2014, from <http://www.schoolengagement.org/Truancypreventionregistry/admin/resources/resources/QuantifyingSchoolengagementresearchreport.pdf>.
- Nett, U. E., Goetz, T., & Hall, N. C. (2011). Coping with boredom in school: An experience sampling perspective. *Contemporary Educational Psychology*, *36*(1), 49-59.
- Neumann, A., van Lier, P.A.C., Gratz, K.L., & Koot, H.M (2010). Multidimensional assessment of emotion regulation difficulties in adolescents using the difficulties in emotion regulation scale, *Assessment*, *17*, pp. 138-149.
- Nylund, K., Bellmore, A., Nishina, A., & Graham, S. (2007). Subtypes, severity, and structural stability of peer victimization: What does latent class analysis say? *Child Development*, *78*, 1706–1722. doi:10.1111/j.1467-8624.2007.01097.x
- O'Brennan, L. M., & Furlong, M. J. (2010). Relations between students' perceptions of school connectedness and peer victimization. *Journal of School Violence*, *9*, 375-391.
- Olafson, K. M., & Ferraro, F. R. (2001). Effects of emotional state on lexical decision performance. *Brain and Cognition*, *45*, 15-20.
- Olweus, D. (1991). Bully/victim problems among schoolchildren: Basic facts and effects of a school based intervention program. In D. J. Pepler & K. H. Rubin (Eds.), *The development and treatment of childhood aggression* (pp. 411-448). Hillsdale, NJ: Erlbaum.
- Olweus, D. (1993). Victimization by peers: Antecedents and long-term outcomes. In K. H. Rubin & J. B. Asendorf (Eds.), *Social withdrawal, inhibition, and shyness in childhood* (pp.15–341). Hillsdale, NJ: Lawrence Erlbaum.

- Pekrun, R., Goetz, T., Daniels, L. M., Stupnisky, R. H., & Perry, R. P. (2010). Boredom in achievement settings: Exploring control-value antecedents and performance outcomes of a neglected emotion. *Journal of Educational Psychology, 102*, 531–549.
- Pettit, G. S. (1997). The developmental course of violence and aggression: Mechanisms of family and peer influence. *Psychiatric Clinic of North America, 20*, 283–299.
- Pianta, R. C. (2009). School psychology and developmental psychology: Moving from programs to processes. In T. B. Gutkin, & C. R. Reynolds (Eds.), *The handbook of school psychology* (4th ed., pp. 107-123). New York: John Wiley & Sons, Inc.
- Pope, A. W., & Bierman, K. L. (1999). Predicting adolescent peer problems and antisocial activities: The relative roles of aggression and dysregulation. *Developmental Psychology, 35*(2), 335-346.
- Pursell, G. R., Laursen, B., Rubin, K. H., Booth-LaForce, C., & Rose-Krasnor, L. (2008). Gender differences in patterns of association between prosocial behavior, personality, and externalizing problems. *Journal of Research in Personality, 42*(2), 472-481. Doi: 10.1016/j.jp.2007.06.003
- Reeve, J., Deci, E. L., & Ryan, R. M. (2004). Self-determination theory: A dialectical framework for understanding the sociocultural influences on student motivation. In D. M. McInerney & S. Van Etten (Eds.), *Research on sociocultural influences on motivation and learning: Big theories revisited* (Vol. 4, pp. 31–59). Greenwich, CT: Information Age Press.
- Reyes, M.R., Rivers, M.A., White, S.E., & Salovey, P. (2012). Classroom emotional climate, student engagement, and academic achievement. *Journal of Educational Psychology*, Advance online publication. doi: 10.1037/a0027268
- Ripski, M., & Gregory, A. (2009). Unfair, unsafe and unwelcome: Do high school students' perceptions of unfairness, hostility, and victimization in school predict engagement and math achievement? *Journal of School Violence, 8*, 355-379. doi: 10.1080/15388220903132755
- Rose, A. J., & Rudolph, K. D. (2006). A review of gender differences in peer relationship processes: potential trade-offs for the emotional and behavioral development of girls and boys. *Psychological Bulletin, 132*, 98–131.

