The association of Victimization and Depression: An investigation of The Implicated Factors of Social Anxiety, Body Esteem, and Social Support

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ABSTRACT

THE ASSOCIATION OF VICTIMIZATION AND DEPRESSION: AN INVESTIGATION OF THE IMPLICATED FACTORS OF SOCIAL ANXIETY, BODY ESTEEM, AND SOCIAL SUPPORT

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Victimization is an experience that affects a substantial portion of the adolescent population and is associated with a host of negative outcomes, including depression. While the relation between victimization and depression has been researched, many internal and external factors contribute to this association. The current study examined an integrated model describing how the constructs of victimization, social anxiety, and body esteem are related to depression when considering classmate social support in adolescent boys and girls using a middle school sample of approximately 675 students. Participants completed various self-report measures, including the Bullying Participant Behaviors Questionnaire, Body Esteem Scale for Adolescents and Adults, Screen for Child Anxiety Related Emotional Disorders, Child and Adolescent Scale for Social Support, and Center for Epidemiologic Studies Depression Scale Revised. Results indicated that body esteem significantly mediated the association of victimization and depression, with social anxiety not being associated with victimization, but significantly related to body esteem. Classmate social support was not a significant moderator. Implications are discussed regarding the findings and directions for future research.
THE ASSOCIATION OF VICTIMIZATION AND DEPRESSION:
AN INVESTIGATION OF THE IMPLICATED FACTORS
OF SOCIAL ANXIETY, BODY ESTEEM,
AND SOCIAL SUPPORT

BY

JACQUELINE KLOSSING
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CHAPTER 1

INTRODUCTION

Being victimized in adolescence puts youth at risk for a host of harmful outcomes, including impairment and disparities in health, social relationships, school engagement, and the development of a host of internalizing disorders (Copeland, Wolke, Angold, & Costello, 2013; Gladstone, Parker, & Malhi, 2006; Mehta, Cornell, Fan, & Gregory, 2013; Wolke, Copeland, Angold, & Costello, 2013). One of these internalizing concerns is depression, which can significantly impair the daily functioning of adolescents who are experiencing depressive disorders, making it much harder to be successful emotionally, behaviorally, and academically.

Adolescence is a period of development often defined by the amount of change that occurs within it. Marked by significant pubertal and cognitive transformations, early on adolescents begin to develop a sensitivity to their perceived perceptions of others, often feeling that others have the same negative thoughts about them that they have about themselves. They perceive their own concerns and worries to be noticed by others and in turn may develop difficulties in how they function in their day-to-day due to this self-consciousness (Elkind & Bowen, 1979; Ryan & Kuczkowski, 1994). Coupled with the natural self-consciousness of adolescence is the experience of victimization. Approximately 1 in 4 middle school students and 1 in 5 high school students report being a victim of bullying, making this a prevalent and relevant experience to adolescent development.

While victimization and depression are commonly associated in the literature (Hawker & Boulton, 2000; Rigby, 2000) and provide evidence for the importance of studying victimization,
other factors can be helpful to consider. One of these factors is body esteem. The way an individual feels about his or her body is an important component of psychological functioning and well-being, particularly in adolescence, when youth experience an intensified sensitivity to how they are perceived by others in appearance. While healthy levels of body satisfaction can be protective, research indicates that body esteem is stable over adolescence, with youth experiencing a slow and steady decline in their confidence about their appearance (Carlson Jones, 2004). This growing body dissatisfaction can act to further affect an individual who is being victimized and experiencing emotional distress (Paxton, Eisenberg, & Neumark-Sztainer, 2006; Stice & Whitenton, 2002).

Another important factor is social anxiety. Social anxiety is well established as being associated with victimization, and it is often considered bidirectionally related to victimization (Gladstone et al., 2006; La Greca & Lopez, 1998), such that individuals who are socially anxious are more likely to be victimized while the experience of being victimized in and of itself has been associated with later development of social anxiety symptomatology (Ghoul, Niwa, & Boxer, 2013; Stapinski et al., 2014). Furthermore, research indicates that social anxiety often is a precursor to the development of poor body esteem (Rodgers, Paxton, & McLean, 2014; Wilhelm, Otto, Zucker, & Pollack, 1997), suggesting that social anxiety may play a mediating role between victimization and body esteem and thus be indirectly related to the manifestation of depressive symptoms.

Additionally, social support is critical to consider when understanding adolescents and their development of depressive symptoms related to victimization experiences. Social support and its effectiveness in protecting victimized youth from internalizing concerns varies based on who is providing that support, with gender being an important factor to consider in explaining some of these differences in effectiveness. In general, research highlights that close friendships
may not be as effective as general peer and parent support (Davidson & Demaray, 2007; Shlafer, McMorris, Sieving, & Gower, 2013) in protecting against emotional concerns. However, when provided correctly according to gender differences, social support can be a powerful protective factor against a variety of both externalizing and internalizing problems (Camara, Bacigalupe, & Padilla, 2017; Davidson & Demaray, 2007; La Greca & Harrison, 2005). By examining the relations between victimization and depression through the lens of the mediation of social anxiety and body esteem and moderating factors of social support and gender, a clearer picture can be illuminated of how depression develops in early adolescence and what amenable intervention points may be relevant to target to address this problem.
CHAPTER 2
LITERATURE REVIEW

Victimization and Internalizing Problems

Victimization is an experience that is both problematic and prevalent throughout adolescence. With approximately 25% of middle school students and 18% of high school students reporting being bullied, victimization is an essential experience to examine when understanding adolescent development (National Center for Education Statistics, 2015). Victimization can be described as the experience of being a victim of bullying. Bullying is defined as unwanted aggressive behavior that is either repeated, or likely to be repeated, against youth or youths in which there is a power imbalance between the victim and perpetrator (Gladden, Vivolo-Kantor, Hamburger, & Lumpkin, 2014). Common internalizing problems associated with victimization include depression and social anxiety. Depression includes a variety of symptoms of physiological disruptions in sleep, appetite, and energy that are driven by feelings of melancholy, sadness, and irritability, particularly in adolescence (American Psychiatric Association [APA], 2013). Social anxiety is characterized by feelings of apprehension and worry related to social interactions, settings, and experiences (APA, 2013).

In general, meta-analysis work has identified significant relations between victimization and internalizing problems. In one study, it was found that a medium effect size was identified between depression and victimization and a small effect size for the link between social anxiety and victimization (Hawker & Boulton, 2000), which is consistent with research identifying peer victimization experiences as contributing to the development of poor mental health (Rigby,
A meta-analysis examining longitudinal studies of the relation between peer victimization and internalizing problems found that peer victimization was a significant predictor of internalizing difficulties over time, while internalizing problems were also predictive of victimization over time (Reijntjes, Kamphuis, Prinzie, & Telch, 2010). When comparing these effects to determine directionality, it was found that a bidirectional relation explained how victimization and internalizing issues are related. The finding of a bidirectional association in some ways contradicts social rank theory in that it suggests that these internalizing feelings are not solely a result of feelings of inferiority and victimization experiences leading these feelings to develop. Rather, those tendencies may also be present and put an adolescent at risk for being a victim of bullying from the outset.

One theory that may help account for this bidirectionality is the social self-discrepancy model. This is a theoretical model that explains affective maladjustment as a result of the discrepancy between the ideal and expected social self and one’s actual self (Kupersmidt, Sigda, Sedikides, & Voegler, 1999). In this theory, it is posited that poor peer relations and victimization experiences are impactful only for those who have a large discrepancy between the actual and ideal self. When a discrepancy exists, there is an affective change that can then elicit behavior changes to cope, such as choosing to withdraw from the school setting or no longer participating in enjoyable activities, both of which are behaviors that can resemble depression. There is evidence to support this theory and its relation to depression (Kupermidt et al., 1999; Prinstein, Cheah, & Guyer, 2005). Furthermore, this theory provides explanations for the relation between victimization and social anxiety. Similar to how it describes the relation between victimization and depression, the social self-discrepancy model posits that feelings of discrepancy between one’s “ought” self, or the qualities an individual feels one “should” have,
and one’s actual self lead to feelings of anxiety. While this anxiety could develop to be generalized, it is more likely to be social in nature as the discrepancy is centered on a person’s “social” self and is thus triggered by social scenarios. Overall, these theories provide some suggestions for how victimization experiences relate to internalizing concerns.

Despite the availability of theoretical models to describe how victimization and internalizing constructs are related, empirical research is inconsistent in teasing apart if these internalizing problems co-occur independently of one another due to other factors or are in fact related to one another after controlling for other environmental and biological factors. For example, one study examined bully roles and experiences of various outcomes in middle school students. Anxiety was significantly related to reports of being victimized, but not depression (Craig, 1998). This is partially supported by other research in the same age group that found that while bully/victims were more likely to be depressed and anxious than other groups, victims were only most likely to be anxious and did not report significantly higher depression than elevated groups such as bullies and bully/victims (Swearer, Song, Cary, Eagle, & Mickelson, 2001). In order to better understand the relations between victimization, social anxiety, and depression, it is necessary to consider these relations separately from one another.

**Victimization and Depression**

Some research has supported the presence of an association between victimization and major depressive disorder in adolescents, with one study expanding on this association to find that contingent self-worth significantly moderated this relation across gender (Ghoul et al., 2013). Still, other research has found no relation between victimization and depression (Craig, 1998) or an association between victimization and depression only when that individual also engaged in bullying in addition to being victimized (i.e., a bully/victim; Copeland et al., 2013). The range of findings indicates that the associations between these constructs may be more
The association between victimization and depression has been explained through various theories, one of which being the social self-discrepancy theory, as previously described. However, another well-established theory is the cognitive-vulnerability stress model. This model has been explored to attempt to explain how cognitive biases can relate to depressive symptoms when coupled with peer rejection experiences. One study found that critical, self-referent attributions were predictive of depressive symptoms over time in adolescents and increased the likelihood of peer victimization experiences (Prinstein et al., 2005). Specifically, the association between these negative self-attributions and depression were only present in those reporting high and not low levels of victimization. This is largely consistent with the social self-discrepancy theory because it explains affective maladjustment as a result of the discrepancy between the ideal and expected social self and one’s actual self (Kupersmidt et al., 1999). However, the cognitive-vulnerability stress model is different in that it does not also provide an explanation for the development of anxiety. Rather, research has identified through this model how depression and anxiety develop differently. Using three studies varying in time of follow-up to assess symptoms, Hankin, Abramson, Miller, and Haeffel, (2004) showed that negative life events in general were predictors of depressive and anxiety symptoms. In contrast, depressive symptoms were uniquely predicted by the interaction of a negative attributional style and negative life events. This elucidates how anxiety and depression may be triggered to develop through negative life experiences such as being a victim of bullying, but that having a cognitive style that is negative in nature will uniquely contribute to the development of depression when a young adolescent is bullied. This can be explained by research indicating a negative attributional style is present in both individuals who are depressed and those who engage in bullying (Dodge, 1993; Quiggle, Garber, Panak, & Dodge, 1992), explaining why being a bully/victim and not victim...
alone has been predictive of depression.

**Victimization and Social Anxiety**

The relation between victimization and the development of anxiety has been well established (Copeland et al., 2013; Crawford & Manassis, 2011; Stapinski et al., 2014). Research has shown that victimization experiences at the age of 13 have been identified to be predictive of anxiety disorder diagnoses by the age of 18 across genders (Stapinski et al., 2014). In fact, reporting frequent victimization during early adolescence was related to a threefold increase in the likelihood of developing an anxiety disorder or anxiety disorders with depression comorbidity (Stapinski et al., 2014). Other longitudinal research has examined bullying roles in mid-adolescence and later social-emotional outcomes in young adulthood to determine how being a victim of bullying or being a bully/victim was related to later functioning (Copeland et al., 2013). After controlling for childhood psychiatric disorders and family hardships, it was found that being a victim alone significantly predicted anxiety disorders, including generalized anxiety and panic disorder, but not depression. These results were consistent across gender, indicating the experience of being a victim of bullying uniquely and robustly predicts the development of anxiety later in life.

