

Long-Term Relations among Peer Victimization
and Internalizing Symptoms in Children

by

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Abstract

The primary purpose of this research was to examine the long-term relations between peer victimization and internalizing symptoms (anxiety and depression) in middle school children. Furthermore, this study intended to determine the potential roles of self-worth, self-acceptance, and social supports in moderating or mediating these proposed relations. At time one, 280 sixth grade students participated and at follow up, 77 eighth grade children were participants. All children were from the same public middle school and completed self-report measures representing the constructs previously described. Reported levels of peer victimization were found to be similar to those reported in previous studies. Significant concurrent correlations were found between the sixth grade predictor variables (victimization, self-worth, social acceptance, social supports). Sixth grade reported peer victimization was also significantly associated with eighth grade depression for boys and eighth grade social anxiety for girls. Tests of mediation supported the role of global self-worth for boys and social acceptance for girls. Teacher support served a significant moderating role for boys' peer victimization-internalizing symptom (depression and social anxiety) relation. In both cases, boys reported fewer internalizing symptoms when peer victimization was low and teacher support was high. Findings are integrated into the literature regarding peer victimization and internalizing difficulties.

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Long-Term Relations among Peer Victimization and Internalizing Symptoms in Children

Research studies have documented numerous concurrent physical and mental health difficulties experienced by children with internalizing problems. Without treatment, these children often continue to evidence internalizing difficulties over time, with variations in the form and expression of such problems. Thus, researchers have increasingly advocated the need to identify and study potential developmental precursors to these difficulties in youth. The present study sought to determine the role of peer victimization in the development of anxiety and depression in pre-adolescent youth, as well as to identify additional variables which might influence the strength of these relations.

Anxiety is often characterized by an array of emotional, behavioral, and cognitive responses to a perceived threat. The overall anxious response typically consists of motoric (e.g., avoidance), physiological (e.g., increased heart rate), and subjective (e.g., fearful thoughts) reactions that interact in complex and diverse ways both within and across individuals (Wicks-Nelson & Israel, 1991). Anxiety disorders are among the most common problems experienced by youth (Beidel, 1991), with estimated prevalence rates of 8 to 17% (Axelson & Birmaher, 2001; Costello et al., 1988; Kashani et al., 1987; Kearney, Eisen, & Schaefer, 1995). Depression in childhood is believed to parallel that seen in adults, with a major depressive episode marked by depressed or irritable mood and a loss of interest or pleasure. Several additional difficulties (e.g., weight changes, sleep disturbances, feelings of worthlessness, and suicidal ideation; American Psychological Association, 1994) also typify depression in youth. Studies of childhood

depression have also yielded high prevalence rates of approximately 2 to 9% in community samples (Axelson & Birmaher, 2001; Doi, Roberts, Takeuchi, & Suzuki, 2001; Wicks-Nelson & Israel, 1991). Furthermore, rates of both anxiety and depression have been found to increase substantially during the adolescent years (Compas, Orosan, & Grant, 1993; Kashani & Orvaschel, 1990; Lewinsohn, Clarke, Seeley, & Rhode, 1994) and gender differences have been universally found, with approximately twice as many girls than boys evidencing these internalizing disorders (c.f., Axelson & Birmaher, 2001; Romano, Tremblay, Vitaro, Zoccolillo, & Pagani, 2001).

In addition to studies of clinical samples, an extensive amount of empirical literature has emerged which has examined anxiety and depression at the symptom level among non-clinic referred youth. This approach investigates symptoms along continuums of severity and frequency (Seligman & Ollendick, 2000), with self-report measures such as the Multidimensional Anxiety Scale for Children (MASC; March, 1997), Revised Children's Manifest Anxiety Scale (RCMAS; Reynolds & Richmond, 1978), Children's Depression Inventory (CDI; Kovacs, 1992), and the Reynolds Adolescent Depression Scale (RADS; Reynolds, 1986).

A number of negative behavioral and psychological problems are commonly associated with anxiety and depression. For instance, youth experiencing these internalizing difficulties often evidence school refusal behaviors (Bernstein & Garfinkel, 1986), social incompetence (Chansky & Kendall, 1997; Grills & Ollendick, 2000; La Greca, Dandes, Wick, Shaw, & Stone, 1988; Strauss, Last, Hersen, & Kazdin, 1988), low self-worth (Bernstein & Garfinkel, 1986; Grills & Ollendick, 2000; LaGreca & Fetter, 1995; Ohannessian, Lerner, Lerner, & von Eye, 1999; Orvaschel, Beeferman, &

Kabacoff, 1997) and feelings of loneliness (Asher, Hymel, & Renshaw, 1984; Crick & Ladd, 1993). Researchers have also noted that anxious children often experience interpersonal problems, such as being perceived by other children as shy or withdrawn, or being socially neglected by their peers (Boulton & Smith, 1994; Strauss, Frame, & Forehand, 1987; Strauss, Lahey, Frick, Frame, & Hynd, 1988). Researchers have also consistently cited a strong association between anxiety and depression as illustrated by high comorbidity rates and significant relations on self-report measures (Bernstein & Garfinkel, 1986; Birmaher et al., 1996; King, Gullone, & Ollendick, 1990; King, Ollendick, & Gullone, 1991; Last, Strauss, & Francis, 1987; Ollendick & Yule, 1990; Seligman & Ollendick, 1999; Saylor, Finch, Spirito, & Bennett, 1984; Strauss et al., 1988). In view of the high rates of internalizing disorders found in children and adolescents, as well as the numerous difficulties associated with these disorders, it is pertinent to determine factors that may influence their development. Due to the increasing importance of peers in school children's lives (Parker & Gottman, 1989), it seems likely that one potential pathway to internalizing problems would involve negative peer interactions.

A causal model can be applied to explain the development of maladaptive behaviors in children who have peer relationship problems (Kupersmidt, Coie, & Dodge, 1990; LaGreca & Fetter, 1995; Parker & Asher, 1987). The basic assumption underlying the causal model is that children who are not liked by their peers fail to obtain normative socialization experiences important for social, affective, and cognitive development. Two mediating pathways have been proposed to link poor peer relations and later maladjustment (Kupersmidt et al., 1990). The first potential pathway builds on the notion

that peer acceptance allows for positive interactions with peers, which in turn, bolsters the development of social and affective competencies. Accordingly, children with low peer acceptance (e.g., socially neglected), as well as those who are actively excluded by their peers (e.g., socially rejected), may develop social-emotional deficiencies which can then lead to later maladjustment. With the second pathway, peer rejection is thought to lead to higher levels of internal distress (feelings of loneliness or inadequacy), which may foster maladaptive behaviors (Kupersmidt et al., 1990).

Peer Victimization

Although “teasing” (e.g., Your mom’s so fat...) and “rough-housing” (e.g., play-wrestling) commonly occur within the interactions of today’s youth (Roberts & Morotti, 2000; Shapiro, Baumeister, & Kessler, 1991), at times these interactions may be perceived as harmful or maladaptive. Potential markers for determining when peer victimizing behaviors deviate from normal youth experiences include the manner in which they are delivered, their intensity, their frequency or incidence, and the target’s perception of them (Roberts & Morotti, 2000). A variety of labels have been used to describe excessive forms of teasing. For example, the terms “victimizing,” “bullying,” “teasing,” “taunting,” and “mobbing” are found in the literature, oftentimes with differing designations. However, Olweus’ (1991; 1993a, b, c; 1997a, b) comprehensive definition appears to be the most commonly adopted by researchers. Olweus defines victimization as repeated exposure to negative actions from at least one other person over time, with an imbalance of strength between the perpetrator and target. A negative action is defined as an intentional attempt or infliction of discomfort which may take the form of physical

contact, words, facial expressions and gestures, intentional defiance of one's wishes or requests, or social isolation and exclusion.

Although Olweus' definition encompasses a variety of terrorizing acts, others have recommended distinguishing between direct or openly confrontational (e.g., physical or verbal assaults) and indirect or covertly manipulative (e.g., ostracism, social manipulation) forms of victimization (Mynard & Joseph, 2000). An additional distinction that has been proposed distinguishes between passive and provocative victims (Olafsen & Viemero, 2000; Olweus, 1991; 1993a; 1997a,b). Passive victims are characterized by an anxious reaction pattern, crying and withdrawing in response to victimization, expressing more negative views of violence, possessing more negative views of themselves, and a physically weaker stature. In contrast, provocative victims are described as showing a combination of anxious and aggressive behaviors, frequently behaving hyperactively or disruptively, and being the least liked by peers (Olweus, 1991; 1993a; 1997a, b). Thus, provocative victims are likely to engage in bullying others, as well as sometimes being bullied themselves, whereas passive victims are only bullied by others.

Prevalence estimates of peer victimization vary greatly as a function of the definition and inclusion criteria employed. For example, Byrne (1994) reported that the incidence of peer victimization in British children and adolescents has been found to range from 3% to 38%. Including frequency criteria, Slee and colleagues found that 8% of Australian students reported experiencing victimization on most days or more, while approximately 20% of the remaining students reported being victimized once a week or more (17%; Slee, 1995; 26%; Slee & Rigby, 1993). Comparably, 10% to 28% of American third through sixth grade children have reported experiencing frequent

victimization from peers (Grills & Ollendick, 2000; Perry, Kusel, & Perry, 1988).

Furthermore, due to the intimidation often associated with peer victimization, it seems likely that reported rates underestimate the occurrence of these behaviors (Casey-Cannon, Hayward, & Gowen, 2001; Ross, 1996).

In addition, findings have been mixed regarding gender differences in overall rates of victimization. Although some researchers have reported similar rates in boys and girls (Bentley & Li, 1995; Bijttebier & Vertommen, 1998; Crick & Grotpeter, 1996; Kumpulainen, Räsänen, & Puura, 2001), others have found greater percentages of boys classified as victims (Boulton & Underwood, 1992; Kumpulainen et al., 1998; Rigby, Cox, & Black, 1997; Rigby & Slee, 1999; Williams, Chambers, Logan, & Robinson, 1996) or bully-victims (Bijttebier & Vertommen, 1998; Kumpulainen et al., 1998; Kumpulainen et al., 2001). Further, it has been suggested that boys experience more overt acts of victimization, while girls experience more covert acts (Bosworth, Espelage, & Simon, 1999; Clarke & Kiselica, 1997; Lagerspetz et al., 1988; Shapiro et al., 1991; Whitney & Smith, 1993). Examination of age effects has revealed a peak in the middle school years (Hoover, Oliver, & Hazler, 1992; Pellegrini & Bartini, 2000). In addition, decreased rates of victimization are found as children advance grades in elementary and secondary school (Bentley & Li, 1995; Byrne, 1994; Rigby, 1999; Rigby et al., 1997; Rivers & Smith, 1994). For example, Rigby (1999) compared students in the first two years of high school with those in the latter two years and found significantly greater rates of victimization in the younger sample for both males (15.9% versus 5.6%) and females (12% versus 3.4%). Similarly, studies have found that children in the earlier grades of elementary school tend to be victimized by both same-age and older students,

whereas older students are primarily victimized by their same age peers (Bentley & Li, 1995; Boulton & Underwood, 1992).