- Rosen, P. J., Milich, R., & Harris, M. J. (2012). Dysregulated negative emotional reactivity as a predictor of chronic peer victimization in childhood. *Aggressive Behavior, 38*(5), 414-427.
- Rudolph, K.D., Troop-Gordon, W., & Flynn, M. (2009). Relational victimization predicts children's social-cognitive and self-regulatory responses in a challenging peer context. *Developmental Psychology, 45*(5), pp. 1444-1454. doi: 10.1037/a0014858
- Salmivalli, C., Lagerspetz, K., Bjorkqvist, K., Osterman, K., & Kaukiainen, A. (1996). Bullying as a group process: Participant roles and their relations to social status within the group. *Aggressive Behavior, 22*, 1-15.
- Schwartz, D., Gorman, A.H., Hopmeyer, A., Nakamoto, J., & Toblin, R.L. (2005). Victimization in peer group and children's academic functioning. *Journal of Educational Psychology, 97*(3), pp. 425-435. doi: 10.1037/0022-0663.97.3.425
- Silva, M. A., Pereira, B., Mendonca, D., Nunes, B., & de Oliveira, W. A. (2013). The involvement of girls and boys with bullying: An analysis of gender differences. *International Journal of Environmental Research of Public Health, 10*(12), 6820-6831. Doi: 10.3390/ijerph10126820
- Skinner E., Furrer, C., Marchand, G., & Kindermann, T. (2008). Engagement and disaffection in the classroom: Part of a larger motivational dynamic? *Journal of Educational Psychology, 100*(4), 765-781.
- Smith, P. K., & Shu, S. (2000). What good schools can do about bullying: Findings from a survey in English schools after a decade of research and action. *Childhood, 7*, pp. 193-212.
- Spence, S. H., De Young, A., Toon, C., & Bond, S. (2009). Longitudinal examination of the associations between emotional dysregulation, coping responses to peer provocation, and victimisation in children. *Australian Journal of Psychology, 61*, 145-155.
- Storch, E. A., Crisp, H., Roberti, J. W., Bagner, D. M., & Masia-Warner, C. (2005). Psychometric evaluation of the social experience questionnaire in adolescents: Descriptive data, reliability, and factorial validity. *Child Psychiatry and Human Development, 36*(2), 167-176.

- Sullivan, T. N., Helms, S. W., Kliewer, W., & Goodman, K. L. (2010). Associations between sadness and anger regulation coping, emotional expression, and physical and relational aggression among urban adolescents. *Social Development, 19*(1), 30-51.
- Sutton, J., Smith, P. K., & Swettenham, J. (1999). Bullying and 'theory of mind': A critique of the 'social skills deficit' view of anti-social behaviour. *Social Development, 8*, 117-127.
- Tamres, L. K., Janicki D., & Helgeson V. S. (2002). Gender differences in coping behavior: A meta-analytic review and an examination of relative coping. *Personality and Social Psychology Review, 6*, 2-30.
- Wang, M. T., & Peck, S. C. (2013). Adolescent educational success and mental health vary across school engagement profiles. *Developmental Psychology, 49*(7), 1266-1276.
- Wei, H., & Williams, J. H. (2004). Relationship between peer victimization and school adjustment in sixth-grade students: Investigating mediation effects. *Violence and Victims, 19*(5), 557-571.
- Weinberg, A., & Klonsky, E. D. (2009). Measurement of emotion dysregulation in adolescents. *Psychological Assessment, 21*, pp. 616-621.
- Wentzel, K. R. (1998). Social relationships and motivation in middle school: The role of parents, teachers, and peers. *Journal of Educational Psychology, 90*(2), 202-209.
- Wiener, J., & Mak, M. (2008). Peer victimization in children with Attention-Deficit/Hyperactivity Disorder. *Psychology in the School, 46*(2), 116-131.
- Wilton, M. M. M., Craig, W. M., & Pepler, D. J. (2000). Emotional regulation and display in classroom victims of bullying: Characteristic expression of affect, coping styles, and relevant contextual factors. *Social Development, 9*(2), 226-245.
- Winne, P. H., Hadwin, A. F., & Perry, N. E. (2012). Metacognition and computer-supported collaborative learning. In C. Hmelo-Silver, A. O'Donnell, C. Chan, & C. Chinn (Eds.), *International handbook of collaborative learning* (pp. 462-479). New York, NY: Taylor & Francis.
- Wolters, C. A. (2010). Self-regulated learning and the 21st century competencies. *Artikel Online*.

Young, G. S., (2001). Emotional expression management and social acceptance in childhood: Ability, strategy, and gender. *Electronic Theses and Dissertations*. Paper 65.
<http://digitalcommons.library.umaine.edu/etd/65>

APPENDIX A

CHILDREN'S SOCIAL EXPERIENCES QUESTIONNAIRE

Things That Happen To Me

In the next set of questions, we are interested in how peers (people about your age) get along with one another. Please think about your relationship with peers and how often these things may happen to you while you're with your peers. (Remember to think just about peers, not your sibling(s)).

	Never	Almost Never	Sometimes	Almost all The Time	All The Time
1. How often does another peer give you help when you need it?	1	2	3	4	5
2. How often do you get hit by another peer at school?	1	2	3	4	5
3. How often do other peers leave you out or exclude you from activities when they are angry with you?	1	2	3	4	5
4. How often does another peer yell at you and call you mean names?	1	2	3	4	5
5. How often does another peer try to cheer you up when you feel sad or upset?	1	2	3	4	5
6. How often does a peer try to get even with you by excluding you from their group of friends?	1	2	3	4	5
7. How often do you get pushed or shoved by another peer?	1	2	3	4	5
8. How often does another peer do something that makes	1	2	3	4	5

you feel happy?