The evidence for the relation between social anxiety and victimization is stronger than the evidence for many other types of anxiety and victimization. A study of adults with social phobia, obsessive compulsive disorder (OCD), or panic disorder (PD) examined their history of being victimized and found that social anxiety in adulthood was significantly predicted by reported experiences of being bullied in adolescence (Copeland et al., 2013). This relation was much stronger for social phobia than OCD or PD, indicating that the relation between social phobia and victimization is stronger than with other anxiety disorders. The social exclusion theory of anxiety attempts to explain the link between victimization and social anxiety by first
positing that social anxiety is derived from innate fears of being excluded (Baumeister & Tice, 1990). Social networks and relationships are critical to the formation of the self, as evidenced by the strong link between social status and how one is perceived by others and their reported self-esteem (Baumeister & Tice, 1990). Anxiety is suggested to be rooted in the fear that one will not be accepted, thus impacting one’s self-esteem as well (Baumeister & Tice, 1990). Research supports that a temperament high in behavioral inhibition is a predictor of both being a victim of bullying and developing social anxiety (Gladstone et al., 2006), suggesting that this fear may be related to a generally inhibited temperament. In contrast, general feelings of state anxiety were predicted by exposure to bullying and controlling parenting styles, not behavioral inhibition (Gladstone et al., 2006). This is important as it highlights how the insecurities in one’s self can perpetuate sensitivity to scenarios in which an individual feels they are being evaluated, as in social situations, and lead to the unique manifestation of social but not generalized anxiety. The researched importance of temperamental differences aligns with findings that individuals with social anxiety report having greater difficulty in developing friendships than those with other anxiety or no anxiety disorder (Scharfstein, Alfano, Beidel, & Wong, 2011). Their difficulties with being extroverted and building relationships with peers may make them more likely to become a target of bullying. Adolescents reporting higher levels of social anxiety also report feeling less accepted and supported by their peers, with this occurring in both boys and girls, although more strongly in girls (La Greca & Lopez, 1998). Other research supports gender differences in the associations between social anxiety and victimization. In a study of middle school students, a significant association was found between social anxiety and both self and peer reports of victimization in both boys and girls (Erath, Flanagan, & Bierman, 2007). However, overall, the associations between victimization and social anxiety were of moderate strength for girls while it was considered strong for boys, indicating social anxiety may play
more of a role in being a victim of bullying for boys than girls. Other research has identified an association between experiences of peer victimization and social phobia, with this association being moderated by contingent self-worth for adolescent boys but not girls (Ghoul et al., 2013). Specifically, when adolescent boys report higher levels of contingent self-worth, the relation between victimization and social phobia strengthens. Furthermore, social anxiety in young adolescents has been found to be predictive of the development of depression (Beesdo et al., 2007; Stein, Fuetsch, Müller, Höfler, Lieb, & Wittchen, 2001), suggesting that social anxiety and depression may not be isolated outcomes of victimization. Together, the results from these studies suggest that victimization, social anxiety, and depression are related throughout adolescence, but in potentially different ways depending on gender, with more gender differences emerging with age.

**Additional Factors**

When examining the research, there are important factors to consider in understanding the associations between victimization and internalizing problems. These include social support and body esteem. Social relationships are incredibly important to the human experience, which is especially true during adolescence, when youth become more sensitive to social dynamics and what others may think of them (Ryan & Kuczkowski, 1994). However, when provided correctly, social support can be a powerful protective factor against a variety of negative outcomes associated with adolescence, including externalizing and internalizing problems (Camara et al., 2017; Davidson & Demaray, 2007; La Greca & Harrison, 2005). In addition, while self-esteem has been often studied as an important factor to account for in understanding the association between victimization and internalizing problems, one mechanism related to self-esteem through which the associations between victimization and depression may occur is body esteem. Body esteem is defined as a physical element of global self-esteem and is a primary domain accounting
for much of what makes up global self-esteem (Harter, 1999; Shapka & Keating, 2005). It is comprised of the attitudes, beliefs, and self-evaluations that an individual has regarding one’s appearance and body (Harter, 2012; Mendelson, Mendelson, & White, 2001).

**Social Support**

**Social support and victimization.** Social support has been identified as a protective factor for adolescents, with research exploring a variety of social support sources and their differing effects in how they bolster against being victimized and developing negative outcomes associated with bullying. Peer relationships are one important source to consider. While research has shown that close friendships alone are not always protective against becoming a victim of bullying (Davidson & Demaray, 2007), there is research that indicates that certain qualities of close friendships, including high-quality relationships with significant amounts of affection and trust, are related to reduced reports of victimization (Goldbaum, Craig, Pepler, & Connolly, 2003; Kendrick, Jutengren, & Stattin, 2012). Interestingly, these friendships also protect against those with additional risk factors for being bullied, such as engaging in internalizing or externalizing behaviors (Hodges, Boivin, Vitaro, & Bukowski, 1999). While these results have been shown to be consistent across gender, differences between boys and girls are particularly relevant when considering the relation between social support and victimization. One study in adolescent girls identified family and peer connectedness was related to reduced likelihood of being victimized (Shlafer et al., 2013). Meanwhile, there is also evidence that social support moderates the relation between victimization experiences and internalizing problems (Davidson & Demaray, 2007) but that this moderation by source differs by gender. Specifically, while teacher, classmate, and school support were protective for boys, parent support alone was protective for girls, suggesting that the associations between social support and victimization experiences are complex and must be considered by both source and gender.
Social support and depression. Social support is a protective factor that may be capitalized on to reduce the likelihood of adolescents developing depression, but its effect is not completely clear when examining these relations by both source and gender. Meta-analysis work has found that both family and general peer social support are more strongly associated with depression than other sources of support in children and adolescents (Rueger, Malecki, Pyun, Aycock, & Coyle, 2016). While family support was consistently associated with depression across children and adolescents, general peer support was less strongly associated with older adolescents in comparison to children and young adolescents. This effect did not differ by gender, indicating that family and general peers may be critical figures for male and female adolescents in helping reduce the likelihood of depression developing.

Social support and social anxiety. In general, meta-analysis work has identified anxiety to be associated with social life impairments (Olatunji, Cisler, & Tolin, 2007). Youth with social anxiety disorder have been shown to be more likely to have fewer friends than those without anxiety difficulties (Eng & Heimberg, 2006; Scharfstein et al., 2011). This may be attributed to problems with social skills, with adolescents with social anxiety disorder showing social competence deficits or heightened social inhibition (Eng & Heimberg, 2006; Scharfstein et al., 2011). These findings may indicate that those with social anxiety disorder are at notable risk of reporting lower levels of social support than individuals with other anxiety or no anxiety disorder, as they demonstrate greater deficits in engaging in social scenarios and developing relationships and report having fewer friends.

Specifically, research has shown that social anxiety is associated with impaired social relationships and home and family relations (Olatunji et al., 2007; Rodebaugh, 2009). Using statistical modeling techniques, research has shown that poor social skills predict lower friendship quality, which in turn is a predictor of victimization (Crawford & Manassis, 2011).
Because social anxiety is often related to social skill deficits, it is important to consider how social anxiety may play a role in this type of relation, preventing individuals from building appropriate peer relationships and thus stunting the growth of their peer social networks.

There may be gender differences in these relations, as various forms of social support can be differentially important in understanding how it benefits individuals who are at risk for social anxiety. Some research examining the relation between relational and overt victimization and social anxiety found that help in friendships buffered against social concerns for girls who were victimized (Schmidt & Bagwell, 2007). However, for boys, the increases in friendship help and support were related to a stronger association between relational victimization and social anxiety. Overall, the findings suggest that social support may be beneficial to those with anxiety but also may be one of the areas impacted by their anxious behaviors and thus make it difficult to capitalize on this potentially protective factor. Furthermore, the benefits may vary based on the source of support and the gender of the adolescent.

**Body Esteem**

**Body esteem and depression.** One model of depression posits that depression develops from affective, biological, and cognitive vulnerabilities that interact with negative life experiences and pubertal onset, leading to both the development of and gender differences in depression. Referred to as the ABC model, this model also suggests that these vulnerabilities manifest as objectified body consciousness that, in conjunction with other negative experiences such as sexual harassment from peers and other events, predicts depression (Hyde, Mezulis, & Abramson, 2008). These vulnerabilities include genetic factors in the gene 5-HTTLPR, a subsequent temperament prone to negative emotionality, and a consequential cognitive vulnerability of rumination and negative attributional style. These factors in turn interact with the onset of puberty, and for those with these vulnerabilities, they are at heightened risk for engaging
in body self-surveillance and shame (Hyde et al., 2008). These feelings predict the development of depression and explain the gender differences seen in depression incidence because girls are more likely to experience these cognitive vulnerabilities due to body changes in puberty that contrast with the ideal while boys’ body changes typically support the ideal. Specifically, girls typically gain weight, which contradicts the thin ideal perpetuated by social and media ideals while boys gain weight and muscle mass, which supports a larger, stronger body type in line with masculine ideals (Graber et al., 1997; Siegel, Yancey, Aneshensel, & Schuler, 1999; Williams & Currie, 2000). In this way, body satisfaction development is to the benefit of boys during puberty and at the detriment of girls.

A longitudinal study in middle school students found that while depression was significantly associated with body dissatisfaction longitudinally and concurrently, it was not a significant predictor of body dissatisfaction five years later in high school (Paxton, Eisenberg, & Neumark-Sztainer; 2006), results that were consistent across gender. These findings provide evidence that depression may be related to body esteem, but in such a way that depression is not a predictor of body dissatisfaction, which has been supported by other research failing to find a longitudinal effect of depression on body dissatisfaction (Stice & Whitenton, 2002). This begs the question, Is body esteem a predictor of depression? Fortunately, this question was explored in a different study using the same sample. Using body dissatisfaction at Time 1 as a predictor, researchers found that it was a significant predictor of depressive symptoms five years later for middle school girls but not boys (Paxton, Neumark-Sztainer, Hannan, & Eisenberg, 2006). However, in high school students, the predictive value of body dissatisfaction on depressive symptoms five years later was the opposite, such that there was a significant effect with males but not females (Paxton, Neumark-Sztainer, et al., 2006). This is generally supported by findings that body dissatisfaction was a significant predictor of the onset of major depressive disorder in a
sample of adolescent girls (Stice, Hayward, Cameron, Killen, & Taylor, 2000) and is supported by the ABC theory of depression. Furthermore, this is consistent with the impact of puberty, with girls typically maturing before boys and experiencing an onset of body dissatisfaction that persists and worsens thereafter (Duncan, Ritter, Dornbusch, Gross, & Carlsmit, 1985; Graber et al., 1997; Siegel et al., 1999). In contrast, males typically benefit from the onset of puberty when it comes to body esteem, with early timing relating to better outcomes. In early adolescence, body esteem is in part reflective of the pubertal timing of the youth and how it manifests to impact internalizing functioning.

**Body esteem and social anxiety.** Social anxiety theory resembles the theories describing how depression develops, with the origins starting with a processing bias that sets individuals on a path to socially anxious feelings. The cognitive-behavioral theory of social anxiety begins with a predisposition to threat sensitivity in social situations, in which individuals perceive others as being overly evaluative of the person (Rapee & Heimberg, 1997). In addition, these individuals place significant value on others’ perceptions of who they are. Attentional resources are allocated to one’s self-image and how that image may or may not align with the “audience” expectation. Based on the evaluation of the difference between perceived self and ideal self, the individual develops feelings of anxiety (Rapee & Heimberg, 1997), which aligns with the social self-discrepancy model previously described to explain the association between victimization and social anxiety (Kupersmidt et al., 1999).

Research conducted in a high school sample in Iran found body esteem to partially mediate the relation between self-esteem and social anxiety (Abdollahi, Abu Talib, Reza Vakili Mobarakheh, Momtaz, & Kavian Mobarakhe, 2016). In addition, the associations between body esteem and social anxiety held across all BMI groups of students, including underweight, normal, and overweight participants (Abdollahi et al., 2016), indicating the perceptions of body
Esteem are related to how an individual experiences anxiety in social situations regardless of their weight status. However, this association between body esteem and social anxiety did differ by gender, with females showing a significant association and males showing no significant association (Abdollahi et al., 2016). It is difficult to discern the directionality of these relations. However, a biopsychosocial model of body image concerns suggests that social anxiety and sensitivity to sociocultural influences leads to internalization of body ideals and self-comparison, which then manifests as poor body image (Rodgers et al., 2014). This model, which has been supported in the research (Rodgers et al., 2014), suggests that social anxiety may be a risk factor to developing poor body image.