Peer victimization and anxiety. The previously described causal model can be specifically applied to explain connections between peer victimization and internalizing problems. That is, particular children appear to be singled out as “victims” and experience repeated peer attacks. Due to repeated exposure to these potentially harmful situations, children who are victimized may become hypervigilant to their surroundings and the opinions of others (Roth, Coles, & Heimberg, 2002). These types of anxious responses have often been purported to result from or maintain victimization by peers. Since a child who has been labeled as a victim tends to continue being bullied years later (Kumpulainen, Rasanen, & Henttonen, 1999; Olweus, 1997; Perry et al., 1988), repeated hypervigilance paired with exposure to potentially harmful situations may lead to a generalized anxiety state. Anxiety regarding social situations may be especially likely to develop as bullying typically occurs within social or group settings (Craig & Pepler, 1995). Furthermore, children may develop a restricted view of social interactions as opportunities for further negative evaluations by peers (Chansky & Kendall, 1997). For example, children with anxiety disorders have been found to experience more negative social expectations and thoughts when compared with children without an anxiety disorder (Chansky & Kendall, 1997). In response to feelings of anxiety, a child may increasingly attempt to escape or avoid social activities altogether. For example, researchers have found that victimized children show increased rates of somatic anxiety symptoms (Rigby, 1999) and physical health complaints (Williams et al., 1996). In addition, researchers have found that children who report experiencing victimization by

peers also indicate several difficulties specific to school, including refusing to attend (Salmon, James, Cassidy, & Javaloyes, 2000), absenteeism (Kumpulainen et al., 1998; Roberts & Coursol, 1996; Slee, 1994), unhappiness (Ross, 1996; Slee, 1995; Slee & Rigby, 1993), fear (Bernstein & Watson, 1997), and avoidance (Peterson & Rigby, 1999; Roberts & Coursol, 1996; Slee, 1994). These varied school-based difficulties may more accurately reflect the child's desire to avoid school and thus, victimization. However, with limited exposure to social activities, children are denied the normative socialization experiences necessary for learning appropriate social skills, as well as discovering they can experience positive peer interactions.

Peer victimization and depression. It has been suggested that victimized children may develop a cognitive style characterized by thoughts of helplessness, as well as feeling out of control over their lives (Roth et al., 2002). Pairing a negative cognitive style with poor feelings about the self following peer attacks could lead to higher incidents of depression among victimized children. Negative thoughts and attitudes towards oneself, the world, and the future comprise the cognitive triad of depression (Kovacs & Beck, 1977) and could partially explain elevated levels of depression found in victimized children. Self-worth represents negative thoughts about the self (Marciano & Kazdin, 1994) and has consistently been found to be lowered in victims. Furthermore, children who are repeatedly exposed to peer victimization without assistance from classmates or school personnel may develop a sense of hopelessness and come to view the world negatively. Similarly, youth who are victimized over time may develop feelings of helplessness regarding their ability to effect change in their environment both in the present and future. In addition, victimization has been associated with an internalizing

coping style (Bijttebier & Vertommen, 1998). That is, the manner in which victims cope with peer attacks may also affect the degree of depression experienced (Craig, 1998). For example, victimized youth who have limited or poor coping strategies (e.g., rumination, dichotomous thinking) may have greater difficulty recovering from victimization experiences, resulting in increased feelings of depression. Likewise, youth who have difficulty maintaining positive self-views in the face of negative peer evaluations may be especially prone to developing depressive symptoms. For example, children who are low in self-worth may interpret peer attacks as confirmation of their pre-existing poor self-views. Furthermore, children who display symptoms of depression may be targeted for victimization (Kaltiala-Heino, Rimpela, Marttunen, Rimpela, & Rantanen, 1999), perhaps due to perceptions of being “weakened” when depressed. For these children, continued victimization, then, likely perpetuates the internalizing difficulties experienced (Swearer, Song, Cary, Eagle, & Mickelson, 2001).

Numerous investigations have supported these hypotheses, such that significant relations have been found between peer victimization and internalizing symptoms. For example, concurrent studies have consistently found significant associations between peer victimization and anxiety (Craig, 1998; Grills & Ollendick, 2002; Hodges & Perry, 1996; Lagerspetz, Bjoerkqvist, Berts, & King, 1982; Swearer et al., 2001), as well as social anxiety (Boulton & Smith, 1994; Craig, 1998; Crick & Grotpeter, 1996; Graham & Juvonen, 1998; Grills & Ollendick, 2002; Hawker & Boulton, 2000; Slee, 1994; Storch et al., 2002; Walters & Inderbitzen, 1998). Research has also revealed significant relations between peer victimization and depressive symptoms (Callaghan & Joseph, 1995; Craig, 1998; Grills & Ollendick, 2000; Kumpulainen et al., 1998; Neary & Joseph, 1994;

Olweus, 1993b,c; Slee, 1995) and suicidal behaviors (Kaltiala-Heino et al., 1999; Olweus, 1991). In addition, Williams et al. (1996) found compromised physical health in children who were victimized by peers, as reported on semi-structured interviews with their school nurses. That is, the 638 fourth grade children in their sample who reported experiencing victimization were found to be at increased risk for somatic complaints (i.e., headache, stomachache), as well as poor sleep, bedwetting, and feeling sad. Bully status comparisons (i.e., victim-only, bully-only, bully-victim, and comparison) have also been found, such that children classified as victims reported significantly greater anxiety (Bernstein & Watson, 1997; Craig, 1998; Hawker & Boulton, 2000; Perry et al., 1988; Swearer et al., 2001) than children classified as bullies or comparison, as well as greater depression than comparison children (Cary, Swearer, Song, Haye, & Sohn, 2001; Craig, 1998; Kumpulainen et al., 1998).

Employing the reports of multiple informants, Kumpulainen et al. (1998) conducted a study of 5813 youth (mean age of 8.4), their parents, and their teachers. Based on these reports, 18.9% of the children were classified as victims, with differing psychosocial adjustment problems found for gender and informant. That is, victims scored highest on parental measures of somatization, teacher reports of internalizing problems, and self-report of anhedonia and negative self-esteem. Male victims were also found to score highest on parental reports of internalizing problems and self-report of negative moods. When victimized children were compared with same-sex controls, significant differences were found on both parent and teacher reports of externalizing and internalizing behaviors. In addition, victims reported significantly greater interpersonal problems, anhedonia, ineffectiveness, negative mood (girls only), and negative self-

esteem (boys only) than same-sex controls (Kumpulainen et al., 1998). Finally, Hawker and Boulton (2000) recently conducted a meta-analysis of studies published between 1978 and 1997 that addressed correlates of peer victimization. Pertinent to the present study, their review revealed mean effect sizes significantly greater than zero for social and generalized anxiety, as well as depression, demonstrating greater levels of these psychosocial adjustment problems in victims than non-victims.

Several investigations have also revealed relations among peer victimization and psychopathology occurring at a later time in life (Bernstein & Watson, 1997; Fabian & Thompson, 1989; Kumpulainen et al., 1999; Kutner, 1991; Olweus, 1993b,c; Rigby, 1999; Roth et al., 2002; Warm, 1997). For example, a recent study revealed negative long-term (three year) associations between victimization and adolescents' overall physical health, as well as females' mental health (Rigby, 1999). Similarly, retrospective reports of victimization have frequently been associated with internalizing problems in adulthood. For instance, Roth et al. (2002) examined relations between a history of being verbally teased and internalizing symptoms in a large sample of college students. Retrospective report of victimization from childhood was significantly correlated with various forms of adult anxious behavior (i.e., trait anxiety, social anxiety, worry, and anxiety sensitivity), as well as depression (Roth et al., 2002). In a related study, a significant association with depression was found for adolescent females who reported a history of teasing (Fabian & Thompson, 1989). Similarly, Olweus (1993b, c) found that adult males (age 23) who were victimized in grades 9-11, but no longer continued to be so, were more likely to evidence symptoms of depression and low self-worth. In addition,

the degree of adult depressive symptoms endorsed was strongly related to the severity of childhood victimization reported (Olweus, 1993b, c).

Similarly, Swearer et al. (2001) reported on a longitudinal study which began with 83 sixth grade students who were followed for two years with 65 and 57 of the students remaining in grades seven and eight, respectively. The percentages of children who reported being victims of bullying were 34, 35, and 41 from grades six through eight. Self-reported depression was found to decrease for children who were classified as victims in grade six, but who were not classified as victims in the seventh grade. Lowered time two (grade seven) depression was also found for children classified as bully-victims at time one and victims-only at time two. Interestingly, there were no significant changes in depression scores from time two to three (grades seven to eight) for either group. Another recent study examined adjustment problems, over time, in children who reported being victimized (Kumpulainen & Rasanen, 2000). Assessments were completed by children, their parents, and their teachers when the children were aged 8, 12, and 15. Increased psychosocial adjustment problems were found for victimized children at each assessment and according to the various informants' reports. In particular, victims (*compared with bullies, bully-victims, and not involved children*) scored highest on the internalizing, relationship, and psychosomatic measures of both the parents and teachers. *Compared with control children*, victims identified at age eight differed on the parent and teacher scales completed at age 15. Children identified as victims at age 12 scored highest on the Rutter A-2 parent scale, as well as on self-reported depression at age 15 (Kumpulainen & Rasanen, 2000).

In summary, past research has clearly linked peer victimization and internalizing problems in youth. That is, both physical and mental health may become compromised with repeated victimization experiences. Although it can be argued that these problems are pre-existing and lead youth to be targeted for victimization, the current study focuses primarily on the role of peer victimization in the development of internalizing problems. However, there are other variables which might influence the established relations among peer victimization and internalizing problems. That is, anxiety and depression may develop directly from victimization experiences or these symptoms may be influenced (e.g., mediated or moderated) by additional factors.