- | | | | | | |
|---|---|---|---|---|---|
| 9. How often does a peer spread rumors or gossip about you to make others not like you anymore? | 1 | 2 | 3 | 4 | 5 |
| 10. How often does a peer start a physical fight with you? | 1 | 2 | 3 | 4 | 5 |
| 11. How often does another peer threaten to not hang out with you unless you do what they want you to do? | 1 | 2 | 3 | 4 | 5 |
| 12. How often does another peer say something nice to you? | 1 | 2 | 3 | 4 | 5 |
| 13. How often does a peer try to keep others from hanging out with you by saying mean things about you? | 1 | 2 | 3 | 4 | 5 |
| 14. How often does another peer threaten to beat you up if you don't do what they want you to do? | 1 | 2 | 3 | 4 | 5 |
| 15. How often do other peers let you know they care about you? | 1 | 2 | 3 | 4 | 5 |

APPENDIX B

DIFFICULTIES IN EMOTION REGULATION SCALE

Please indicate how often the following 36 statements apply to you by circling the appropriate number (1= Almost Never, 2= Sometimes, 3= About Half the Time, 4= Most of the Time, 5= Almost Always)

	Almost Never (0-10%)	Sometimes (11-35%)	About half the time (36-65%)	Most of the time (66-90%)	Almost Always (91-100%)
1. I am clear about my feelings.	1	2	3	4	5
2. I pay attention to how I feel.	1	2	3	4	5
3. I experience my emotions as overwhelming and out of control.	1	2	3	4	5
4. I have no idea how I am feeling.	1	2	3	4	5
5. I have difficulty making sense out of my feelings.	1	2	3	4	5
6. I am attentive to my feelings.	1	2	3	4	5
7. I know exactly how I am feeling.	1	2	3	4	5
8. I care about what I am feeling.	1	2	3	4	5
9. I am confused about how I feel.	1	2	3	4	5
10. When I'm upset, I acknowledge my emotions.	1	2	3	4	5
11. When I'm upset, I become angry with myself for feeling that way.	1	2	3	4	5
12. When I'm upset, I become embarrassed for feeling that way.	1	2	3	4	5
13. When I'm upset, I have difficulty getting work done.	1	2	3	4	5
14. When I'm upset, I become out of control.	1	2	3	4	5
15. When I'm upset, I believe that I will remain that way for a long time.	1	2	3	4	5
16. When I'm upset, I believe that I'll end up feeling very depressed.	1	2	3	4	5
17. When I'm upset, I believe that my feelings are valid and important.	1	2	3	4	5

	Almost Never (0-10%)	Sometimes (11-35%)	About half the time (36-65%)	Most of the time (66-90%)	Almost Always (91-100%)
18. When I'm upset, I have difficulty focusing on other things.	1	2	3	4	5
19. When I'm upset, I feel out of control.	1	2	3	4	5
20. When I'm upset, I can still get things done.	1	2	3	4	5
21. When I'm upset, I feel ashamed with myself for feeling that way.	1	2	3	4	5
22. When I'm upset, I know that I can find a way to eventually feel better.	1	2	3	4	5
23. When I'm upset, I feel like I am weak.	1	2	3	4	5
24. When I'm upset, I feel like I can remain in control of my behaviors.	1	2	3	4	5
25. When I'm upset, I feel guilty for feeling that way.	1	2	3	4	5
26. When I'm upset, I have difficulty concentrating.	1	2	3	4	5
27. When I'm upset, I have difficulty controlling my behaviors.	1	2	3	4	5
28. When I'm upset, I believe there is nothing I can do to make myself feel better.	1	2	3	4	5
29. When I'm upset, I become irritated with myself for feeling that way.	1	2	3	4	5
30. When I'm upset, I start to feel very bad about myself.	1	2	3	4	5
31. When I'm upset, I believe that wallowing (being stuck thinking about it) in it is all I can do.	1	2	3	4	5
32. When I'm upset, I lose control over my behaviors.	1	2	3	4	5
33. When I'm upset, I have difficulty thinking about anything else.	1	2	3	4	5
34. When I'm upset, I take time to figure out what I'm really feeling.	1	2	3	4	5
35. When I'm upset, it takes me a long time to feel better.	1	2	3	4	5
36. When I'm upset, my emotions feel overwhelming.	1	2	3	4	5

APPENDIX C

SCHOOL ENGAGEMENT SCALE

Please indicate how often the following statements apply to you by circling the appropriate number (1= Never, 2= On Occasion, 3= Some of the Time, 4= Most of the Time, 5= All of the Time)

	Never	On Occasion	Some of the Time	Most of the Time	All of the Time
1. I pay attention in class	1	2	3	4	5
2. When I am in class I just act as if I am working	1	2	3	4	5
3. I follow the rules at school	1	2	3	4	5
4. I get in trouble at school	1	2	3	4	5
5. I feel happy in school	1	2	3	4	5
6. I feel bored in school	1	2	3	4	5
7. I feel excited by the work in school	1	2	3	4	5
8. I like being at school	1	2	3	4	5
9. I am interested in the work at school	1	2	3	4	5
10. My classroom is a fun place to be	1	2	3	4	5
11. When I read a book, I ask myself questions to make sure I understand what it is about	1	2	3	4	5
12. I study at home even when I don't have a test	1	2	3	4	5
13. I try to watch TV shows about things we are doing in school	1	2	3	4	5
14. I check my schoolwork for mistakes	1	2	3	4	5
15. I read extra books to learn more about things we do in school	1	2	3	4	5