Furthermore, a clinical representation of poor body esteem has been found to be associated with these internalizing disorders. Body dysmorphic disorder (BDD), a disorder in which an individual becomes hyper-focused on perceived imperfections in one’s appearance, is significantly related to poor body esteem. Specifically, BDD involves an individual experiencing preoccupations with perceived flaws in their appearance that are either very mild or imperceptible to other individuals. This preoccupation is accompanied by repetitive behaviors, either externally or mentally, in response to these feelings of worry related to appearance (APA, 2013). Age of onset typically occurs in early to mid-adolescence, with subclinical symptoms appearing earlier, which can be impacted by pubertal development. Research has found that of various types of anxiety disorders, social anxiety is the most commonly comorbid disorder with BDD, with approximately 12% of individuals with BDD also experiencing clinically significant levels of social anxiety (Wilhelm et al., 1997). In that study, it was found that social anxiety always preceded the emergence of BDD, indicating that the experience of social anxiety can manifest into other difficulties such as poor body image. Other research examined BDD and comorbidity with depression and various anxiety disorders and found that BDD and subclinical
symptoms of shape and weight concerns were significantly associated with the presence of these disorders (Dyl, Kittler, Phillips, & Hunt, 2006).

**Social Support and Body Esteem**

While the relation between social support and body esteem has not been studied extensively, there are a few studies available that begin to elucidate how these constructs may relate to one another. One longitudinal study examining two different adolescent cohort groups, middle school students and high school students, explored how adolescent body esteem difficulties were related to dieting-supportive behaviors in their relationships with parents and peers. Results demonstrated that parent dieting behaviors were not predictive of body dissatisfaction five years later, but friend dieting behaviors were for middle-school-aged girls (Paxton, Eisenberg, & Neumark-Sztainer, 2006). Interestingly, this was not the case for middle-school-aged boys or the high school students. Other research examined general parental social support as a predictor of body dissatisfaction nine months later, finding that social support was not a significant predictor (Presnell, Bearman, & Stice, 2004). However, perceived pressures to be thinner from peers, not family, were predictive for both boys and girls. This finding highlights the importance that peer relationships and interactions may have in contributing to body esteem development while underscoring the lack of evidence for parent support as a contributor.

While less is known about social support and body esteem explicitly, it has been noted that social support explains a significant portion of the variance present in general self-esteem (Han & Kim, 2006). Because global self-esteem is highly correlated with body esteem and physical appearance makes up a large portion of one’s overall self-esteem (Harter, 1999; Shapka & Keating, 2005), it is logical to posit that the relation between social support and body esteem may be similar. Fortunately, one study was able to assess parent and peer social support and its impact on body dissatisfaction longitudinally in a sample of adolescent girls. Results showed that
social support was predictive of body dissatisfaction over time such that those reporting greater social support reported lower levels of body dissatisfaction (Stice & Whitenton, 2002).

**Rationale and Purpose of Current Study**

The present study aimed to examine the construct of victimization in adolescence and how it relates to depression through the mediating factors of social anxiety and body esteem, moderated by social support and gender.

**Research Questions**

The current study attempted to answer the following research questions: 1. Does body esteem mediate the relation between victimization and depression, and is this mediation moderated by classmate social support and gender? 2. Does social anxiety partially mediate the relation between victimization and body esteem, and is the relation between victimization and social anxiety moderated by classmate social support and gender?

**Research Predictions**

**Question 1.**

1. Does body esteem mediate the relation between victimization and depression, and is this mediation moderated by classmate social support and gender?

**Prediction 1a:** Victimization will be positively associated with depression through the mediator of body esteem, and body esteem will have a negative association with victimization and depression.

**Prediction 1b:** Classmate social support will moderate the association between victimization and body esteem such that increased social support will weaken this association.

**Prediction 1c:** Gender will moderate the association between body esteem and depression such that this association will be significant for girls but not boys.
There is evidence that suggests that body dissatisfaction predates depression longitudinally and is even a predictor of depression (Paxton, Eisenberg, & Neumark-Sztainer 2006; Stice & Whitenton, 2002). However, there are developmental gender differences in the association between victimization, body esteem, and depression. Specifically, research shows that during the middle school years, body dissatisfaction is a predictor of depression in girls but not boys. In high school, this relation reverses and body dissatisfaction becomes a significant predictor of depression in adolescent boys but not girls. Previous research has found that objectified body consciousness mediated the association between peer sexual harassment and depression, with peer sexual harassment representing a construct that is often captured through victimization measures (Hyde et al., 2008). This aligns with other research finding that low self-esteem, highly correlated with body esteem, mediated the association between peer victimization and depression in youth (Benas & Gibb, 2007).

Victimization has commonly been associated with self-esteem (Ata et al., 2007; Fox & Farrow, 2009) and has also been found to be associated with body dissatisfaction and appearance concerns (Benas & Gibb, 2007; Fox & Farrow, 2009). When considering body esteem, which is very closely linked to both the constructs of self-esteem and body dissatisfaction, it is expected that victimization and body esteem will function similarly. Furthermore, adolescents report being most frequently targeted in bullying based on appearance (Davis & Nixon, 2010; Puhl, Luedicke, Heuer, 2011), providing further support for the association between victimization and body esteem.

Regarding social support, there are findings that peer support is predictive of body dissatisfaction for adolescent boys and girls (Presnell et al., 2004; Stice & Whitenton, 2002). This has been supported by other research finding that general peer support is important for both genders in buffering against depression in adolescents and more protective than close friendships.
These findings provide support for the prediction that body esteem mediates the association between victimization and depression, with classmate social support moderating the association between victimization and body esteem and gender moderating the association of body esteem and depression (Figure 1).

![Figure 1. RQ#1 proposed model.](image)

**Question 2.**

2. Does social anxiety partially mediate the relation between victimization and body esteem, and is the relation between victimization and social anxiety moderated by classmate social support and gender?

**Prediction 2a:** Social anxiety will partially mediate the association between victimization and body esteem, with social anxiety positively associated with victimization and negatively associated with body esteem.
Prediction 2b: Classmate social support will moderate the association between victimization and social anxiety such that increased social support will weaken this association.

Prediction 2c: Gender will moderate the association between victimization and social anxiety such that this association will be significant, but stronger for boys than girls.

Research has identified a link between social anxiety and victimization, with a positive association being reported across multiple studies (Copeland et al., 2013; Craig, 1998; Ghoul et al., 2013; La Greca & Harrison, 2005). The directionality of this association is difficult to determine, but longitudinal research supports that the relation between victimization and social anxiety may be bidirectional (Reijntjes et al., 2010). Reijntjes and colleagues’ research suggests that individuals have emotional propensities that put them at risk for both social anxiety and being victimized, such as being behaviorally inhibited or lacking social skills (Gladstone et al., 2006; Scharfstein et al., 2011). Additionally, gender has been supported as a moderator of this association in the literature, with research identifying the association between victimization and social anxiety to be significant in both genders, but stronger for boys than girls (Erath et al., 2007).

Social anxiety and body esteem have been found to be associated across a variety of studies, with research indicating that social anxiety often predates the development of body image issues (Abdollahi et al., 2016; Rodgers et al., 2014; Wilhelm et al., 1997). Rodgers and colleagues (2014) tested a biopsychosocial model examining a variety of factors that influence body image and eating behavior outcomes for adolescent girls and found that, as predicted, social anxiety and sensitivity to sociocultural influences was predictive of the internalization of body ideals and self-comparison, which then predicted poor body image. Other research conducted with both adolescent girls and boys examined the relation between social anxiety and body esteem across varying levels of weight status. The results indicated that there was a significant
association for girls, but not boys, and that the associations held across all levels of weight, indicating that perception, not appearance factors, may be more important to the association between social anxiety and body image issues and there may be gender differences in this association. Still other research has not noted gender differences, with a study conducted examining the associations of social anxiety disorder (SAD) and body dysmorphic disorder (BDD), a disorder in which an individual becomes hyper-focused on perceived imperfections in one’s appearance and is significantly related to poor body esteem. Specifically, BDD involves an individual experiencing preoccupations with perceived flaws in their appearance that are either very mild or imperceptible to other individuals and are accompanied by repetitive behaviors, either externally or mentally, in response to those feelings of worry related to appearance (APA, 2013). The study found that of various types of anxiety disorders, social anxiety is the most commonly comorbid disorder with BDD, with approximately 12% of individuals with BDD also experiencing clinically significant levels of social anxiety (Wilhelm et al., 1997). It was also found that social anxiety always preceded the emergence of BDD, indicating that the experience of social anxiety can manifest into other difficulties such as poor body image and supporting the prediction that social anxiety will be negatively associated with body esteem.

Regarding social support, there is evidence that support from classmates can be beneficial in reducing the likelihood of developing internalizing problems for victimized adolescents (Davidson & Demaray, 2007). Furthermore, research has found that being a member of a larger peer crowd and reporting peer support buffers against anxiolytic outcomes related to victimization (Holt & Espelage, 2007; La Greca & Harrison, 2005). However, no research has looked explicitly at social anxiety as an outcome with various sources, only one study identifying friendship social support as protective for victimized girls but a risk factor for victimized boys, in demonstrating social anxiety symptoms (Schmidt & Bagwell, 2007). Because of the lack of
research currently in the literature, it is posited that classmate social support will moderate the relation between victimization and social anxiety (Figure 2).

![Diagram](image.png)

Figure 2. RQ#2 proposed model.

**Question 3.**

3. Does an integrated model including all of the aforementioned associations as described in RQs 1-2 significantly describe how victimization, social anxiety, body esteem, classmate social support, gender, and depression are related?

Prediction 3a: An integrated model including all of the aforementioned associations as described in RQs 1-2 will provide a statistically supported depiction in describing how victimization, body esteem, social support, gender, and internalizing problems are related.

Based on the research supporting the hypotheses for RQs 1-2, it is likely that when integrating these components together, a final model will be created that will demonstrate how victimization, social anxiety, social support, body esteem, depression, and gender are related to one another (Figure 3).
Figure 3. RQ#3 proposed model.
CHAPTER 3

METHODOLOGY

Participants

The participants included in the current study were part of a school population of approximately 850 students attending a suburban middle school in northern Illinois. Student ethnicities were reported as the following within the total school population: 86% White, 9% Hispanic, 2% Multiracial, 2% Asian, 1% Black, and <1% American Indian. When examining free and reduced lunch status, 12% of the total student population was considered low income. Thirteen percent of students were reported to receive special education services. A total of 681 students passed preliminary data screening procedures and were included in the final sample. Of these students, 50% identified as female and 50% as male. Fifty percent were in fifth grade and 50% in sixth grade.

Measures

The study utilized five self-report measures to examine students’ perceptions of experiences and feelings in the areas of victimization, body esteem, social support, social anxiety, and depression.

Bullying Participant Behaviors Questionnaire (BPBQ; Summers & Demaray, 2008)

The Bullying Participant Behaviors Questionnaire (BPBQ) is a 50-item questionnaire that measures an individual’s engagement in various behaviors related to the bullying scenario (Summers & Demaray, 2008). There are a total of five subscales, including Victim, Bully, Defender, Assistant to Bully, and Outsider. Each subscale includes 10 items inquiring about the
student’s frequency of engaging in specific behaviors related to these roles in the past 30 days using a 5-point scale ranging from 0 (never) to 4 (7 or more times). Each subscale asks about different types of victimization, such as physical and relational, from the perspective of each role. Examples of this include the following sample items: “I have been purposely left out of something” (Victim); “I have pushed, punched, or slapped another student” (Bully); “I tried to become friends with someone after they were picked on” (Defender); “I made fun of someone who was being called mean names” (Assistant to the Bully); and “I pretended not to notice when rumors were being spread about other students” (Outsider). Subscales are scored individually by summing the items and calculating a mean score to indicate the average frequency of experiences in each role in the past month.

Psychometric analyses were conducted using a sample of 801 middle school (Grades 6-8) students in a midwestern suburban school district (Demaray, Summers, Jenkins, & Becker, 2016). Data were factor analyzed utilizing both principal and confirmatory factor analyses by separating the total sample into two randomized samples. With the initial principal component analysis, an oblique rotation was completed that identified five to seven potential factors. An additional factor analysis was conducted in which five factors were forced, yielding a result of 52% of the variance being accounted for. Five items loaded on different factors than was expected, and thus these items were removed. After the exclusion of the five items that did not load according to predictions, the analysis was completed again. Results indicated that all items loaded as expected. The lowest loading items were then excluded to reduce each subscale to 10 items. The fit of this final model was assessed with confirmatory factor analyses. While initial analyses demonstrated inadequate fit, changes were made to the error covariances, leading to an improvement in fit ($\chi^2 (1145) = 2668.89, p < .001$, $\text{CFI} = .88$, $\text{SRMR} = .06$, $\text{RMSEA} = .065$, 90% CI [.062, .068], PNFI = .74).
Reliability and validity tests were completed on the entire sample. All subscales demonstrated good to excellent reliability with Cronbach’s α = .878 to α = .938. All correlations between each item and its associated subscale were moderate to high ($r = .506 - .849, p < .01$). Evidence of construct validity was derived from the correlations between similar and dissimilar subscales. The Victim subscale demonstrated moderate correlations with Defender and Bully ($r = .41, p < .01; r = .32, p < .01$) and small correlations with Assistant ($r = .19, p < .01$). The Outsider subscale demonstrated small correlations with Defender and Victim ($r = .21, p < .01; r = .25, p < .01$). As to be expected, the correlation between Assistant and Bully was large ($r = .60, p < .01$).