Self-Worth, Social Acceptance, and Social Support

Self-worth, social acceptance, and social support are variables that have all been linked with peer victimization and internalizing problems. Self-worth appears to play a particularly salient role in the development or inhibition of internalizing problems in children. As previously noted, research has established strong associations between low self-worth and elevated mood states such as depression, loneliness, and anxiety (Bernstein & Garfinkel, 1986; Fenell, 1997; Grills & Ollendick, 2000; LaGreca & Fetter, 1995; Ohannessian et al., 1999; Orvaschel et al., 1997). More specifically, self-worth has been purported as a risk factor for the development of depression (Orvaschel et al., 1997), as well as a protective factor against the development of anxiety (LaGreca & Fetter, 1995; Ollendick, 1983). Several studies have also found an association between peer victimization and low self-worth (Andreou, 2000; Austin & Joseph, 1996; Boulton & Underwood, 1992; Callaghan & Joseph, 1995; Graham & Juvonen, 1998; Grills & Ollendick, 2000; Mynard & Joseph, 1997; Neary & Joseph, 1994; Peterson & Rigby,

1999; Ross, 1996; Slee & Rigby, 1993). Furthermore, researchers have found that children classified as victim-only report significantly lower self-worth than their bully-only or not-involved peers (Andreou, 2000; Boulton & Underwood, 1992).

Thus, self-worth may play a role in the peer victimization-internalizing symptom association. For instance, it has been argued that peer victimization directly affects self-worth (Boulton & Underwood, 1992; Ross, 1996; Slee & Rigby, 1993), since students generally report feeling worse about themselves following a peer attack (Peterson & Rigby, 1999; Slee, 1995). Moreover, youth who incorporate the negative feedback inherent in being bullied into their self views may be more likely to develop internalizing problems (Crick & Bigbee, 1998; Olweus, 1993, 1997a, b). Results from an earlier study support this suggestion, such that global self-worth influenced the pattern of anxiety and depression in children who experienced frequent bullying as a stressor (Grills & Ollendick, 2000). That is, analyses revealed a mediating role of self-worth for girls, suggesting that victimization experiences negatively influenced girls' views of themselves and helped explain the elevated levels of anxiety also reported by them. For boys, self-worth moderated the peer victimization-anxiety relation, such that fewer anxiety symptoms were reported by victimized boys who reported having high self-worth, as compared with victimized boys who indicated lower self-worth. Finally, for both boys and girls, global self-worth was found to mediate the peer victimization-depression relation.

Supportive peer and familial relationships have also been enlisted as potential protective factors regarding the development of internalizing symptomatology in the face of life stressors (LaGreca & Fetter, 1995; Renouf, Kovacs, & Mukerji, 1997). In contrast,

children who are rejected by their peers or lack familial support have been found to be at a greater risk for the development of anxiety and depressive disorders (Bennett & Bates, 1995; Sheeber, Hops, Alpert, Davis, & Andrews, 1997; DuBois, Felner, Brand, Adan, & Evans, 1992; Windle, 1992).

Regarding familial support, results from a recent longitudinal study (Sheeber et al., 1997) showed that less supportive family environments were related to higher ratings of depression both concurrently and prospectively over a one-year period. In addition, depressive symptoms continued to be influenced by problematic family relationships at two-year follow up (Sheeber et al., 1997). Similarly, Windle (1992) found adolescent girls' report of low family support predicted later symptoms of depression. Zimmerman, Ramirez-Valles, Zapert, and Maton (2000) followed 173 African-American adolescents (69% not attending school) over a sixth-month period and found that youth with parental support reported less anxiety and depression. Interestingly, parental support has not been directly linked with peer victimization experiences. This may be related to children's reluctance to report their victimization experiences to their parents (or others) for fear of retaliation or further teasing by peers. Nevertheless, it is possible that parental support would help reduce the negative effects of peer victimization, perhaps by bolstering of the youth's self-views.

Peer rejected or neglected children have also been found to be at substantial risk for a myriad of emotional problems (Cowen, Pederson, Babigian, Izzo, & Trost, 1973; LaGreca & Fetter, 1995; Ollendick, Greene, Weist, & Oswald, 1990; Ollendick, Weist, Borden, & Greene, 1992; Wicks-Nelson & Israel, 1991). For example, social rejection has been associated with elevated levels of loneliness, distress, and depression (Crick &

Ladd, 1993; Fordham & Stevenson-Hinde, 1999), as well as increased risk of school drop-out (Parker & Asher, 1987; Perry et al., 1988). Similarly, studies have found peer acceptance to be associated with positive social skills and adaptive emotional functioning, whereas peer rejection and neglect have been associated with internal distress and behavioral problems (LaGreca & Fetter, 1995; Parker & Asher, 1987). In contrast, the ability to form friendships has not been found to be prohibited by shyness in children (Fordham & Stevenson-Hinde, 1999). Research has also established associations between peer victimization and increased isolation and lack of support from peers (Ross, 1996; Slee & Rigby, 1993), as well as lower social acceptance and perceived competence (Callaghan & Joseph, 1995; Grills & Ollendick, 2000; Neary & Joseph, 1994). For example, peers have been found to reject (socially) victimized children and to describe them as 'shy' and 'seeking help' (Boulton & Smith, 1994; Perry et al., 1988). Females classified as victims have also been found to report less peer acceptance when compared with bullies and uninvolved children (Boulton & Smith, 1994). Finally, Fabian and Thompson (1989) specifically implicated a lack of social support in the development of depression for the victimized adolescent girls in their study.

In summary, results from numerous empirical studies suggest a network of relations among global self-worth, social support, and social acceptance with both peer victimization and internalizing problems. However, the specific pathways among these variables appear less clear. Thus, in an earlier study, Grills and Ollendick (2000) attempted to provide clarification by examining the relations among these variables, as well as possible mediator and moderator models. In general, it was found that children who reported greater victimization also reported increased symptoms of anxiety and

depression, as well as feelings of lower self-worth, social acceptance, and fewer social supports. Attempts to explain these relationships revealed that peer victimization tended to lead to worse feelings about the self, which, in turn, led to greater symptoms of anxiety and depression. Thus, self-worth served as a mediator in these relations. Furthermore, for boys in particular, it was found that having high self-worth protected them from experiencing these internalizing states, even when victimization had occurred. These findings were generally consistent with the literature and supported hypotheses regarding the detrimental effects of peer victimization.

Nonetheless, the previous study was limited in that results were based on only one time of assessment. That is, it remained unclear which variables preceded versus followed victimization. In order to determine the exact nature of these relations, longitudinal research studies are necessary. Therefore, the current study attempted to examine, longitudinally, the relations among these variables. In addition, this study further evaluated the mediator and moderator models. Thus, the present study was designed as a follow-up to Grills and Ollendick's (2000) study on victimization in children and its association with anxiety and depression.

The Mediator Model

The first, or mediated, model (see Figure 1) proposed that peer victimization would negatively affect social acceptance, social support, and self-worth in victimized children which would, in turn, lead to greater levels of internalizing problems (anxiety, social anxiety, physical anxiety, and depression). Accordingly, the potential mediating role of social acceptance, social support, and self-worth in the long-term association between peer victimization and self-reported internalizing symptoms was examined.

Specifically, it was hypothesized that these mediating variables would explain a significant amount of the variance in the depressive and anxious symptoms reported by victims. A mediating effect would be established if the statistical relationship between victimization and internalizing symptoms was found to abate once the associations between social acceptance, social support, or self-worth with internalizing symptoms was determined (Baron & Kenny, 1986; Holmbeck, 1997).

The Moderator Model

The second model (see Figure 2) concerned the potential moderating role of social acceptance, social support, and self-worth. Specifically, this model assessed whether the amount of these variables differentially influenced behavioral responses to being victimized by peers. A moderating effect would be established if the statistical relationship between victimization and internalizing symptoms was found to be stronger for children indicating lower social acceptance, social support, or self-worth than for children indicating higher levels (Baron & Kenny, 1986; Holmbeck, 1997).

Method

Participants

Participants were recruited from the eighth grade class of a local middle school in southwestern Virginia. At the time of this assessment, all of these students were in the eighth grade (age range = 11-15; $M=13.61$; $SD=.60$) at the same school as the previous study (Grills & Ollendick, 2000). Seventy-seven of the 280 students from the first study were participants in the current study. In addition, 12 students who had transferred into the school within the past two years participated only in the eighth grade assessment. In all, 40 females and 37 males ($M=13.64$; $SD=.54$) participated at both times of assessment

and were included in the predictive analyses. The majority of children were Caucasian (88.3%), followed by African American (3.9%), American Indian (3.9%), Bi-racial (2.6%), and Asian-American (1.3%). Although socioeconomic data were not collected on individual participants, census tract data indicated that these children resided primarily in lower middle to upper middle-income families.

Measures Administered in Sixth Grade Only (see Appendices A-B)

Peer Victimization Scale (PVS; Neary & Joseph, 1994). This scale contains six items designed to measure aspects of victimization through negative physical actions (e.g., being hit and pushed, picked on, and bullied) and negative verbal actions (e.g., being teased, called horrible names, and being laughed at). Created identically in format to the Self Perception Profile for Children/Adolescents (see below), each of the items are antithetical (e.g., “Some children are often teased by other children BUT Other children are not teased by other children”) and scored according to instructions provided by Harter (1985). Thus, for each subject a total score ranging from 6-24 (with higher scores representing more victimization) is computed as well as a subscale mean item score ranging from one to four. This scale has been utilized in several studies with children aged 8-12 years (Austin & Joseph, 1996; Callaghan & Joseph, 1995; Neary & Joseph, 1994) and has been found to possess acceptable internal consistency (Cronbach’s $\alpha = .83$; Neary & Joseph, 1994).