Evidence of discriminant and convergent validity was derived from the correlations among the different roles and victimization, social skills, and social-emotional outcomes. Correlations with victimization were used using the Bully Survey (Swearer, 2001). Results demonstrated significant, positive correlations between all the BPBQ subscale roles and the victimization measure, with the sole large correlation existing between the Victim subscale and the measure ($r = .57, p < .0008$). Social skills were measured using the Social Skills Rating System (Gresham & Elliott, 1990) subscales of Self-Control, Cooperation, and Empathy. Victim, Assistant, and Bully subscales each had significant, negative correlations with some or all of the social skills subscales, with the strongest negative correlation existing between each of the social skills subscales and the Bully subscale. Notably, a significant, negative correlation was demonstrated between the Assertion subscale for social skills and the Victim subscale. Additionally, correlations between the BPBQ subscales and social-emotional outcomes were assessed using the Behavior Assessment System for Children, 2nd edition (Reynolds & Kamphaus, 2004). Victim, Assistant, and Bully subscales were each significantly, negatively associated with positive social-emotional outcomes and significantly, positively associated with
negative social-emotional outcomes. Only the Victim subscale was used for the present study.

**Screen for Child Anxiety Related Emotional Disorders (SCARED; Birmaher et al., 1997)**

The Screen for Child Anxiety Related Emotional Disorders (SCARED) is a 41-item self-report measure that is used to screen for anxiety disorders in children and adolescents in the areas of generalized anxiety, social anxiety, separation anxiety, panic disorder, and school avoidance (Birmaher et al., 1997). Respondents report their perceptions of how true each item has been for them in the past three months using a 3-point scale ranging from 0 (*not true or hardly ever true*) to 2 (*very true or often true*). There are a total of five subscales, including Panic Disorder or Significant Somatic Symptoms, Generalized Anxiety Disorder, Separation Anxiety Disorder, Social Anxiety Disorder, and School Avoidance. Each subscale has a varying number of items ranging from three to nine items per subscale. Sample items include, “When I feel frightened, it’s hard for me to breathe” (Panic Disorder); “I am nervous” (Generalized Anxiety), “I follow my mother or father wherever I go” (Separation Anxiety); “I don’t like to be with people I don’t know well” (Social Anxiety); and “I get headaches when I am at school” (School Avoidance). Subscales can be scored individually by summing the items or a total score can be derived across all items as a general indicator of anxiolytic symptomatology.

Several psychometric studies have been conducted with the SCARED. However, two primary studies are typically cited in the literature regarding psychometrics. The initial development of the SCARED was completed in a sample of 341 children and adolescents aged 9 to 18 years (Birmaher et al., 1997). All participants had been referred to a mood or anxiety disorder clinic, and most of the children included had two or more anxiety disorder diagnoses. This study completed a principal components factor analysis using a varimax rotation and found a five-factor solution with factor loadings ranging between .30 and .80. The factors identified included somatic/panic, generalized anxiety, separation anxiety, social phobia, and school phobia.
(Birmaher et al., 1997). While the study helped to provide a preliminary point for investigating the scale, more was done in a follow-up replication study that reflects that current measure (Birmaher et al., 1999). The replication study was completed to further refine the measure and replicate findings using a modified version with 41 items. Three items had been added from the previous study’s 38-item measure to improve the measure’s ability to discriminate between social anxiety disorder and other types of anxiety. The sample included 190 participants ages 9 to 19 years (Birmaher et al., 1999). As in the first study using the SCARED, participants were referred to mood or anxiety disorder clinics, and diagnoses were obtained using diagnostic checklist interviews. A factor analysis identified a five-factor solution, with internal consistency ranging from acceptable to good (Cronbach’s $\alpha = .78$ to $\alpha = .87$). The three added items loaded on the social anxiety factor, with the other items loading as expected on the factors identified in the initial study (Birmaher et al., 1999).

Evidence of discriminant validity was provided by using the receiver operator curve (ROC) method to determine a cutoff score for discrimination and calculating parametric and nonparametric statistics. Scores were evaluated to determine if they could successfully discriminate between those adolescents and children with anxiety disorders and those with depressive or disruptive disorders based on their diagnoses from clinical interviews. The total score successfully discriminated between children experiencing anxiety and those with depression or a disruptive disorder, $F(1, 187) = 18.58, p < .0001$, in addition to each of the scales’ factors ($p \leq .008$; Birmaher et al., 1999).

Another set of studies conducted with the 38-item version of the SCARED resulted in data to support test-retest reliability and convergent validity (Muris, Merckelbach, Van Brakel, & Mayer, 1999). Evidence of test-retest reliability was provided by administering the SCARED twice with a sample of 101 adolescents aged 11 to 14 years. The SCARED was given 12 weeks
apart. Correlations between both time points demonstrate that the SCARED has adequate test-retest reliability both for the total score \((r = .81, p < .001)\) and for the subscales \((r = .40, p < .001\) to \(r = .78, p < .001;\) Muris et al., 1999). Evidence of convergent validity was provided by computing correlations between the SCARED scores to scores derived from the Children’s Anxiety Scale (CAS; Spence, 1998) in a sample of 88 children aged 8 to 12 years. All correlations were significant between total and subscale scores across both measures, including the total score \((r = .88, p < .001)\), panic disorder \((r = .74, p < .001)\), generalized anxiety disorder \((r = .75, p < .001)\), social phobia \((r = .37, p < .001)\), and separation anxiety disorder \((r = .80, p < .001)\). School Avoidance was not assessed due to there being no comparable subscale available to measure convergent validity (Muris et al., 1999). For the purposes of the present study, only the Social Anxiety subscale was used.

**Body Esteem Scale for Adolescents and Adults (BESAA; Mendelson, Mendelson, & White, 2001)**

The Body Esteem Scale for Adolescents and Adults (BESAA) is a 30-item questionnaire used to measure body esteem, or an individual’s feelings on their body and appearance (Mendelson, White, & Mendelson, 1997). Respondents report their perceptions using a 5-point scale ranging from 0 (never) to 4 (always). The BESAA was developed out of the Body Esteem Scale for Children (Mendelson & White, 1982; Mendelson & White, 1993-1994), a measure that had restrictions in its response format and ability to be used in older populations. The BESAA was developed to address these concerns and now includes 30 items and three subscales: Body Esteem (BE)-Appearance, Body Esteem (BE)-Attribution, and Body Esteem (BE)-Weight. The BE-Appearance includes 13 items and assesses an individual’s general feelings regarding the way he or she looks. Sample items include, “I like what I look like in pictures” and “I worry about the way I look.” The BE-Attribution subscale has four items and measures the evaluations
of a person’s body and appearance that the participant attributes to other individuals. Sample items include, “My looks help me to get dates” and “Other people consider me good looking.” The BE-Weight consists of six items and evaluates an individual’s weight satisfaction. Sample items include, “I am preoccupied with trying to change my body weight” and “I am satisfied with my weight.” Items framed to describe dissatisfaction and poor body esteem are reverse coded. The total score is interpreted as the mean of each subscale (see Appendix C for the measure).

Data were collected to assess psychometric properties by Mendelson and colleagues (2001) utilizing a normed sample of 1,334 participants between the ages of 12 and 25 from Montreal, Quebec. After factor analyzing the data, results identified a four-factor model, with the fourth factor containing only two items. Thus, these two items were removed and data were factor analyzed again. A three-factor solution was identified with all items demonstrating factor loadings between .42 to .96. Each subscale demonstrated good to excellent internal consistency with Cronbach’s α = .92 for appearance, α = .81 for attribution, and α = .94 for weight. Test-retest reliability was assessed in a subsample of undergraduates at three months, with reliability ranging from good to excellent (Cronbach’s α = .83 to α = .92).

Evidence of discriminant validity was demonstrated by analyzing the correlations between the BESAA’s subscales and the varying types of self-esteem assessed in the Self-Perception Profiles for College Students. The Self-Esteem-Appearance subscale correlated significantly with the BE-Appearance and BE-Weight subscales ($r = .42-.49, p < .01; r = .58-.79, p < .01$), while the BE-Attributions subscale correlated significantly with the Self-Esteem Romantic and Self-Esteem Social subscales ($r = .24-.45, p < .01-.05; r = .24-.27, p < .01-.05$). BE-Appearance also correlated significantly with the Self-Esteem Romantic and Self-Esteem Social subscales ($r = .23, p < .05; r = .30, p < .01$). Evidence of convergent validity was
demonstrated by examining the correlations between the BE-Appearance subscale and global self-esteem measured using both the Global Self-Esteem of the Self-Perception Profile for College Students \( (r = .43-.76, p < .01-.05) \) and the Rosenberg Self-Esteem Scale \( (r = .28-.63, p < .01-.05) \). In general, correlations between the BE-Appearance and global self-esteem were higher for girls than boys.

For the current study, only the BE-Appearance subscale was included as the BESAA assesses three unique constructs and the present study is examining general body esteem. The correlations between the BE-Appearance subscale and RSES in 13-17-year-olds across genders provide evidence that this subscale appropriately captures a global measure of self-esteem regarding appearance \( (r = .28-.63, p < .01-.05) \).

**Child and Adolescent Scale for Social Support (CASSS; Malecki & Demaray, 2002)**

The Child and Adolescent Scale for Social Support (CASSS) is a 40-item self-report measure used to measure different types of social support from various sources including parents, classmates, close friends, and teachers (Malecki & Demaray, 2002). Respondents report their perceptions of the frequency in which they experience different types of support from 1 (never) to 6 (always). Ten items are used for each subscale and source of support measured. Sample items include, “My parent(s) give me good advice” (Parent); “My teacher(s) cares about me” (Teacher); “My classmates ask me to join activities” (Classmate); and “My close friend helps me when I need it” (Close Friend). Scores are obtained by calculating the mean from each of the individual subscales to provide an average measure of the perceived support from the specified source. In addition, importance can also be measured using an extension to the scale. However, for the purposes of this study, only frequency was assessed.

Psychometric properties of the CASSS were assessed using a sample of 1,110 students across Grades 3 through 12 from schools across one northeastern and a variety of midwestern
states. Factor analyses were completed using two subsets of the sample, one from Grades 3 to 6 and one from Grades 6 to 12. While a variety of models fits were tested based on competing theoretical models, it was found that a source-based model provided the best fit for the 3rd to 6th grade group ($\chi^2 (353) = 1366.14, p < .001, \text{CFI} = .91, \text{RMSEA} = .05, \text{NNFI} = .90$) and the 6th to 12th grade group ($\chi^2 (734) = 1928.02, p < .001, \text{CFI} = .94, \text{RMSEA} = .05, \text{NNFI} = .94$). All factor loadings were significant and ranged from $t = 11.3$ to $t = 29.4$ across both subsamples. Internal consistency was demonstrated to be excellent for the total scale for both groups with Cronbach’s $\alpha = .94$ and $\alpha = .95$. Additionally, internal consistency was considered good to excellent across all sources of support for the younger (Grades 3 to 6; Cronbach’s $\alpha = .87$ to $\alpha = .93$) and older subsamples (Grades 6 to 12; Cronbach’s $\alpha = .89$ to $\alpha = .94$). Test-retest reliability was conducted eight weeks later with 85 middle school students from the original sample, with coefficients falling between .60 to .70 across each source of support and .70 for the total score.

Evidence of convergent validity was provided by examining the correlations among the CASSS total scale and subscales and the corresponding scores from the Social Support Scale for Children (Harter, 1985), a well-established and psychometrically sound measure of social support. Correlations were obtained from 258 middle school students from the original sample and considered strong across both the total scale ($r = .70$) and subscales ($r = .55-.62$). Examining the correlations among the subscales within the CASSS provided evidence of discriminant validity. Results demonstrated that correlations fell within the moderate to strong range between each subscale ($r = .35-.58$), with correlations stronger between peer subscales (Classmate and Close Friend) and adult figure subscales (Parent and Teacher). For the purposes of this study, only the Classmate subscale was utilized.
The Center for Epidemiologic Studies Depression Scale Revised (CES-DR; Eaton, Smith, Ybarra, Muntaner, & Tien, 2004) is a 20-item self-report measure that is used to assess a variety of areas of symptomatology that are associated with depression according to criteria set by the Diagnostic and Statistical Manual, 5th edition (DSM-5; Eaton, Smith, Ybarra, Muntaner, & Tien, 2004). The CES-DR is derived from the Center for Epidemiologic Studies Depression Scale (CES-D; Radloff, 1977), which aligned with the fourth edition of the DSM for diagnostic criteria. Individuals are asked to report how often they have felt in the past week to two weeks, with response options ranging from 1 (not at all or less than one day) to 5 (nearly every day for two weeks). Sample items include, “My appetite was poor” and “Nothing made me happy.” Two items were removed for the purposes of this study in order to make the measure acceptable to the school setting, including, “I wanted to hurt myself” and “I wished I were dead.”

While extensive psychometric research has been conducted on the CES-D, less has been done utilizing the CES-DR. However, a large community sample of 10,304 participants and an undergraduate sample of 245 students were used for a study to provide evidence of reliability and validity in the revised scale (Van Dam & Earleywine, 2011). Both exploratory and confirmatory factor analyses were conducted. The exploratory factor analysis identified a two-factor model as the best fit both psychometrically and theoretically, with items mapping onto negative affect and functional impairment factors. The confirmatory factor analysis also yielded a two-factor model in both samples as the best fit over a one-factor model ($\Delta \chi^2(1) = 124.7$, $p < 0.001$; $\Delta \chi^2(1) = 31.1$, $p < 0.001$). However, due to a high inter-factor correlation ($r = .94$; $r = .98$), it was determined that a two-factor model led to redundancy. Thus, a one-factor model was
Regarding reliability, internal consistency was considered excellent within both samples of the study with Cronbach’s $\alpha = .92$ to $\alpha = .93$. Test-retest reliability was not assessed. Convergent and discriminant validity were assessed by examining the correlations between the CES-DR scores and the Positive and Negative Affect Schedule (PANAS), a measure of affect; the State-Trait for Cognitive and Somatic Anxiety (STICSA), a measure of anxiety; and the Schizotypal Personality Questionnaire-Brief (SPQ-B), a measure assessing components of schizotypal personality disorder. It was expected that CES-DR scores would highly correlate with the PANAS negative affect score (PANAS-NA), STICSA, and the SPQ-B, but not the PANAS positive affect score (PANAS-PA). Evidence of convergent validity was provided with positive correlations between the CES-DR and the STICSA ($r = .65-.74$, $p < .01$), the SPQ-B ($r = .44$, $p < .01$), and the PANAS-NA ($r = .58$, $p < .01$). Evidence of discriminant validity was provided with a negative correlation identified between the CES-DR and the PANAS-PA ($r = -.26$, $p < .01$).

**Procedure**

The present study was submitted to the Northern Illinois University Institutional Review Board and approved for passive consent. Parents belonging to the partner school district were given the opportunity to exclude their child from the data collection through provided “opt-out” forms that were returned to the school. These forms were sent out both in paper form with students to take home and electronically through the school newsletter. Both the information and opt-out letters are included in Appendix F. Due to the data being used to inform universal practices in the school, all students whose parents did not return the “opt-out” form were included in the study. Approximately 75 students opted out of the study.
The study was conducted over the course of a single day, although several days were provided to complete the data collection process. Classroom teachers were given instructions on how to complete the data collection process, which was completed online using the program Qualtrics to complete online surveys. Specifically, teachers were provided an administration script to read in order to conduct the data collection, which can be seen in Appendix G. Students were given the opportunity to formally assent during the beginning of the survey; if they chose not to assent, they were directed immediately to the end of the survey. Students who did not assent were given the opportunity to use the time to continue working on schoolwork or their laptops if they chose not to participate. It took approximately 30 minutes for the students to complete the surveys. Surveys were counterbalanced by measure in order to ensure measure items were administered together as is done in validation studies and necessary to maintain the consistency of scales and instructions for each survey. A lie item was included as a reliability check (“I am answering these questions honestly right now”). Participants who responded to the lie item with not true or hardly ever true were excluded from the analysis. After completing the data collection, a de-identified report was developed for the school highlighting the global scores and any significant gender and grade differences across the variables.
CHAPTER 4

RESULTS

Research Inquiries and Analyses

Preliminary Analyses

Means and standard deviations were calculated for all variables (Victimization, Social Anxiety, Body Esteem, Classmate Social Support, and Depression) by gender and grade and are included in Table 1. Preliminary screening of the data was completed to identify and manage any data abnormalities or assumption violations. Inclusion criteria required that participants indicated assent through an item at the beginning of the survey and passed a lie item (“I am answering these questions honestly right now”). Participants responding to the lie item with not true or hardly ever true regarding if they were answering honestly were excluded due to evidence of poor reliability in response. Of the total sample, 65 participants were removed due to failing the lie item, 16 were removed due to not responding to assent, and 12 were removed due to actively refusing assent. A range of 4 to 7% of data were missing across all items included in the survey. All variables were mean centered as a primary step to ease interpretation. All preliminary analyses were performed using SPSS.

Assumptions. Assumptions testing identified no concerns regarding violations. Normality of residuals was assessed utilizing histogram and Q-Q plot visual analysis, through which no significant violations were noted. Homoscedasticity was assessed through scatterplots, with visual analysis demonstrating appropriate distribution of residuals. Multivariate outliers
were also assessed with 17 cases identified and removed due to falling above critical value of 18.47 on Mahalanobis distance.

Table 1

<table>
<thead>
<tr>
<th>Total</th>
<th>Boys</th>
<th>Girls</th>
<th>5th Grade</th>
<th>6th Grade</th>
<th>Gender Differences</th>
<th>Grade Differences</th>
<th>Gender x Grade Interactions</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>M</td>
<td>SD</td>
<td>M</td>
<td>SD</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Body Esteem†</td>
<td>4.10</td>
<td>0.81</td>
<td>4.17</td>
<td>0.73</td>
<td>4.04</td>
<td>0.88</td>
<td>4.19</td>
</tr>
<tr>
<td>Victimization</td>
<td>1.67</td>
<td>0.79</td>
<td>1.69</td>
<td>0.80</td>
<td>1.64</td>
<td>0.78</td>
<td>1.73</td>
</tr>
<tr>
<td>Social Anxiety</td>
<td>0.78</td>
<td>0.48</td>
<td>0.75</td>
<td>0.45</td>
<td>0.81</td>
<td>0.51</td>
<td>0.83</td>
</tr>
<tr>
<td>Classmate Social Support</td>
<td>4.54</td>
<td>1.03</td>
<td>4.47</td>
<td>1.03</td>
<td>4.62</td>
<td>1.02</td>
<td>4.50</td>
</tr>
<tr>
<td>Depression</td>
<td>1.59</td>
<td>0.64</td>
<td>1.57</td>
<td>0.63</td>
<td>1.62</td>
<td>0.64</td>
<td>1.66</td>
</tr>
</tbody>
</table>

Note. † denotes the presence of significant group differences, * = p < .05; ** = p < .01; *** = p < .001, Body Esteem (never to always).

Victimization (never to 7 or more times), and Depression (not at all or less than one day to nearly every day for two weeks) scores range from 1 to 5. Classmate Social Support scores range from 1 to 6. Social Anxiety scores range from 0 to 2 (not true or hardly ever true to very true or often true).

**Gender and grade-level differences.** Gender, Grade Level, and Gender by Grade Level interaction differences were assessed in the main study variables (i.e., Body Esteem, Victimization, Social Anxiety, Depression, and Classmate Social Support) by conducting a series of two-way ANOVAs. Regarding Gender, significant differences were noted in Body Esteem, $F(1,661) = 5.29, p < .05$, such that boys ($M = 4.17, SD = 0.73$) reported higher levels of Body Esteem than girls ($M = 4.04, SD = 0.88$). Girls ($M = 4.62, SD = 1.02$) reported significantly higher levels of Classmate Social Support, $F(1,668) = 3.91, p < .05$, than boys ($M = 4.47, SD = ...
No other significant differences by Gender were identified across the other study variables.

Regarding Grade Level, significant differences were identified across nearly all study variables. For Body Esteem, 5th graders (M = 4.19, SD = 0.76) reported higher levels than 6th graders (M = 4.02, SD = 0.85), F(1,661) = 7.57, p < .01. For Victimization, 5th graders (M = 4.19, SD = 0.76) reported higher frequencies than 6th graders (M = 1.60, SD = 0.76), F(1,667) = 4.54, p < .05. Regarding Social Anxiety, 5th graders (M = 0.83, SD = 0.49) also reported higher scores than 6th graders (M = 0.73, SD = 0.47), F(1,666) = 5.80, p < .05. Fifth graders also reported higher rates of depression (M = 1.66, SD = 0.64) than their older peers (M = 1.53, SD = 0.62), F(1,655) = 6.94, p < .01. There were no significant grade differences in Classmate Social Support.

Gender by Grade Level interactions were also evaluated using the two-way ANOVA. No significant interaction effects were identified in Body Esteem, Victimization, Social Anxiety, and Classmate Social Support. However, there was a significant Gender x Grade Level interaction for Depression F(1, 655) = 4.12, p < .05. Specifically, boys reported lower levels of depression at 6th grade than 5th grade (5th, M = 1.66; 6th, M = 1.44) while girls reported consistent levels from 5th to 6th grade (5th; M = 1.61; 6th, M = 1.57). Simple slope testing was used to determine if the slope for boys or girls was significantly different from zero. Boys demonstrated a slope that differed significantly from zero, t(1, 673) = -3.27, p = .001, while girls demonstrated a slope that did not differ, t(1, 673) = -0.44, p > .05. See Table 1 for the means, standard deviations, ANOVA results by total sample, gender, and grade. See Figure 4 for the Grade x Gender interaction of Depression.
Correlations. Pearson’s correlations were conducted to identify the associations among all study variables by total sample and by Gender. For boys, significant correlations were identified among all of the variables. Body Esteem had a weak significant, negative association with Victimization, $r(366) = -0.39, p < .001$, and Social Anxiety, $r(366) = -0.32, p < .001$, and a moderately significant, positive association with Classmate Social Support, $r(365) = 0.40, p < .001$, and Depression, $r(367) = -0.43, p < .001$. Victimization had a moderately significant, negative association with Classmate Social Support, $r(368) = -0.54, p < .001$; a moderately significant, positive association with Depression, $r(369) = 0.50, p < .001$; and a weak significant, positive association with Social Anxiety, $r(368) = 0.27, p < .001$. With Social Anxiety, weak significant, negative associations were noted with Classmate Social Support, $r(367) = -0.32, p <
.001, and a weak significant, positive association with Depression, \( r(359) = .25, p < .001 \).

Classmate Social Support had a moderately significant, negative association with Depression, \( r(360) = -.46, p < .001 \).

In regards to girls, Body Esteem has a moderately significant, negative association with Victimization, \( r(367) = -.46, p < .001 \), and Depression \( r(363) = -.53, p < .001 \); a moderately significant, positive association with Classmate Social Support, \( r(367) = .55, p < .001 \); and a weak but significant, negative association with Social Anxiety, \( r(366) = -.33, p < .001 \).

Victimization had a strongly significant, positive association with Depression, \( r(366) = .58, p < .001 \); a weak significant, positive association with Social Anxiety, \( r(370) = .22, p < .001 \); and a strong, negative association with Classmate Social Support, \( r(371) = -.52, p < .001 \). Social Anxiety had a moderately positive, significant association with Depression, \( r(366) = .44, p < .001 \), and a moderately negative, significant association with Classmate Social Support, \( r(371) = -.37, p < .001 \). Classmate Social Support had a moderately negative, significant association with Depression, \( r(367) = -.50, p < .001 \). See Tables 2 and 3 for these results.