Self-Perception Profile for Children (SPPC; Harter, 1985). The SPPC is a 36-item scale designed to assess children’s self-competence in a number of domains, as well as global perceptions of self-esteem. Each item contains two statements that are antithetical (e.g., “Some kids like the kind of person they are BUT Other kids wish that

they were different”). The child chooses one of the statements and then rates it as really true or sort-of true. Although this scale provides a score for 6 subscales (i.e., scholastic competence, social acceptance, athletic competence, physical appearance, behavioral conduct, and global self-worth), only the global self-worth (GSW) and social acceptance (SOAC) subscales were used in the present study. Each of these subscales contains 6 items with half of the items reverse worded. Total scores range from 6-24, with higher scores reflecting more positive feelings of self-worth or social acceptance. Furthermore, the total scores are divided by six (the number of items comprising the subscale), thus resulting in subscale mean item scores ranging from one to four. Normative and psychometric data for this scale are available for children in grades three through eight.

Measures Administered in Sixth and Eighth Grade (see Appendices C-F)

Demographic Information Form. A brief demographic information form was created for purposes of the present study. This form asked children to record their age, gender, ethnicity, and after-school activities.

Social Support Scale for Children (SSSC; Harter, 1986). This questionnaire consists of 24 antithetical statements (e.g., “Some kids have a close friend who they can tell problems to BUT Other kids don’t have a close friend who they can tell problems to”) that participants choose between and rate as really true or sort-of true for themselves. This scale yields four subscales corresponding to individuals from whom support is received, including parents (PSUP), classmates (CSUP), teachers (TSUP), and close friends (FSUP). Total scores for each subscale range from 6-24 with higher scores representing higher levels of support. In addition, similar to the scoring of the SPPC and SPPA, each subscale item mean is calculated and may range from one to four. Internal

reliability has been demonstrated for each of these subscales among children in grades three through eight ($\alpha = .71-.88$).

Multidimensional Anxiety Scale for Children (MASC; March, 1997). The MASC is a 39-item measure that assesses four domains of anxiety (e.g., physical symptoms, harm avoidance, social anxiety, and separation/panic), as well as total anxiety. This measure also provides two additional indexes, one for anxiety disorder and the other for inconsistency ratings. Each item on the MASC is rated on a 4-point Likert Scale ranging from 0 (never true for me) to 3 (often true for me). Internal reliability coefficients for all domains of the MASC, as well as the total anxiety and anxiety disorders indexes, have been reported at acceptable levels ranging from .61 to .89. Three month test-retest reliability coefficients for all domains of the MASC have also been reported within the satisfactory to excellent range (.70-.93). Normative and psychometric properties for this scale are available for children aged 8-19 years (March, 1997). The social anxiety subscale (SAST), physical symptoms subscale (PHYS), and total anxiety (MASCT) scores were utilized in the current study.

Reynolds Adolescent Depression Scale (RADS; Reynolds, 1986). The RADS is a 30-item measure designed to assess symptoms associated with depression, including cognitive, motoric-vegetative, somatic, and interpersonal symptoms. All items on this questionnaire are rated on a four point Likert scale (almost never, hardly ever, sometimes, or most of the time) with total scores ranging from 30-120. All but 7 of the items on this scale measure depressive symptomology. The remaining 7 items are inconsistent with depression and are subsequently reverse scored and entered into the total depression score. Internal reliability of the RADS has been estimated in a number of studies (c.f.,

Reynolds, 1986) with ranges of .91 to .96 reported. This scale has also been found to possess good test-retest reliability at six weeks (.80), three months (.79), and one year (.63).

Measures Administered in Eighth Grade Only (see Appendices G-I)

Multidimensional Peer Victimization Scale (MPVS; Mynard & Joseph, 2000).

The MPVS is a 16-item instrument designed to measure aspects of victimization through negative physical actions (e.g., punched, kicked), negative verbal actions (e.g., made fun of me for some reason, swore at me), social manipulation (e.g., tried to make my friends turn against me), and attacks on property (e.g., tried to break something of mine). Each item is rated on a three point Likert scale, ranging from 0-2 (“Not at all”, “Once”, “More than once”). The overall total score ranges from 0-32 and for each domain from 0-8, with higher scores representing greater victimization. Acceptable internal reliability coefficients have been reported for all subscales (Cronbach’s $\alpha = .73$ to $.85$). Factor structure and convergent validity of this measure have also been reported (Mynard & Joseph, 2000). Only the total score was used in the current study.

The Bully Survey (BYS; Swearer & Paulk, 1998). The BYS is a self-report measure that contains three main sections designed to assess behaviors related to being victimized, observing others being victimized, and victimizing others. Each of these sections contains a screener question at the beginning of the section that asks children to indicate whether or not they have experienced bullying during the past school year (e.g., have you been bullied, have you seen someone else be bullied, have you bullied someone else). If children respond negatively, then they are directed to the next section. If they respond affirmatively, children are asked subsequent questions regarding where and how

the bullying occurred (e.g., hallways), who bullied them or who they bullied most often (e.g., older boys/girls), how the bullying affected them (e.g., made me feel bad or sad), why they think the bullying occurred (e.g., I get good grades), and who was aware of the problem. A final section that all children are asked to complete, contains questions related to attitudes towards bullying behaviors. Based on this measure, children can be classified as one of the following: bully-only, victim-only, bully-victim, or not-involved.

Self-Perception Profile for Adolescents (SPPA; Harter, 1988). The 45-item SPPA is created identical to the SPPC with the addition of three subscales (job competence, romantic appeal, close friendships). Total scores for each domain range from 5-20, with higher scores reflecting more positive feelings of competence or self-worth. These scores are then divided by five (the number of items comprising the subscale), thus resulting in a subscale mean item score ranging from one to four. Normative and psychometric data for this scale are available for children in grades eight through eleven. Harter (1988) has reported acceptable internal consistency coefficients for all domains, ranging from .74 to .93. Consistent with the sixth grade, only the Global Self-Worth (GSW) and Social Acceptance (SOAC) subscales were used for this study.

Procedures

School and administrative consent (e.g., superintendent's office) was granted for the present study to be conducted with the eighth grade students. Following this, a letter from the school principal detailing the project, the parent consent form, and child assent forms were mailed to all eighth grade students' parents with their report cards. Parents were asked to review and sign the consent form and return it to the school. In all, three

mailings were completed and 30% of the parent consent forms were returned.

Participants completed all measures under the supervision and guidance of a doctoral level graduate student. Counterbalancing was used in the presentation of the questionnaires to prevent order effects and all children included in this study were assessed within the same school week in order to control for extraneous effects.

Results

Analytic Plan

The first set of analyses pertained to the descriptive properties of the measures used in this study. Internal consistency coefficients, scale means, and standard deviations were computed to establish the measure psychometrics in the current sample of children. Group differences were also examined to ensure that children who participated at sixth and eighth grade did not differ from those who only participated at grade six. Gender differences were also examined to determine if boys and girls reported dissimilar levels of peer victimization, self-perceptions, social support, or internalizing symptoms. The second set of analyses pertained to reported peer victimization in the current sample. Following this, correlational analyses were conducted separately by gender, both within and across grades, to determine significant associations and to lay the foundation for the mediational model tests. Hierarchical regression analyses were next computed to test for mediation and post-hoc probing using Sobel's test was completed for each significant mediator model. Finally, multiple hierarchical regression analyses were conducted to examine potential moderating effects. Significant moderating models were also followed up with post-hoc probing.

Descriptive Analyses

Internal consistency

For all scales, internal consistency coefficients were calculated (see Tables 1-2). All scale mean scores and standard deviations were found to be generally commensurate with their respective published norms. Acceptable internal consistency coefficients were found for all of these scales with Cronbach's alphas ranging from .73 (CSUP6) to .91 (RADS8).

Group Differences

Chi-square analyses and one-way analyses of variance failed to reveal significant differences between those who did and did not participate in grade eight for age [$F(1, 277) = 1.40, p = .24$], gender [$\chi^2(1, N = 278) = 0.06, p = .80$], race [$F(1, 268) = .87, p = .35$], or reported victimization [$F(1, 270) = .26, p = .61$].

Gender Differences

To examine potential gender differences, a series of independent t-tests were calculated (see Tables 3-4). In both sixth and eighth grades boys reported more victimization than girls. In addition, sixth grade boys reported less support from classmates and friends, as well as less social acceptance than sixth grade girls. In the eighth grade, boys reported significantly less parent, classmate, and friend support as well as less social acceptance than girls. However, in both grades six and eight, girls reported more total anxiety than boys. All other tests of gender differences were non-significant.

Sample Reported Peer Victimization

Percentages of males and females who scored one standard deviation (SD) above the mean (see Table 5) were computed for the sixth and eighth grade. These calculations

revealed that 17.4% of the girls and 16.1% of the boys scored one SD above the mean (2.61 and 2.87, respectively) in grade six. In the eighth grade, 27.4% of the boys and 13.3% of the girls indicated scores on the MPVS that were one SD above the mean (20.95 and 17.60, respectively). In addition, significant correlations were found between the sixth and eighth grade victimization scales for boys ($r = -.34, p < .05$) and girls ($r = -.57, p < .05$). The Bully Survey (BYS) classified children into groups according to whether they reported bullying others ($N = 3$), being victimized ($N = 32$), both bullying others and being victimized ($N = 27$), or no involvement ($N = 26$) in peer victimization. Eighth grade measures were examined by group with a multivariate analysis of variance and Tukey's honestly significant difference comparison. However, comparisons were only made among the victim-only, bully-victim, and not involved groups, due to the small number of participants in the bully-only group. These analyses revealed significant differences on the social anxiety, physical symptoms of anxiety, total anxiety, depression, global self-worth, and classmate support scales (see Table 6).

Correlational Analyses

Correlations were conducted by gender for all variables (see Tables 7-8). All analyses conducted were one-tailed. Among the predictor measures, significant correlations (p 's $< .05$) were found for PVS with GSW, SOAC, and CSUP for both boys and girls. These findings suggest that children who reported greater levels of victimization also indicated feelings of lowered self-worth, poor social acceptance, and fewer supportive relationships with classmates (see Table 7). In addition, sixth grade boys who reported higher victimization scores also tended to report less supportive friends at that time.

Sixth grade peer victimization (PVS) was related to eighth grade depression for boys and social anxiety for girls. For both genders, GSW in the sixth grade was significantly correlated with all internalizing measures with the exception of total anxiety. For all children, sixth grade SOAC was significantly correlated with SAST and MASCT in grade eight. Additionally, boys' SOAC was also negatively associated with eighth RADS. Children's report of parental support in the sixth grade was not significantly correlated with any of the dependent eighth grade measures. Grade six CSUP was significantly related to grade eight SAST and RADS, but only for boys. On the other hand, TSUP in the sixth grade was associated with SAST in the eighth grade for girls. Sixth grade FSUP was also significantly associated with girls' eighth grade SAST and MASCT (see Table 8).