Table 2

*Bivariate Correlations Among Study Variables- Total Sample*

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
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<tr>
<td>1. Body Esteem</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
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<tr>
<td>2. Victimization</td>
<td>- .43***</td>
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<td>--</td>
<td>--</td>
<td>--</td>
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<tr>
<td>3. Social Anxiety</td>
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<td>.25***</td>
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<td>--</td>
</tr>
<tr>
<td>4. Classmate Social Support</td>
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<td>-.53***</td>
<td>-.35***</td>
<td>--</td>
<td>--</td>
</tr>
<tr>
<td>5. Depression</td>
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<td>.53***</td>
<td>.35**</td>
<td>-.47***</td>
<td>--</td>
</tr>
</tbody>
</table>

*Note.* * = \( p < .05 \); ** = \( p < .01 \); *** = \( p < .001 \)
Table 3

Bivariate Correlations Among Study Variables by Gender

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
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<td>1. Body Esteem</td>
<td></td>
<td>---</td>
<td>-.39***</td>
<td>-.32***</td>
<td>.40***</td>
</tr>
<tr>
<td>2. Victimization</td>
<td>-.46***</td>
<td></td>
<td>.27***</td>
<td>-.54***</td>
<td>.50***</td>
</tr>
<tr>
<td>3. Social Anxiety</td>
<td>-.33***</td>
<td>.22***</td>
<td></td>
<td>-.32***</td>
<td>.25***</td>
</tr>
<tr>
<td>4. Classmate Social Support</td>
<td>.55***</td>
<td>-.52***</td>
<td>-.37***</td>
<td></td>
<td>-.46***</td>
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<tr>
<td>5. Depression</td>
<td>-.53***</td>
<td>.58***</td>
<td>.44***</td>
<td>-.50***</td>
<td></td>
</tr>
</tbody>
</table>

Note. Correlations for boys are presented above the diagonal and correlations for girls are presented below the diagonal; * \( p < .05; ** \( p < .01; *** \( p < .001

Psychometric analyses. Internal consistency was assessed for all included measures. Several of the measures demonstrated excellent internal consistency, including the BPBQ Victimization subscale (\( \alpha = .91 \)), the BES-Appearance subscale (\( \alpha = .92 \)), the CASSS-Classmate (\( \alpha = .93 \)), and the CES-DR (\( \alpha = .90 \)). The SCARED Social Anxiety subscale demonstrated good internal consistency (\( \alpha = .87 \)).

Main Analyses

Question 1: Does body esteem mediate the relation between victimization and depression, and is this mediation moderated by classmate social support and gender?

A moderated mediation model was assessed using SPSS (IBM Corp., 2015) through Model 21 from the SPSS Process macro (Hayes, 2013). Victimization was entered as the independent variable (X) and Depression as the dependent variable (Y). Body Esteem was entered as the mediator (M) of the association between Victimization and Depression (X and Y). Classmate Social Support was entered as a moderator (W) of the association between Victimization and Body Esteem (X and M). Finally, Gender was entered as a moderator (V) between Body Esteem and Depression (M and Y).
Mediation was identified as being present and significant. While Victimization demonstrated a significant, positive association with Depression, $b = .32$, SE = .03, $p < .001$, it also demonstrated a significant, negative association with Body Esteem, $b = -.35$, SE = .13, $p < .01$. The association between Body Esteem and Depression was also found to be significant, $b = -.23$, SE = .08, $p < .01$. Regarding the moderation of Classmate Social Support on the association between Victimization and Body Esteem, results indicated the interaction was not significant, $b = .03$, SE = .03, $p = .40$. Gender was not a significant moderator of the association between Body Esteem and Depression, $b = -.01$, SE = .05, $p = .84$. While there were no significant moderator effects, the indirect effects of Victimization on Depression were significant across all levels of tested moderators, as is noted in Table 4. The significant pathways and indirect effects identified provide evidence of mediation by Body Esteem in the association of Victimization and Depression. See Figure 5 for a model depiction of these results.

Table 4

<table>
<thead>
<tr>
<th>Gender</th>
<th>Classmate Social Support</th>
<th>Effect</th>
<th>SE</th>
<th>CI (lower)</th>
<th>CI (upper)</th>
</tr>
</thead>
<tbody>
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<td>Males</td>
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<td>.06*</td>
<td>.02</td>
<td>.03</td>
<td>.10</td>
</tr>
<tr>
<td></td>
<td>4.75</td>
<td>.05*</td>
<td>.02</td>
<td>.03</td>
<td>.09</td>
</tr>
<tr>
<td></td>
<td>5.58</td>
<td>.05*</td>
<td>.02</td>
<td>.01</td>
<td>.10</td>
</tr>
<tr>
<td>Females</td>
<td>3.42</td>
<td>.06*</td>
<td>.02</td>
<td>.03</td>
<td>.11</td>
</tr>
<tr>
<td></td>
<td>4.75</td>
<td>.06*</td>
<td>.02</td>
<td>.03</td>
<td>.10</td>
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<tr>
<td></td>
<td>5.58</td>
<td>.05*</td>
<td>.02</td>
<td>.01</td>
<td>.10</td>
</tr>
</tbody>
</table>

*Note. Classmate Social Support levels reflect a standard deviation below the mean, above the mean, and the mean itself; Lower and upper bound of confidence intervals (CI) based on 95% confidence interval. * $p < .05$
Question 2: Does social anxiety partially mediate the relation between victimization and body esteem, and is the relation between victimization and social anxiety moderated by social support and gender?

This moderated mediation model was assessed by utilizing Model 9 from SPSS Process macro (Hayes, 2013) in SPSS (IBM Corp., 2015). Victimization was entered as the independent variable (X) and Body Esteem as the dependent variable (Y), with Social Anxiety as the mediator (M) of this association. Classmate Social Support (W) and Gender (V) were entered
individually as unique moderators in the association between Victimization and Social Anxiety (X and M).

Partial mediation was not identified as being significant in the model. While Victimization was significantly associated with Body Esteem, $b = -.37$, SE = .04, $p < .001$, it was not significantly associated with Social Anxiety, $b = .05$, SE = .10, $p = .60$, the tested mediator. However, Social Anxiety was associated with Body Esteem, $b = -.43$, SE = .06, $p < .001$, indicating that Victimization and Social Anxiety are uniquely and independently associated with Body Esteem. Regarding the moderation of Classmate Social Support on the association between Victimization and Social Anxiety, results indicated the interaction was not significant, $b = .01$, SE = .02, $p = .57$. Gender was also not a significant moderator of the association of Victimization and Social Anxiety, $b = -.03$, SE = .05, $p = .54$. See Figure 6 for a model depiction of these results.

**Question 3: Does an integrated model including all of the aforementioned associations as described in RQs 1-2 provide a good fit in describing how victimization, social anxiety, body esteem, classmate social support, and depression are related?**

Due to the lack of evidence of moderated mediation in the first two analyses conducted in RQ1 and RQ2, it was determined that the fully integrated model should not tested as it would likely not demonstrate additional effects not captured by the first two models. For this reason, the analyses proposed for RQ3 were excluded.
Figure 6. Social Anxiety as a mediator between Victimization and Body Esteem, Classmate Social Support and Gender moderators.
CHAPTER 5

DISCUSSION

Overview

While the experience of being bullied has been studied often in how it relates to depression (Hawker & Boulton, 2000; Rigby, 2000), little has been done to contextualize the experience of being bullied within a larger framework accounting for the notable importance of body esteem that emerges throughout child development and particularly into adolescence (Cash & Smolak, 2011; Jones, Vígufsdóttir, & Lee, 2004; Sabiston, Sedgwick, Crocker, Kowalski, & Mack, 2007). The current study served to consider these factors together by assessing how the experience of victimization may partially contribute to the development of depression through the constructs of social anxiety, body esteem, and classmate social support in early adolescence. Within the first tested model, results indicated that body esteem mediates the association between victimization and depression, such that those who experience victimization are likely to have reduced body esteem and higher rates of depression. Interestingly, classmate social support was not found to serve as a moderator in the association between victimization and body esteem, indicating it did not serve as a significant protective factor in those being victimized.

Within the second tested model, social anxiety was tested and found to not mediate the association between victimization and body esteem. Overall, this model demonstrated poor fit, with results showing that while victimization and social anxiety were associated with feelings about one’s appearance, they were not associated with one another. Again, classmate social support did not serve as a protective moderator in this model. Interestingly, gender did not
significantly moderate any of the proposed pathways across either model, suggesting that
young adolescents still experience many of these constructs in the same way despite the
continually emerging differences they experience in social hierarchies, relationships, body image
pressures, and internalizing outcomes. Collectively, these results provide evidence that
contextualizing victimization and depression with the inclusion of previously understudied
factors such as body esteem and social anxiety may be important to understanding the
complexity of how being bullied is related to negative internalizing outcomes.

Victimization and Internalizing

The current study aimed to expand on the literature by re-examining how victimization
and depression are related to one another through mediating internalizing experiences. Research
has suggested that the association between victimization and internalizing is well established.
Specifically, research has demonstrated links between victimization and poor mental health
(Reijntjes, 2010; Rigby, 2000), as well as specific outcomes such as anxiety and depression
(Hawker & Boulton, 2000). The current study examined depression and social anxiety as unique,
internalizing concerns that are potential consequences of being bullied in early adolescence.

Victimization and depression. Victimization and depression were found to be
significantly associated across all analyses within the current study. Bivariate correlations
identified a significant positive association between these two constructs across gender.
Additionally, in the tested model, a direct, positive association between victimization and
depression was present. The findings that the association between victimization and depression is
significant are consistent with both predictions and previous research.

Seals and Young (2003) conducted a study in a sample of middle school students that
identified that reports of being victimized or being a bully were significantly associated with
increased rates of depression. Extending beyond middle school, Klomek and colleagues (2007)
identified this same association in a sample of high school students. While these two studies are well cited in the literature and highlight how the experience of being bullied can put youth at risk for developing depression, the finding of victimization being associated with heightened rates of depressive symptoms is consistent with several studies (Arseneault, Bowes, & Shakoor, 2010; Copeland et al., 2013; Hankin et al., 2004; Hawker & Boulton, 2000). However, while it may be that in this particular sample this association was evident because it was conducted with young adolescents, it may change as youth age. One study examined longitudinal associations of victimization and depression in youth throughout adolescence (Sweeting, Young, West, & Der, 2006). The findings indicated that while a reciprocal association existed between victimization and depression across various timepoints, at age 13 victimization was more predictive of depression than vice versa, and this reversed by the age of 15 in boys but not girls (Sweeting et al., 2006). Accordingly, it may be helpful to consider the bidirectionality of victimization and depression in longitudinal approaches and expand the sample to address how this developmental pathway changes through adolescence.

**Victimization and social anxiety.** When exploring the association between victimization and social anxiety, the bivariate correlation was found be positive and significant across genders. However, the findings when examining the assessed model were different. Specifically, the association between victimization and social anxiety was not significant, which also was not moderated by gender. These findings were contrary to what was predicted, as previous research has identified anxiety and social anxiety to be associated with experiences of victimization (Erath et al., 2007; Ghoul et al., 2013; Gladstone et al., 2006).

However, there are some findings in previous research that align with the results of the current study. In particular, a study in adolescents found that there was a significant association between social anxiety and relational victimization, but not overt victimization (La Greca &
Harrison, 2005), which was a finding consistent across gender. The current study utilized a broadband assessment of victimization, and thus, the effects unique to specific types of victimization were likely diluted within the study. Still other research conducted by Storch and colleagues (2005) found longitudinally that neither relational nor overt victimization were predictive of social anxiety or phobia for males or females, but when reversing the directionality, social phobia predicted relational victimization. Because the predicted model identified social anxiety as a mediator between victimization and body esteem, it is possible the directionality of the model was an inappropriate structure for describing these relations. Collectively, the research supports that the current findings may be indicative of only certain types of victimization predicting social anxiety or directionality problems within the model.

**Victimization and Body Esteem**

When examining the association between the experience of being victimized and body esteem, results indicated there was an association across all analyses. Bivariate correlations indicated a significant, negative association in males and females. Additionally, when examining the association between victimization and body esteem in the assessed model, it was found to be negative and significant, with gender not serving as a significant moderator. The significant association between victimization and body esteem is consistent with what was predicted and with previous research linking victimization to poor self-esteem and body image (Ata et al., 2007; Benas & Gibb, 2007; Fox & Farrow, 2009).

Body esteem has been shown to be linked to experiences of victimization, and there are two specific pathways through which this link is identified. Being a victim of bullying has been found to be predictive of low self-esteem in young adolescent both cross-sectionally and longitudinally (Hawker & Boulton, 2000; Overbeek, Zeevalkink, Vermulst, & Scholte, 2010). Indeed, the internalization of being victimized is connected to how adolescents form their self-
concepts, including body esteem, as it is the component of global self-esteem that accounts for the largest amount of variance in overall feelings about oneself (Harter, 1999; Shapka & Keating, 2005).

In addition to victimization and body esteem being related due to body esteem’s large contributions to global self-esteem, individuals also often report being victimized based on appearance. In fact, appearance-based bullying is reported as the most common reason individuals feel they are being targeted (Davis & Nixon, 2010; Puhl et al., 2011), which is only compounded by the onset of puberty when body esteem can begin to plummet, particularly for early onset girls and late-blooming boys (Duncan et al., 1985; Graber et al., 1997; Siegel et al., 1999). Whether this is rooted in perceptions of being bullied based on how an individual looks or objective statements made about a victim’s appearance, it suggests that being a victim of bullying in large part is understood by adolescents as related to how they look. Thus, having poorer body esteem after being bullied is a natural response to such experiences. The current study was able to continue to provide support for the association between being victimized and the development of poor body image, even in young adolescents who may be just beginning to enter puberty and experience appearance changes that can affect their body esteem.

Social Anxiety and Body Esteem as Mediators

The current study examined the associations of victimization and body esteem through the mediator of social anxiety and the associations of victimization and depression through the mediator of body esteem. Within the first tested model, results indicated that body esteem explained the association between victimization and depression as a mediator. Within the second model assessed, it was found that social anxiety did not mediate the association between victimization and body esteem. Rather, social anxiety and victimization were not significantly associated but instead independently and significantly related to body esteem. Consistent with
the models, the bivariate correlations identified an association between body esteem and
depression and social anxiety and body esteem. Specifically, individuals reporting higher levels
of social anxiety were likely to report lower levels of body esteem, whereas individuals with
lower body esteem were likely to report higher levels of depressive symptoms.

Regarding the portion of the first model of body esteem and depression, research supports
that poor body esteem often predicts and predates the development of depressive symptoms
(Paxton, Eisenberg, & Neumark-Sztainer; 2006; Stice & Whitenton, 2002). While some research
has suggested this is only true of females during early adolescence, gender was not found to
moderate this pathway in the current study. Additionally, other studies have identified constructs
resembling body esteem, including objectified body consciousness and general self-esteem, to
mediate the association between victimization experiences and depression (Benas & Gibb, 2007;
Hyde et al., 2008), which is consistent with the findings of the current study. Overall, the
findings indicate that the development of depression may be understood through different
pathways starting with victimization or social anxiety that collectively contributes to negative
feelings about one’s appearance, working to exacerbate the development of depressive
symptoms.

Classmate Social Support as a Protective Factor

While the current study identified associations between victimization, social anxiety, and
body esteem that help explain the manifestation of depression, classmate social support was not
identified as a protective factor in this mediation. Classmate social support was examined in both
models as a moderator, specifically in the associations of victimization and body esteem and
victimization and social anxiety. It was not found to be protective in the association of
victimization and body esteem, which was in contrast to predictions and a number of findings
within the literature. The expectations that classmate social support would be a protective factor
in the model are in part due to research findings that peer support has not only been found to be protective against the development of depression for youth who have been victimized (Davidson & Demaray, 2007; Holt & Espelage, 2007; La Greca & Harrison, 2005) but also a predictor of body dissatisfaction for adolescents (Presnell et al., 2004; Stice & Whitenton, 2002).

Furthermore, reporting peer support and belonging to a peer crowd have been found to be protective factors against the developmental of anxiety (Holt & Espelage, 2007; La Greca & Harrison, 2005).

However, there is currently a gap in the literature regarding classmate social support and how it could be protective against social anxiety outcomes specifically. While the social self-discrepancy theory explains the manifestation of social and emotional distress as being derived from a discrepancy between an individual’s idealized version of oneself in comparison to one’s true self (Kupersmidt et al., 1999), and it is presumed that those with peer support would feel less of a discrepancy in their idealized and actual social selves due to positive peer feedback, this explanation does not align with the current results. The findings suggest that more may be done to consider how classmate social support is protective. In fact, it may be possible that the current data reflect the reliance on parent support that transitions to classmate social support more heavily in adolescence, as the sample of youth was in early adolescence. Future research may consider parent support as a buffering factor in this type of sample to determine how support source may contribute to the current findings.

Implications

The current study provided an initial step in identifying the importance of considering implicated internalizing factors when understanding how individuals who are victimized in early adolescence can develop depressive symptoms. The association between the experience of being bullied and developing emotional difficulties has been evaluated with some mediating factors in
the past, but never before in a way that examines both socially implicated constructs of social anxiety and body esteem.

Bullying has been of increased interest in schools in the past few decades, with many districts making attempts to address bullying in their schools both independently and due to state mandates to provide psychoeducation on this problem and ways to intervene. While this is important as victimization is associated with a host of negative behavioral and social-emotional outcomes (Copeland et al., 2013; Gladstone et al., 2006; Mehta et al., 2013; Wolke et al., 2013), the current findings suggest that depression itself develops through other pathways and has mediating factors that may be of interest to address.

In particular, social-emotional interventions should be readily available in the schools for youth. While there are social-emotional learning standards schools are required to address, many schools do not provide universal social-emotional learning curriculum, let alone targeted supports. When considering how to effectively combat depression in youth, utilizing screening and benchmarking data, schools may begin to highlight those students who present not only with the risk factor of being victimized but also those students who naturally internalize, such as those who display social anxiety symptoms. Beyond the predictability of social anxiety predating additionally harmful outcomes such as body esteem and depression, intervening in early adolescence with social anxiety can help to bolster student social networks at school rather than allowing them to isolate themselves, which will become increasingly protective as they age and increasingly reliant on peer support.

Body esteem is also currently left unaddressed in most schools. In fact there is very little available regarding evidence-based interventions in the schools for body esteem, in spite of the fact that studies indicate anywhere from 54 to 92% of adolescents report body dissatisfaction (Lawler & Nixon, 2011; Neumark-Sztainer, Story, Hannan, Perry, & Irving, 2002; Presnell et al.,
Despite the pervasiveness of low body esteem, compounded by the significant portion of variance in global self-worth that is accounted for by feelings about one’s appearance (Harter, 1999; Shapka & Keating, 2005), schools have yet to demonstrate buy-in regarding addressing these concerns. The current study highlights the relevance intervention in body esteem may have in not only reducing negative outcomes associated with victimization and social anxiety but also reducing the likelihood of depressive symptoms developing for youth who may be bullied, be socially anxious, or be self-conscious about their appearance, either uniquely or collectively. Thus, the need for such an intervention for adolescents is quite notable.

Finally, the current study highlights that relying on peer support to protect youth is not sufficient. This study demonstrated that in young adolescents there is evidence for the idea that being accepted and experiencing support from the larger peer group does not protect against these internalizing problems. For students who may appear to be well liked, it should be recognized that they may in fact be dealing with a host of internalizing difficulties despite this semblance of healthy social supports and functioning. Capitalizing on both school staff and parent support is important and should be prioritized in intermediate and middle schools that include young adolescent populations.

**Limitations**

While the current study provides new information regarding depression and how it manifests through the experiences of being victimized and internalizing problems, there are a number of limitations present. Specifically, the data has a variety of limitations due to the use of self-report, being collected at a single timepoint, using older adolescent and adult measures, and being limited as a sample in generalizability.
To begin, the use of self-report introduces subjectivity into the data collection process. Social desirability bias, or the tendency to respond in ways that align with social mores and expectation, can lead to results that are not truly accurate (King & Bruner, 2000). It has been shown to play a role in adolescents’ responses under different conditions (Tilgner, Wertheim, & Paxton, 2004), suggesting that data collected in this manner are not always an accurate measurement of reality. Beyond the social desirability bias, youth may have difficulties being able to self-reflect in an honest way that allows them to report information accurately (Paulhus & Vazire, 2007; Tourangeau & Yan, 2007). Youth vary developmentally in their ability to engage in such self-reflective tasks and may thus vary in their ability to successfully report valid information utilizing self-report methods.

Another limitation relates to the use of data that was collected at a single timepoint. While the use of path analysis attempts to consider how constructs are related to one another, to have information regarding the predictive quality of victimization and social anxiety in leading to low body esteem and depression, longitudinal data must be collected. Without the ability to examine reports of the studied constructs over multiple timepoints, it is impossible to identify the directionality of the associations identified. Consequently, the associations identified between the constructs of this project could be occurring due to additional factors not included in the current study or could be a reflection of the time period in which the data was collected. In particular, there are a variety of factors that change over time in the school environment. For example, it is probable that social hierarchies develop over the course of the school year, and thus, victimization rates may increase from spring to fall as well. Longitudinal data would provide more clarity in these relations and certainty in potential developmental cascades within the studied constructs.
Measures were also used that are not typically used in younger populations. Specifically, the inclusion of the Body Esteem Scale for Adolescents and Adults (BESAA; Mendelson et al., 2001) and the Center for Epidemiologic Studies Depression Scale Revised (CES-DR; Eaton et al., 2004) presented limitations to the study in that these measures are typically used in older populations. While internal consistency was excellent for both measures in the current study, the use of these tools could have impacted findings. The BESAA was normed on a sample of youth ages 12 to 25, while the current sample included students aged 10 to 12. While versions of the scale have been used with younger children (Mendelson, White, & Mendelson, 1996; Shriver, Harrist, Page, Hubbs-Tait, Moulton, & Topham, 2013), because the norming process was completed on an older population, the identified factors may not accurately capture factors that may be found in a younger population, thus affecting the results and also how body esteem may be conceptualized in young adolescents through the BESAA. Regarding the CES-DR, a norming sample was used of undergraduate students and an adult community sample. For the current project, comparisons were made between the Center for Epidemiologic Studies Depression Scale for Children (CES-DC) and the CES-DR, and it was noted that there were minimal differences, with the CES-DR being utilized as it was updated more recently and aligns with the DSM-5. However, the same concerns as present in the use of the BESAA apply, with the results and use of the CES-DR potentially being a measure of depression that is not best suited to capturing the symptomatology and experiences of the current sample.

Finally, the current study was conducted in a suburban, primarily middle-class sample with the majority of the students identifying as White. Because the sample is relatively homogeneous, the ability to generalize the current findings to minority groups of students is quite limited. Beyond this, victimization is experienced differently based on a student’s social identities and the social identities of the majority within the school (Hanish & Guerra, 2000).
Understanding school composition and student identities could play a role not only in the likelihood of being bullied but also of developing internalizing problems as a result (Bellmore, Witkow, Graham, & Juvonen, 2004). Similarly, body image ideals vary culturally and are reinforced differentially based on ideals perpetuated by both the media and local communities (Neumark-Sztainer et al., 2002). How cultural identity and body image interact with a school community’s composition may affect the development of body esteem by either bolstering or undermining healthy body image.

**Future Directions**

Human development is a complicated process, with factors and experiences affecting one another, often in a non-linear fashion. Knowing this, it is important to acknowledge that this study provides only a foundation upon which to continue to build and elucidate how victimization and depression are connected to one another through internalizing experiences. While there are a host of directions to move toward from based on the current results, some key areas to address in future studies include studying additional sources of support as protective factors while expanding the study to use longitudinal and larger developmental approaches.

First and foremost, the current study was successful in beginning to examine the constructs of social anxiety and body esteem in relation to victimization and depression in young adolescents that has not been studied before. However, there is a need to collect data longitudinally to flesh out true developmental cascades related to these constructs. In addition to improving the ability to identify directionality of relations, it would be helpful to follow youth over time such that changes in these associations can be examined. A variety of changes occur during adolescence, including an increase in independence and abstract thinking and reasoning that youth are exercising (Allen, Hauser, Bell, & O’Connor, 1994). Identity development is also particularly salient, and the social environment feeds into how adolescents begin to
conceptualize who they are and their own self-worth within the larger peer group. Youth who develop a healthy self-esteem may experience greater well-being while those who do not may develop the types of internalizing concerns evaluated in the current study (Sowislo & Orth, 2013). For this reason, including a developmental approach that follows students over a number of years and assesses self-esteem may be useful.

Additionally, the need to include other sources of social support in the model would be helpful in identifying protective factors that can be capitalized on to address concerns related to being bullied and developing internalizing problems. Classmate social support did not buffer against internalizing outcomes in the current study. It is possible that the role of peer support is still a protective, but that rather than general peer support, close friend support is more powerful, as past research has found close friendships to be protective against the development of internalizing concerns (Hodges et al., 1999). The results regarding classmate social support may also be a reflection of the fact that parent influence is a primary source of support over peers through childhood and into early adolescence (Chassin, Presson, Sherman, Montello, & McGrew, 1986). In addition to parent support, understanding the role teacher support can play in supporting students who are being bullied is important. There are a number of students who may not be able to rely on parent support and require teacher support as a primary source of adult support in their lives. Beyond this, because victimization may often be occurring within the context of school, having a source of support within that setting is particularly critical in providing some sense of safety and security.

In addition to the external factor of support sources, research should expand to consider how cognitive thinking, including negative attributional style, may contribute to the development of depression after having negative life experiences such as being victimized, as this has been suggested by other research as an important factor to consider (Dodge, 1993; Hankin et al., 2004;
Many of the theories examining how social anxiety and depression develop involve affected individuals often displaying components of thinking that reflect both negative attributions about the perceptions of others and about the self. Assessing this type of thinking may illuminate internal risk factors that may inform intervention strategies, including introducing methods to address maladaptive thinking such as teaching cognitive coping and utilizing Socratic dialogues.