Mediator Model Tests

As described by Holmbeck (1997) and Baron and Kenny (1986), three prerequisites were necessary to examine mediation. That is, a statistically significant relation had to be established between the predictor and criterion variables, predictor and mediator variables, and mediator and criterion variables. As shown in Tables 7-8 and reported above, these prerequisites precluded several mediation tests from being undertaken. For boys, sixth grade GSW, SOAC, and CSUP were each examined for potential mediation in the sixth grade peer victimization to eighth grade depression relation. For girls, mediational analyses were conducted separately for sixth grade GSW and SOAC in the sixth grade peer victimization to eighth grade social anxiety relation. Prior to testing for mediation, all predictor variables (e.g., PVS, GSW) were centered, as suggested by Aiken and West (1991) and Holmbeck (2002). Centering was accomplished

by subtracting the sample mean from each child's score on the predictor variables, resulting in standardized scores with means of 0 on these measures. This procedure reduces multicollinearity between the predictors and the interaction term. Following the centering process, for each of the mediational analyses described below, the eighth grade dependent variable (i.e., RADS for boys and SAST for girls) was first regressed on sixth grade peer victimization, and then, on the sixth grade mediator being tested (i.e., GSW, SOAC, or CSUP).

Boys

PVS (grade 6) – GSW (grade 6) – RADS (grade 8). For boys, when sixth grade PVS was entered in the first step of the hierarchical regression equation, the standardized Beta coefficient was significant [$t(36) = -2.264, p < .05$]. When sixth grade GSW was entered in the second step of this equation, the standardized Beta coefficient for PVS was no longer significant [$t(36) = -1.278, p = .21$]. However, the standardized Beta coefficient for GSW in step two was significant [$t(36) = -3.363, p < .01$], indicating that the relation between PVS and depression was mediated by GSW for boys (see Table 9).

PVS (grade 6) – SOAC (grade 6) – RADS (grade 8). When PVS from grade six was entered in the first step of the hierarchical regression equation, the standardized Beta coefficient was significant [$t(36) = -2.264, p < .05$]. When sixth grade SOAC was entered in the second step of this equation, the standardized Beta coefficient for PVS was no longer significant [$t(36) = -1.332, p = .19$]. However, the standardized Beta coefficient for SOAC in step two was also not significant [$t(36) = -1.596, p = .12$], indicating that the relation between PVS and depression was not mediated by SOAC for boys.

PVS (grade 6) – CSUP (grade 6) – RADS (grade 8). When sixth grade PVS was entered in the first step of the hierarchical regression equation, the standardized Beta coefficient was significant [$t(36) = -2.264, p < .05$]. When sixth grade CSUP was entered in the second step of this equation, the standardized Beta coefficient for PVS was no longer significant [$t(36) = -.983, p = .33$]. However, the standardized Beta coefficient for GSW in step two was also not significant [$t(36) = -1.554, p = .13$], indicating that the association between PVS and RADS was not mediated by GSW for boys.

Girls

PVS (grade 6) – GSW (grade 6) – SAST (grade 8). For girls, when PVS from grade six was entered in the first step of the hierarchical regression equation, the standardized Beta coefficient was significant [$t(38) = -2.264, p < .05$]. When GSW from grade six was entered in the second step of this equation, the standardized Beta coefficient for PVS was no longer significant [$t(38) = -1.184, p = .24$]. The standardized Beta coefficient for sixth grade GSW in step two was also not significant [$t(38) = -1.890, p = .07$], indicating that the relation between PVS and SAST was not mediated by GSW for girls.

PVS (grade 6) – SOAC (grade 6) – SAST (grade 8). When sixth grade PVS was entered in the first step of the hierarchical regression equation, the standardized Beta coefficient was significant [$t(38) = -2.264, p < .05$]. When sixth grade SOAC was entered in the second step of this equation, the standardized Beta coefficient for PVS was no longer significant [$t(38) = -1.159, p = .25$]. However, the standardized Beta coefficient for SOAC in step two was significant [$t(38) = -2.922, p < .01$], indicating that the relation between PVS and SAST was mediated by SOAC for girls (see Table 10).

Post-Hoc Probing of Mediation Effects

As recommended by Holmbeck (2002) and Baron and Kenny (1986), post-hoc probing was conducted for the significant mediation models using Sobel's equation. Sobel's equation uses unstandardized regression coefficients and standard errors and provides a test of the decrease observed in the predictor-dependent effect when the mediator is entered into the model (see Figure 3). For each of these analyses, a regression analysis was first conducted with the mediator regressed on the predictor variable. A second regression analysis is computed next, with the dependent variable regressed on the predictor and mediator variables (c.f., Holmbeck, 2002 for computational explanations and examples; c.f., Preacher & Leonardelli, 2001 for interactive calculation).

Boys

PVS (grade 6) – GSW (grade 6) – RADS (grade 8). To test the significant mediation effect found for GSW in the PVS-RADS relation for boys, sixth grade GSW was first regressed on sixth grade PVS (unstandardized coefficient = .351, standard error = .065). Next, eighth grade RADS was regressed on sixth grade PVS and GSW, resulting in an unstandardized coefficient of -2.184 and a standard error of .650. Sobel's test ($z = -2.85$) was significant at the $p < .01$ level, with approximately 28.4% of the grade six PVS to grade eight RADS path accounted for by GSW for boys.

Girls

PVS (grade 6) – SOAC (grade 6) – SAST (grade 8). Regressing sixth grade SOAC on sixth grade PVS resulted in an unstandardized coefficient of .535 and standard error of .058. In the second regression analysis, the unstandardized coefficient (-.674) and

standard error (.231) were obtained by regression grade eight SAST on sixth grade PVS and SOAC. Sobel's test ($z = -2.78$) was significant at the $p < .01$ level, with approximately 25.9% of the grade six PVS to grade eight SAST path accounted for by SOAC for girls.

Moderator Model Tests

Hierarchical regression analyses were conducted to examine the hypothesized moderating role of global self-worth, social acceptance, and social support. To test for moderation, peer victimization (predictor) was first entered into the regression, followed by the proposed moderator variable (as in the mediation analyses described above), and finally the interaction variable (e.g., predictor x moderator) in Step 3. For girls, none of the moderational analyses were found to be significant. In contrast, two significant moderation models were revealed for boys (see Tables 11-12 and below).

Boys

PVS (grade 6) – TSUP (grade 6) – RADS (grade 8). For boys, the R^2 regressing RADS on PVS was .128 ($p < .05$). Including TSUP increased the total R^2 to .129, a non-significant increase. With the addition of the victimization x teacher support interaction, however, total R^2 was increased to .233, accounting for a statistically significant increase in the amount of variance predicted (see Table 11).

PVS (grade 6) – TSUP (grade 6) – SAST (grade 8). For boys, the R^2 regressing SAST on PVS was .008 (ns). Inclusion of TSUP led to a non-significant R^2 change (.003). The addition of the PVS x TSUP interaction, however, increased R^2 to .136, which accounted for a statistically significant increase in the amount of variance predicted (see Table 12).

Post-Hoc Probing of Significant Moderational Effects

First, conditional moderators were computed to manipulate the zero-point of the moderator, with the high condition moderator reflecting one standard deviation above the mean and the low condition moderator reflecting one standard deviation below the mean. These conditions were calculated by subtracting the total sample standard deviation of the moderator from each child's score (high condition) and subtracting the total sample negative standard deviation of the moderator from each child's score (low condition). Next, new interaction terms were computed using the conditional moderators (i.e., PVS x High-Conditional Moderator and PVS x Low-Conditional Moderator). The third phase involved two new regression analyses that included the conditional moderators and interaction terms. For example, one of the regressions included the following steps: 1) predictor variable, 2) High Conditional Moderator, 3) PVS x High-Conditional Moderator. Likewise, the second regression included the corresponding low conditional moderator terms. Each model was then reduced by substituting 0 for the conditional moderator, leaving the predictor with its coefficient and the intercept. T-tests were also calculated for each equation. These tests indicated the significance of the slope for each regression line and the direction of the test (positive or negative) determined the manner in which the results were interpreted. Finally, regression lines were plotted by substituting high (one standard deviation above the mean) or low (one standard deviation below the mean) predictor values.

Boys

PVS (grade 6) – TSUP (grade 6) – SAST (grade 8). After computing the above described steps, a non-significant t-test was found for the low TSUP condition [$t(36) =$

.706, ns]. In contrast, a significant t-test [$t(36) = -2.509, p < .05$] was revealed for the high TSUP condition, indicating that boys' depression scores tended to be lower at lower levels of peer victimization when teacher support was high (see Figure 4).

PVS (grade 6) – TSUP (grade 6) – RADS (grade 8). Post-hoc probing was also conducted for the significant moderating effect of sixth grade teacher support on boys' sixth grade peer victimization and eighth grade depression relation. The low TSUP condition was not significant, as indicated by the t-test results [$t(36) = -.279, ns$]. A significant t-test [$t(36) = -3.147, p < .01$] was found for the high TSUP condition, suggesting that boys' social anxiety scores tended to be lower at lower levels of peer victimization when teacher support was high (see Figure 5).

Discussion

Overall, past research has clearly demonstrated concurrent relations among peer victimization and symptoms of depression, social anxiety, and total anxiety. The current study added to the literature by examining the long-term relations among these problems, as well as other potentially influential variables (e.g., self-worth). Victimized boys and girls generally evidenced different patterns of findings that will be discussed below.

Group and Gender Differences

Prior to all other analyses, group differences were examined to determine if children who participated in both sixth and eighth grade data collections differed from those who only participated during sixth grade. Results from these analyses revealed that the group of children who were participants at both assessments did not differ in terms of age, gender, and race from those who only participated in grade six. There were also no group differences on the peer victimization scale administered in sixth grade, indicating

that children who remained involved at eighth grade evidenced similar scores to those who no longer participated. That is, children who were participants at both assessments appear to be a representative subset of the larger group included at the first assessment.

Gender differences were also examined for the various measures employed in the current study, with several significant findings. Commensurate with the gender differences found on sixth grade measures, these results at eighth grade were also significant for ratings of victimization, social support, and anxiety. In fact, the same measures evidenced gender differences in grades six and eight (i.e., PVS, SOAC, CSUP, FSUP, and MASCT), with the addition of parent support in grade eight.