Conclusion

Adolescence is a period marked with a number of both positive and negative experiences as the social self continues to develop and peers become more and more important to youth. Within this, the experience of victimization remains present and can put adolescents at risk for a host of outcomes, including depression. While the association of victimization and depression has been studied in the literature, certain mediating factors have not been explored. The current study examined how the experience of victimization relates to the development of depressive symptoms in early adolescence through the implicated factors of social anxiety and body esteem and the protective factor of classmate social support. The findings indicate that victimization and social anxiety are separately associated with body esteem, which is itself a partial mediator in the association of victimization and depression. Classmate social support was not a protective factor within this model, and gender did not play a role in moderating a number of these associations as predicted.

The findings highlight the role internalizing factors play in the development of depression and the need to consider social anxiety as a separate pathway to depressive symptoms. Furthermore, body esteem was identified as a central factor that may connect both victimization and social anxiety to depression. While schools have yet to provide intervention related to youth’s feelings about their appearance, targeting this area of self-esteem is important to fully
addressing how social-emotional problems may manifest in adolescence. By expanding intervention efforts to include these constructs, students can be better supported to be emotionally healthy throughout their adolescent years and time in school.
REFERENCES


Camara, M., Bacigalupe, G., & Padilla, P. (2017). The role of social support in adolescents: are you helping me or stressing me out?. *International Journal of Adolescence and Youth, 22*(2), 123-136.


APPENDICES
APPENDIX A

BULLYING PARTICIPANT ROLES QUESTIONNAIRE – VICTIM SUBSCALE
### Has any of the following happened to you in the past 30 days?

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>1-2 Times</th>
<th>3-4 Times</th>
<th>5-6 Times</th>
<th>7 or More Times</th>
</tr>
</thead>
<tbody>
<tr>
<td>14. I have been called mean names.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>15. I have been made fun of.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>16. I have been purposely left out of something.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>17. I have been ignored.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>18. I have been pushed around, punched or slapped.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>19. I have been pushed or shoved.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>20. People have told lies about me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>21. People have tried to make others dislike me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>22. I have been threatened by others.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>23. I have had things taken from me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX B

SCREEN FOR CHILD ANXIETY RELATED EMOTIONAL DISORDERS- SOCIAL ANXIETY ITEMS
Below is a list of sentences that describe how people feel. Read each phrase and decide if it is “Not True or Hardly Ever True” or “Somewhat True or Sometimes True” or “Very True or Often True” for you. Then, for each sentence, fill in one circle that corresponds to the response that seems to describe you for the last 3 months.

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Almost never</th>
<th>Some of the time</th>
</tr>
</thead>
<tbody>
<tr>
<td>I don't like to be with people I don’t know well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I feel nervous with people I don’t know well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>It is hard for me to talk with people I don’t know well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I feel shy with people I don’t know well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I worry about how well I do things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I feel nervous when I am with other children or adults and I have to do something while they watch me (for example: read aloud, speak, play a game, play a sport).</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I feel nervous when I am going to parties, dances, or any place where there will be people that I don’t know well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>I am shy.</td>
<td>1</td>
<td>2</td>
<td>3</td>
</tr>
</tbody>
</table>
APPENDIX C

BODY ESTEEM SCALE FOR ADOLESCENTS AND ADULTS- GENERAL APPEARANCE

SUBSCALE
For the questions below, fill in the bubble of the response that best describes how often you agree with the following statements.

<table>
<thead>
<tr>
<th></th>
<th></th>
<th>Never</th>
<th>Seldom</th>
<th>Sometimes</th>
<th>Often</th>
<th>Always</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>I like what I look like in pictures.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>2.</td>
<td>I am proud of my body.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>3.</td>
<td>I like what I see when I look in the mirror.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>4.</td>
<td>There are lots of things I'd change about my looks if I could.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>5.</td>
<td>I wish I looked better.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>6.</td>
<td>I wish I looked like someone else.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>7.</td>
<td>My looks upset me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>8.</td>
<td>I'm as nice looking as most people.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>9.</td>
<td>I'm pretty happy about the way I look.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>10.</td>
<td>I feel ashamed of how I look.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>11.</td>
<td>I worry about the way I look.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>12.</td>
<td>I think I have a good body.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>13.</td>
<td>I'm looking as nice as I'd like to.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
APPENDIX D

CHILD AND ADOLESCENT SCALE FOR SOCIAL SUPPORT- CLASSMATE SUBSCALE
<table>
<thead>
<tr>
<th></th>
<th>My classmates treat me nicely.</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>My classmates like most of my ideas and opinions.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>3</td>
<td>My classmates pay attention to me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>My classmates give me ideas when I don’t know what to do.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>5</td>
<td>My classmates give me information so I can learn new things.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>6</td>
<td>My classmates give me good advice.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>7</td>
<td>My classmates tell me what I did a good job when something went well.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>8</td>
<td>My classmates nicely tell me when I make mistakes.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>9</td>
<td>My classmates notice when I have worked hard.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>10</td>
<td>My classmates ask me to join activities.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>11</td>
<td>My classmates spend time doing things with me.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td>12</td>
<td>My classmates help me with projects in class.</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
</tbody>
</table>
APPENDIX E

CENTER FOR EPIDEMIOLOGIC STUDIES DEPRESSION SCALE REVISED
Below is a list of the ways you might have felt or behaved. Please check the boxes to tell me how often you have felt this way in the past week or so.

<table>
<thead>
<tr>
<th></th>
<th>Last Week</th>
<th>Nearly every day for 2 weeks</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Not at all or Less than 1 day</td>
<td>1-2 days</td>
</tr>
<tr>
<td>My appetite was poor.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I could not shake off the blues.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I had trouble keeping my mind on what I was doing.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I felt depressed.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>My sleep was restless.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I felt sad.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I could not get going.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>Nothing made me happy.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I felt like a bad person.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I lost interest in my usual activities.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I slept much more than usual.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I felt like I was moving too slowly.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I felt fidgety.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I was tired all the time.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I did not like myself.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I lost a lot of weight without trying to.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I had a lot of trouble getting to sleep.</td>
<td>1</td>
<td>2</td>
</tr>
<tr>
<td>I could not focus on the important things.</td>
<td>1</td>
<td>2</td>
</tr>
</tbody>
</table>
APPENDIX F

PARENT INFORMATION LETTER AND OPT-OUT FORM
Winter 2016

Dear Parent/Guardian,

My name is Jacqueline Klossing, and I am a graduate student at Northern Illinois University. All students at your child’s school are being asked to participate in a research project that will be used for the completion of my thesis. The purpose of this project is to understand how students feel about themselves and their appearance, their internalizing feelings, their experiences of victimization at school, and social support experienced from parents and classmates. In addition, the de-identified information will be provided to the school in a comprehensive report to help inform school-wide practices to benefit students.

**Student Participation.** Staff at your child’s school will assist participating children to complete seven questionnaires that will take about 30 minutes to complete. This will likely take place during a study hall period or during a time that your child’s teacher or the school administration approves. These measures will be given in a group format and staff will be there to answer any questions.

Seven questionnaires will be given to your child. The first questionnaire asks your child about basic demographic data. The second questionnaire contains questions about the way your child feels about their appearance (e.g. I am pretty happy about way I look). The third and fourth questionnaires ask students to rate their perceptions of social support from parents and classmates (e.g. My parents show they are proud of me; My classmates give me good advice). The fifth questionnaire asks your child about their experiences being bullied, both generally and based on appearance (e.g. I have been called mean names; People have teased me about my body/looks). The sixth and seventh questionnaires ask about your child’s internalizing feelings and emotions in more recent times (e.g. I felt lonely; I am a worrier).

**Confidentiality.** All information collected will be kept confidential. The students will not be asked to write their name or IDs on the surveys. Participation in the study is voluntary. Any person may withdraw from the study at any time and for any reason. Students will be assured that they can decide not to participate or can decide to stop participating at any point. There are no known risks to students participating in this type of study. Information obtained during this study may be published in scientific journals or presented at scientific meetings, but no information could be used to identify your child or your child’s school, as the published information is anonymous.

**Benefits of Your and Your Child’s Participation:** The benefits that your child may receive from participating in this study are that many students find the measures interesting to complete. Information on the large group of students participating will be provided to your school to help them get a general sense of how students are doing (as a group, not individually). In addition, the results may influence future knowledge in the area of body esteem, victimization, internalizing difficulties, and social support and result in helping educators and others who work with students in the schools to better meet adolescents’ needs in the future.

**Potential Risks:** Your child may experience some slight discomfort when asked about their feelings about themselves and others. However, if your child has any questions or would like to talk to someone about their feelings, they will be encouraged to speak with me, the school social worker, or school psychologist.

**Participation is Voluntary:** Your decision whether or not to allow your child to participate will not adversely affect your child or affect their grades in any way. Participation is completely voluntary. We will ask your child for their assent at the time of the survey and they can choose not to participate at that time as well or quit during the survey. You are free to withdraw your child from participation any time without penalty or prejudice.

Please feel free to contact me with any questions or concerns, or if you would like to see a blank copy of the surveys that will be used. Any questions should be addressed to Jacqueline Klossing (jklossing1@niu.edu), Psychology

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Northern Illinois University
Department, DeKalb, IL 60115. If you wish further information regarding your rights or your child's/ward's rights as a research subject, you may contact the Office of Research Compliance at Northern Illinois University at (815) 753-8588.

I hope you will participate in this research project!

Sincerely,

Jacqueline Klossing

Dr. Michelle Demaray
NORTHERN ILLINOIS UNIVERSITY RESEARCH PROJECT
PARENT PERMISSION FORM

Victimization as a Mediator of the Relation between Body Esteem and School Engagement
Jacqueline Klossing

PARENT OPT-OUT FORM

Please return to __________________ by ______ December 19th, 2016

If we do not hear from you, we will assume your child has permission to participate in this school evaluation. If you do NOT wish your child to participate, please return this form.

☐ I prefer that my child not participate in this evaluation.

_________________________________________  __________________
Signature of parent/guardian                  Date

_________________________________________
Student Name (please print)                   Student’s Grade in School
Please send out survey links.

“Today, you will be asked to answer some questions about things like how you feel about yourself and your appearance, your feelings and emotions, and your experiences and relationships with your classmates and parents. This is not a school requirement and not answering questions or participating will not affect your grade in any way. Participation is completely voluntary. If you wish to skip a question or decide to stop the survey at anytime, you are free to do so. If at any time during the survey you become upset, please me know so that we can help you.”

Then, read the following letter from the researcher:

“Dear Student,

Your parents said it was ok for you to help us with a project by answering questions about how you feel about yourself and your appearance and your experiences with peers and parents. We would like to have you answer some questions about the help you get from people in your life, and about yourself, and your friendships. This will take you about 30 minutes.

Only I, and the college students that work with me at Northern Illinois University, will see your answers on the surveys. Your name will not be on the surveys, so no one will know who filled them out. Your parents said it was okay to work with you. If it is ok with you to answer these questions for me, please click the option below saying you will participate.

You may decide at any time that you do not want to do this project and that would be okay. You just need to let me know by stopping or selecting the option below that you wish not to participate. Deciding not to do it or to stop while answering the questions at any time will NOT affect your school grades in any way.

If you have any questions you may contact Jacqueline Klossing at 309-236-8124 or a counselor, social worker, or psychologist at your school. Further information about the rights of study participants is also available by calling the Northern Illinois University Office of Research Compliance 815-753-8588.

Sincerely,

Jacqueline Klossing

Note the box below, it says:

I have read about this project. I understand that I can decide whether to participate or not. I understand that deciding not to participate or stopping participation at any time will NOT affect my school grades in any way.

Please select one choice (yes or no) and put your initials in the box below to act as a signature. Now you may click the red arrow to begin.”

Do not read the FAQ’s below to students, but reference them if needed.

Frequently Asked Questions

1. When students have specific questions, you can just respond by telling them to give their best, most honest answer. They should not overthink it.

Example: “I pay attention in class when I am doing some things but not others? Does that mean it is on occasion or some of the time?”

Please respond to these questions by asking them to provide the best answer that they can, or what seems to be most like them and encourage them to NOT skip any questions.
2. *If a student does not know what a word means, please give them your best definition of the word and tell them to make their best choice.*

3. *Some students may say that they are not sure between two answers. Please tell them to choose the response that describes them best.*

Example: Sometimes I worry about the way I look, but it’s not very often, so do I put seldom or sometimes?

Simply respond by asking the student to put the answer that describes them best.