First, a significant gender difference was found regarding victimization, such that boys tended to report greater levels of victimization than girls. This finding is consistent with previous studies, which have also often found that boys are more likely to report being victimized by peers (Bijttebier & Vertommen, 1998; Boulton & Underwood, 1992; Callaghan & Joseph, 1995; Kumpulainen et al., 1998, 2001; Lagerspetz et al., 1982; O'Moore & Hillery, 1989; Paquette & Underwood, 1999; Rigby et al., 1997; Rigby & Slee, 1999; Williams et al., 1996). One potential explanation for boys' experience of greater victimization draws on the distinctions among victimization types. For example, it is commonly argued that boys exhibit more overt aggression than girls. Supporting this suggestion are findings indicating that boys report significantly more direct (e.g., physical assault, overt confrontation) victimization than girls, whereas girls report significantly more indirect (e.g., social manipulation) victimization than boys (Bjoerkqvist, Lagerspetz, & Kaukiainen, 1992; Crick & Grotpeter, 1995; Mynard & Joseph, 2000; Olweus, 1991; Whitney & Smith, 1993). Further, peer attacks often occur in same-gender

dyads or groups. Thus, it could be argued that boys are more likely to be both perpetrators and targets of direct peer victimization. Previous research that included assessment of both victim and perpetrator status have provided support for this supposition (Boulton & Underwood, 1992; Lagerspetz et al., 1982; Olweus, 1991; O'Moore & Hillery, 1989). Since total scores were employed in the current study and these scores were more reflective of direct victimization, summing across victimization subtypes may have attenuated the gender differences found. Thus, it could be that the gender differences found in the present study would abate if indirect victimization had been assessed separately. However, as the present study did not utilize a measure of indirect victimization, this possibility could not be explored further.

Second, this study also revealed significant differences regarding social support, with boys generally reporting less social support than girls. These findings may be related to differences in the socialization of boys and girls. To illustrate, boys in Western societies tend to receive praise for less emotional expressions and greater independence, whereas the reverse tends to be true for girls. For instance, parent-child interactions have shown that parents emphasize greater emotion and dependency in daughters than sons (Denmark, Rabinowitz, & Sechzer, 2000). Thus, boys may perceive others as less supportive, seek support less often, or act in a manner that conveys that they do not need support. Boys who exhibit these behavioral characteristics may deter others from reaching out to them, further affirming their view that support is not available. In contrast, females are more likely to seek out support from others when stressed (Taylor et al., 2000). Thus, girls may exhibit both an increased perception of social support, as well as actual increases in the amount of support available.

Third, gender differences were noted regarding children's reported total anxiety symptoms, such that girls tended to indicate elevated levels of anxiety in both grades six and eight, as compared to boys. This finding corresponds with existing literature on the presentation of anxiety symptoms in childhood (Bell-Dolan, Last, & Strauss, 1990; March, 1997; Muris, Merckelbach, Mayer, & Meesters, 1998; Muris, Merckelbach, Van Brakel et al., 1998; Ollendick, King, & Frary, 1989). For example, previous studies have shown that girls score significantly higher on total anxiety, as well as symptoms of environmental-situation phobia, animal phobia, blood-injection-injury phobia, separation anxiety disorder, and panic disorder (c.f., Muris, Merckelbach, Mayer et al., 1998; Muris, Merckelbach, Van Brakel et al., 1998). Similar to that described for social support, differences in boys' and girls' socialization experiences or gender role expectations may account for gender differences found on internalizing measures. That is, it may be more acceptable for girls to express internalizing concerns and/or others may expect girls to be described using these terms (Ollendick, 1983; Ollendick, Yang, Dong, Xia, & Lin, 1995); Unger & Crawford, 1996). This area of research is clearly in need of further experimental study and verification.

Peer Victimization

Elevated rates of peer victimization, as determined using a cut-off score of one standard deviation above the mean, were similar to those reported in earlier U.S. studies (i.e., 10-28%; Grills & Ollendick, 2000; Perry et al., 1988). That is, approximately one fifth of the children in the present study indicated experiencing elevated levels of peer victimization in grades six and eight. Although these rates appear to fall toward the high end of the prevalence range, this finding is commensurate with suggestions that peer

victimization peaks during the middle school years (Hoover et al., 1992; Pellegrini & Bartini, 2000). Furthermore, while the percentage of elevated victimization decreased slightly over time for girls from sixth to eighth grade (17.4% and 13.3%, respectively), a remarkable increase was found for boys (from 16.1% in sixth grade to 27.4% in eighth grade). This finding was inconsistent with previous literature. Although extant research tends to suggest that overall rates of victimization decrease as a function of increasing grade in school, it is important to note that the second assessment occurred while boys were in the highest grade of their middle school, a peak time for victimization experiences (Bentley & Li, 1995; Rigby, 1999; Rigby et al., 1997; Rivers & Smith, 1994).

Finally, a significant correlation was observed for peer victimization over time, suggesting that children who reported being targeted for victimization in grade six continued to report this in grade eight. This supports findings from previous research indicating that children deemed to be victims tend to carry that label over time (Kumpulainen et al., 1999; Olweus, 1997a, b; Perry et al., 1988; Salmivalli, Lappalainen, & Lagerspetz, 1998). Thus, it appears that certain children are consistently targeted for victimization throughout schooling, whereas for other children, victimization experiences decline or end. For example, it may be the most severely victimized children who are repeatedly targeted. Exploring factors that may lead to a decrease or perpetuation of victimization will be an important next step for research in this area. Nevertheless, these inferences are made with caution, since the measures of victimization used in grades six and eight differed greatly in terms of content and number of items. This may have

affected the results found (e.g., the MPVS includes direct and indirect types of victimization and is four times longer than the PVS).

Interestingly, few children in the present study were classified as bully-only, as compared with victim-only, bully-victim, or not involved on the BYS in grade eight. However, the percentages of children within each category were generally consistent with those reported by the scale developer for their eighth grade sample (Swearer, Hays, Cary, Brey, & Frazier-Koontz, 2002). These results suggest that there are a few children who exclusively bully others, while a significantly greater number of children both bully and get bullied (bully-victims) or are exclusively bullied (victims). Although not central to the current study, it is important to take note of these findings since researchers have found that bully-victims also evidence marked psychosocial impairment (Craig, 1998; Haynie et al., 2001; Kaltiala-Heino et al., 1999; Kumpulainen et al., 2001; Rigby, 1996; Swearer et al., 2001). In part, these results may be a reflection of the BYS, which assesses for any bully experiences occurring throughout the school year. Since the eighth grade assessment occurred in the last quarter of the school year and peer victimization is a common experience for middle school students, the rates of bully-victims, as opposed to bully-only, may have been augmented. Alternatively, it is possible that children were less likely to report solely engaging in bullying, perhaps due to concerns with being disciplined.

In addition, several differences were revealed on eighth grade measures as a function of BYS classification status. Both victims and not-involved children scored significantly higher than bully-victims on the eighth grade measure of global self-worth. Victims and bully-victims reported greater distress on the physical symptoms of anxiety

and depression scales, as well as less support from classmates when compared with not involved children. Furthermore, victims evidenced significantly greater scores of social and total anxiety than not involved children at grade eight. Greater internalizing problems have also been reported by victims in previous studies (Bernstein & Watson, 1997; Cary et al., 2001; Craig, 1998; Hawker & Boulton, 2000; Kumpulainen et al., 1998; Perry et al., 1988; Swearer et al., 2001). Together, these results suggest that increased levels of psychopathology were reported by eighth grade children involved in peer victimization.

Relations among Study Variables

Overall, findings for the sixth grade predictor variables were consistent with previous research and provided support for the relations among peer victimization, global self-worth, social acceptance, and peer support for both boys and girls. Specifically, youth who indicated higher levels of victimization also tended to report more negative feelings about themselves, their acceptance by peers, and the support available from their peer social network. Interestingly, in contrast to what was predicted, greater victimization was not associated with lower parent or teacher support. Thus, it seems that the support of peers, whether close friends or classmates, tended to be more related to victimization experiences for this middle school sample of children.

For boys and girls, greater variability was noted regarding the correlations among the predictor and criterion variables. Although in some cases these changes may reflect “true” differences in responding, it is important to note that in several cases the magnitude of the correlations were similar in grades six and eight while the significance values were not. Thus, it is important to interpret any differences found with caution as the reduction in sample size at the second assessment likely impacted these statistical

significance values. In particular, sixth grade peer victimization was significantly correlated with eighth grade social anxiety for girls and depression for boys. Two previous longitudinal studies have also revealed long-term relations among peer victimization and internalizing symptoms (Kumpulainen & Rasanen, 2000; Swearer et al., 2001). However, neither of these studies reported findings by gender, precluding further parallels from being drawn. Nonetheless, results from the current study suggest that boys' and girls' reactions to peer victimization appear to be related to different psychosocial adjustment problems.

Global self-worth was the only sixth grade measure significantly associated with grade eight physical symptoms of anxiety. This finding is in contrast to previous research (Rigby, 1999; Williams et al., 1996), which has found associations between poor physical health and peer victimization. Sixth grade global self-worth was also related to eighth grade reports of social anxiety and depression for the children in this study. Thus, negative views about oneself appear involved in the maintenance of anxiety, as well as depression. For boys, classmate support and social acceptance in sixth grade were each negatively correlated with eighth grade psychosocial adjustment problems (social anxiety and depression). Boys and girls who reported lower social acceptance in grade six, also indicated greater social and overall anxiety in grade eight. In addition, girls who perceived themselves as having little support from teachers or friends in the sixth grade tended to indicate more social and overall anxiety symptoms two years later.

In all, these findings were consistent with the hypotheses of the current study and revealed long-term associations among peer victimization, negative self-views, peer interpersonal problems, and lack of support with increased depressive and anxious

symptoms in youth. In order to further explore the nature of these relations, a series of hierarchical regression analyses were conducted to specifically examine the proposed mediator and moderator models. That is, the first set of analyses were computed to determine whether being victimized by peers led to decreased self-worth, peer acceptance, or social support, which then led to increased internalizing symptoms. Second, models of potential moderation were examined to identify whether low, versus high, levels of global self-worth, social acceptance, and/or social support differentially influenced children's internalized responses to being victimized by peers.

Mediator and Moderator Model Analyses

As previously described, tests of mediation require significant relations first be established between the following pairs of variables: predictor and dependent, predictor and mediator, mediator and dependent. Thus, three separate tests were conducted to test for mediation of the significant relation between grade six peer victimization and grade eight depression found for boys. Four separate mediation tests were conducted to examine the association between girls' sixth grade peer victimization and eighth grade social anxiety.

Results of this study provided support for the proposed mediating role of global self-worth in the relation between peer victimization and depression. This finding is consistent with that found using only sixth grade data (Grills & Ollendick, 2000). However, the present analyses could only be conducted for boys due to a non-significant relation between girls' reports of sixth grade peer victimization and eighth grade depression. As predicted, it appears that victimization experiences negatively influence boys' views of themselves and helped explain the elevated levels of depression reported

by them. As noted earlier, self-worth has been suggested to represent the negative thoughts about the self (Marciano & Kazdin, 1994) aspect of the cognitive triad of depression (Kovacs & Beck, 1977). Male victims may develop self-beliefs consistent with the negative comments received during peer attacks, which in turn, lead to depressive symptoms. In fact, a substantial amount of the peer victimization-depression relation (28.4%) was accounted for by global self-worth in the present study. In line with these results, previous authors have argued that peer victimization directly affects self-worth (Boulton & Underwood, 1992; Ross, 1996; Slee & Rigby, 1993) and that low self-worth serves as a risk factor for the development of depression (Orvaschel et al., 1997). Findings from the present study appear to serve as a bridge for these postulates and suggest that global self worth is one construct through which depression can result from peer victimization in boys.

For girls, a significant mediation effect was found for social acceptance in the association between peer victimization and social anxiety. While it was not possible to examine this mediational model for boys (i.e., due to unsatisfied prerequisites), it seems likely that the attenuation for girls was due to their greater emotional investment in peer status and friendships (Lagerspetz et al., 1988). Thus, it appears that female victims from the current study perceived themselves as less well accepted in their social networks, which then partially explained the elevated levels of social anxiety reported by them. Indeed, nearly 26% of the relation between girls' reports of sixth grade peer victimization and eighth grade social anxiety was accounted for by the inclusion of social acceptance in the mediation model. A consistent theme is evidenced in this result, such that interpersonal components are involved at each level. As noted above, girls who are

repeatedly exposed to victimization may become hypervigilant to their surroundings and the opinions of others (Roth et al., 2002). Since bullying typically occurs within social or group interactions (Craig & Pepler, 1995), girls may become particularly sensitive to negative evaluations in these settings and perceive negative or questionable peer interactions as indicative of their unpopularity or non-acceptance. Likewise, girls who are distressed in anticipation of social interactions and the potential for receiving further negative evaluations may develop anxiety specifically related to social situations. In addition, these girls may evidence withdrawal or avoidance of future interpersonal situations, thus interfering with social skill achievements and the development of appropriate friendships.

Finally, teacher support was found to serve as a significant moderator of the relations among peer victimization, depression, and social anxiety. That is, the interaction between peer victimization and teacher support differentially affected boys' reported levels of depression and social anxiety. Not surprisingly, boys reported fewer internalizing symptoms when peer victimization was low and teacher support was high. However, high teacher support did not serve as a buffer against the development of these internalizing problems under conditions of high victimization. Thus, boys who are not often victimized appear to additionally benefit from having the support of their teachers. In contrast, it seems that teacher support alone is not enough of a protective factor against depression and social anxiety for boys who often experiencing victimization as a stressor.

Contrary to what was expected, results of the current study failed to demonstrate a mediating or moderating role for peer support (classmate or friend). Although it appears that peer support was unrelated to internalizing symptoms, significant long-term

associations were found among these variables for boys and girls. In line with previous research demonstrating peer relationship difficulties (e.g., social neglect) for anxious children (Boulton & Smith, 1994; Strauss, Frame, & Forehand, 1987; Strauss, Lahey, Frick, Frame, & Hynd, 1988), it appears that these are better conceived of as direct relations.

While statistically significant results were revealed in the present study, it is also important to note the clinical significance of these findings. Regarding the mediation analyses, a remarkable amount of the variance in the peer victimization-depression and peer victimization-social anxiety (26-28%) relations was explained by the inclusion of global self-worth and social acceptance, respectively, in the model. However, in the moderation analysis, only 1-3% of the variance was explained by the peer victimization x teacher support interaction. In terms of the clinical implications of these findings, it seems that global self-worth and social acceptance should be first line targets for interventions. Further, although a modest portion of the associations among peer victimization and internalizing symptoms can be explained by these mediators, there are clearly other variables involved. Therefore, it seems that future research should explore other potential mediator and moderator variables (e.g., locus of control, coping mechanisms), as well as attempt to replicate the current findings, to fully understand these relations and design the most effective intervention programs.

Limitations

It is important to note limitations of the present study, as well as some future directions for research within this area. First, the present study relied solely upon the use of self-report measures. Although self-report measures of internalizing symptoms appear

to be less problematic (Craig, 1998), children may underestimate or underreport the degree of victimization experienced on self-report measures (Olafsen & Viemero, 2000). Furthermore, only using self-report measures allows for the confounding of shared method variance. Thus, it would be useful for future research to include the reports of others (e.g., classmates, teachers), which may be more objective and would allow for multiple informant comparisons. Second, the present sample was limited in that the majority of children were Caucasian and all children were from the same grade in a small suburban town. Therefore, the findings presented herein may not generalize to more diverse ethnic populations, regional settings, or developmental periods.

An additional limitation is apparent regarding the measures of peer victimization utilized in the current study. First, the PVS primarily measures verbal and physical victimization experiences; both of which are classified as direct forms of victimization. Thus, it may be that the relationships examined within the present study operate differently with regard to indirect forms of victimization experiences. For example, assessment of direct and indirect forms of victimization may have altered the gender differences found in reference to degree of victimization reported. Furthermore, indirect victimization may be associated with different long-term outcomes than direct. Accordingly, future studies should attempt to examine relations with both types of victimization. Second, comparisons between the measures of victimization used in sixth (PVS) and eighth (MPVS) grade were precluded by their differences. While the MPVS was designed as an extended and revised version of the PVS, these alterations may have influenced the differing rates of victimization reported by children in grades six and eight.

Perhaps one of the greatest limitations of the present study concerns the participant attrition that occurred. While differences were not found between those who participated in the eighth grade and those who did not, a remarkable reduction in power was noted. Therefore, when separated by gender, the small sample sizes utilized for analyses influenced the significance levels and hindered mediator model tests from being conducted. This, in turn, may have influenced the detection of important mediating relations. Thus, these mediating models should be further examined in future research, perhaps with greater initial sample sizes that could still produce acceptable power, even with attrition.

Similarly, the present study did not employ statistical corrections for the number of analyses undertaken. For example, due to the small sample size and the number of examinations being conducted, a priori decisions were made not to use Bonferroni's corrections. While it is acknowledged that this approach may have resulted in greater Type II error, this was opted for in lieu of increased Type I error. That is, due to the potential significance and application of these findings for intervention and prevention research, allowing identification of variables that may not have been statistically significant with Bonferroni's corrections applied was preferred over potentially missing these variables.

The present study was also limited by only having two assessment points. That is, the predictors in the current study were from the same assessment point and represented correlational associations. A three-point longitudinal study would be necessary to fully discern whether peer victimization led to lowered global self worth (or social acceptance), which then predicted internalizing problems. Alternatively, the reported

levels of the mediator and criterion variables from time one (sixth grade) could have first been partialled out of the regression equations. Although this was not proposed for the current study, it would have been a more stringent test of the longitudinal nature of these relations. These issues should be taken into consideration in future research and analytic designs.

Finally, because this is the first known study to explore mediating and moderating models of global self-worth, social acceptance, and social support in the relationships among peer victimization and internalizing symptoms, replication with independent samples is necessary in order to establish the robustness of these findings. Further, a significant amount of variance remains to be explained for the peer victimization-internalizing symptom relation, suggesting that future researchers should continue to identify and study additional mediator and moderator variables.

Implications

Results of this study and the numerous others that have revealed similar findings have a number of implications for all those potentially involved with victimized children (e.g., parents, teachers, peers, clinicians). Clearly, these findings point to the devastating effects that peer victimization may have, particularly on a child's feelings of depression and social anxiety. Furthermore, based on the current findings and previous research, it seems likely that without intervention victimized children will continue to experience these difficulties.

Results from the present study are consistent with others indicating that victimized children report greater levels psychopathology when compared to youth who are not involved in bullying (Austin & Joseph, 1996; Kumpulainen et al., 2001; Swearer

et al., 2001). These findings clearly speak to the need for the development and implementation of effective bullying/victimization intervention programs. However, these intervention strategies need to reach beyond the level of victimized children. That is, to be most effective it seems that interventions need simultaneously target all aspects of children's lives (e.g., parents, peers, teachers, community; Colvin, Tobin, Beard, Hagan, & Sprague, 1998; Hanish & Guerra, 2000). Hanish and Guerra (2000) noted that this type of approach attempts to prevent the efforts of change at one level (e.g., school) from being overshadowed by tendencies at another (e.g., home). Similarly, several authors have warned against only targeting individual children (e.g., victims) for interventions (Colvin et al., 1998; Hanish & Guerra, 2000). Rather, including all children has been suggested to be more effective (Salmivalli, 1999), such that it allows for modification of the entire peer group. Olweus has utilized such strategies with school children in Norway (1983-1985) and found promising results, such that significant reductions (50-70%) in peer victimization were reported for both genders and across all grades. In addition, these decrements were observed for both direct (e.g., hitting) and indirect (e.g., social exclusion) victimizing behaviors (c.f., Olweus, 1991; 1993a,b,c; 1997a,b for detailed description of this intervention).

Moreover, results from the present study indicate that victimized children would benefit from protocols that target their feelings of self-worth and social acceptance. Since global self-worth was implicated as a mediator for boys and girls among peer victimization, anxiety, social anxiety, and depression, it seems that strategies should be employed which help children develop or maintain high self-worth in the face of victimizing experiences. In addition, teacher support alone does not appear to be enough

of a protective factor against depression and social anxiety for boys who report experiencing high levels of victimization. Despite non-significant findings for peer forms of support in the present study, it remains possible that increasing peer friendships may deter future victimization experiences. Furthermore, significant findings were revealed for peer *acceptance*, suggesting that social skills training paired with anxiety management techniques may help reduce the symptoms of social anxiety that can develop in youth who are victimized and particularly girls.

In conclusion, results of the present study add to the growing literature on the associations with and consequences of peer victimization. Future longitudinal research should continue to examine these relations, as well as address the concerns previously raised. Furthermore, intervention policies, such as that designed by Olweus (1991; 1993a,b,c; 1997a,b), should be implemented and evaluated with American school children in order to examine their effectiveness within our culture. Finally, results of the present study suggest that interventions which include strategies for building or maintaining self-worth and social acceptance would be beneficial for reducing symptoms of social anxiety and depression.

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Appendix A

Peer Victimization Scale

DIRECTIONS: For each of the items listed below, I would like you to think back to when you were in the **6th grade**. Then, answer each of these questions as you think you would of when you were a **6th grade student**. Remember, there are no right or wrong answers.

Really true for me	Sort of true for me		BUT		Sort of true for me	Really true for me
<input type="checkbox"/>	<input type="checkbox"/>	Some children are often teased by other children	BUT	Other children are not teased by other children	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some children are often bullied by other children	BUT	Other children are not bullied by other children	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some children are not called horrible names	BUT	Other children are often called horrible names	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some children are often picked on by other children	BUT	Other children are not picked on by other children	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some children are not hit and pushed about by other children	BUT	Other children are often hit and pushed about by other children	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some children are not laughed at by other children	BUT	Other children are often laughed at by other children	<input type="checkbox"/>	<input type="checkbox"/>

Appendix B

Self-Perception Profile for Children

Global Self Worth Subscale

Really true for me	Sort of true for me		BUT		Sort of true for me	Really true for me
<input type="checkbox"/>	<input type="checkbox"/>	Some kids are often unhappy with themselves	BUT	Other kids are pretty pleased with themselves	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids don't like the way they are leading their life	BUT	Other kids do like the way they are leading their life	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids are usually happy with themselves as a person	BUT	Other kids are often not happy with themselves	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids like the kind of person they are	BUT	Other kids often wish they were someone else	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids are very happy being the way they are	BUT	Other kids wish they were different	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids are not happy with the way they do a lot of things	BUT	Other kids think the way they do things is fine	<input type="checkbox"/>	<input type="checkbox"/>

Social Acceptance Subscale

Really true for me	Sort of true for me		BUT		Sort of true for me	Really true for me
<input type="checkbox"/>	<input type="checkbox"/>	Some kids find it hard to make friends	BUT	Other kids are find it's pretty easy to make friends	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have alot of friends	BUT	Other kids don't have a lot of friends	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids would like to have a lot more friends	BUT	Other kids have as many friends as they want	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids are always doing things with a lot of kids	BUT	Other kids usually do things by themselves	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids wish that more people their age liked them	BUT	Other kids feel that most people their age do like them	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids are popular with others their age	BUT	Other kids are not very popular	<input type="checkbox"/>	<input type="checkbox"/>

Appendix D

Social Support Scale for Children

Really true for me	Sort of true for me		BUT		Sort of true for me	Really true for me
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have parents who don't really understand them		Other kids have parents who really do understand them	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have classmates who like them the way they are		Other kids have classmates who wish they were different	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have a teacher who helps them if they are upset and have a problem		Other kids don't have a teacher who helps if they are upset and have a problem	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have a close friend who they can tell problems to		Other kids don't have a close friend who they can tell problems to	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have parents that don't seem to want to hear about their children's problems		Other kids have parents who do want to listen to their children's problems	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have classmates that they can become friends with		Other kids don't have classmates that they can become friends with	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids don't have a teacher who helps them to do their very best		Other kids do have a teacher who helps them to do their very best	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have a close friend who really understands them		Other kids don't have a close friend who understands them	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have parents who care about their feelings		Other kids have parents who don't seem to care very much about their children's feelings	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have classmates who sometimes make fun of them		Other kids don't have classmates who make fun of them	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids do have a teacher who cares about them		Other kids don't have a teacher who cares about them	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have a close friend who they can talk to about things that bother them		Other kids don't have a close friend who they can talk to about things that bother them	<input type="checkbox"/>	<input type="checkbox"/>

<input type="checkbox"/>	<input type="checkbox"/>	Some kids have parents who treat their children like a person who really matters	BUT	Other kids have parents who don't usually treat their children like a person who matters	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have classmates who pay attention to what they say	BUT	Other kids have classmates who usually don't pay attention to what they say	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids don't have a teacher who is fair to them	BUT	Other kids do have a teacher who is fair to them	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids don't have a close friend who they like to spend time with	BUT	Other kids do have a close friend who they like to spend time with	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have parents who like them the way they are	BUT	Other kids have parents who wish their children were different	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids don't get asked to play in games with classmates very often	BUT	Other kids often get asked to play in games by their classmates	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids don't have a teacher who cares if they feel bad	BUT	Other kids do have a teacher who cares if they feel bad	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids don't have a close friend who really listens to what they say	BUT	Other kids do have a close friend who really listens to what they say	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have parents who don't act like what their children do is important	BUT	Other kids have parents who do act like what their children do is important	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids often spend recess being alone	BUT	Other kids spend recess playing with their classmates	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids have a teacher who treats them like a person	BUT	Other kids don't have a teacher who treats them like a person	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some kids don't have a close friend who cares about their feelings	BUT	Other kids do have a close friend who cares about their feelings	<input type="checkbox"/>	<input type="checkbox"/>

Appendix E

Multidimensional Anxiety Scale for Children

Directions. This questionnaire asks you how you have been thinking, feeling, or acting recently. For each item, please circle the number that shows how often the statement is true for you. If a sentence is true for you a lot of the time, circle 3. If it is true for you some of the time, circle 2. If it is true for you once in a while, circle 1. If a sentence is hardly ever true about you, circle 0. Remember there are no right or wrong answers, just answer how you have been feeling recently.

Here are two examples to show you how to complete the questionnaire. In Example A, if you were hardly ever scared of dogs, you would circle 1, meaning that the statement is rarely true about you. In Example B, if thunderstorms sometimes upset you, you would circle 2, meaning that the statement is sometimes true about you.

	Never true about me	Rarely true about me	Sometimes true about me	Often true about me
Example A I'm scared of dogs.....	0	1	2	3
Example B Thunderstorms upset me.....	0	1	2	3

Now try these items yourself.

1. I feel tense or upset.....	0	1	2	3
2. I usually ask permission.....	0	1	2	3
3. I worry about other people laughing at me.....	0	1	2	3
4. I get scared when my parents go away.....	0	1	2	3
5. I have trouble getting my breath.....	0	1	2	3
6. I keep my eyes open for danger.....	0	1	2	3
7. The idea of going away to camp scares me.....	0	1	2	3
8. I get shaky or jittery.....	0	1	2	3
9. I try hard to obey my parents and teachers.....	0	1	2	3
10. I'm afraid that other kids will make fun of me.....	0	1	2	3
11. I try to stay near my mom or dad.....	0	1	2	3
12. I get dizzy or faint feelings.....	0	1	2	3
13. I check things out first.....	0	1	2	3
14. I worry about getting called on in class.....	0	1	2	3
15. I'm jumpy.....	0	1	2	3
16. I'm afraid other people will think I'm stupid.....	0	1	2	3
17. I keep the light on at night.....	0	1	2	3
18. I have pains in my chest.....	0	1	2	3
19. I avoid going to places without my family.....	0	1	2	3
20. I feel strange, weird, or unreal.....	0	1	2	3
21. I try to do things other people will like.....	0	1	2	3

22. I worry what other people think of me.....	0	1	2	3
23. I avoid watching scary movies and TV shows.....	0	1	2	3
24. My heart races or skips beats.....	0	1	2	3
25. I stay away from things that upset me.....	0	1	2	3
26. I sleep next to someone from my family.....	0	1	2	3
27. I feel restless and on edge.....	0	1	2	3
28. I try to do everything exactly right.....	0	1	2	3
29. I worry about doing something stupid or embarrassing.....	0	1	2	3
30. I get scared riding in the car or on the bus.....	0	1	2	3
31. I feel sick to my stomach.....	0	1	2	3
32. If I get upset or scared, I let someone know right away.....	0	1	2	3
33. I get nervous if I have to perform in public.....	0	1	2	3
34. Bad weather, the dark, heights, animals, or bugs scare me.....	0	1	2	3
35. My hands shake.....	0	1	2	3
36. I check to make sure things are safe	0	1	2	3
37. I have trouble asking other kids to play with me.....	0	1	2	3
38. My hands feel sweaty or cold.....	0	1	2	3
39. I feel shy.....	0	1	2	3

Appendix F

Reynolds Adolescent Depression Scale

Directions. Listed below are some sentences about how you feel. Read each sentence and decide how often *you* feel this way. Decide if you feel this way: almost never, hardly ever, sometimes, or most of the time. Fill in the circle under the answer that best describes how you really feel. Remember, there are no right or wrong answers. Just choose the answer that tells how you usually feel.

	Almost Never	Hardly Ever	Sometimes	Most of the Time
1. I feel happy				
2. I worry about school				
3. I feel lonely				
4. I feel my parents don't like me				
5. I feel important				
6. I feel like hiding from people				
7. I feel sad				
8. I feel like crying				
9. I feel that no one cares about me				
10. I feel like having fun with other students				
11. I feel sick				
12. I feel loved				
13. I feel like running away				
14. I feel like hurting myself				
15. I feel that other student's don't like me				
16. I feel upset				
17. I feel life is unfair				
18. I feel tired				
19. I feel I am bad				
20. I feel I am no good				
21. I feel sorry for myself				
22. I feel mad about things				
23. I feel like talking to other students				
24. I have trouble sleeping				
25. I feel like having fun				
26. I feel worried				
27. I get stomachaches				
28. I feel bored				
29. I like eating meals				
30. I feel like nothing I do helps anymore				

Appendix G

Multidimensional Peer Victimization Scale

Below is a list of things that some children do to other children. How often during the last school year has another pupil done these things to you? Please answer by putting a tick in one of the three columns for each of the 16 questions.

	Not at all	Once	More than once
1. Punched me			
2. Tried to get me into trouble with my friends			
3. Called me names			
4. Took something of mine without permission			
5. Kicked me			
6. Tried to make my friends turn against me			
7. Made fun of me because of my appearance			
8. Tried to break something of mine			
9. Hurt me physically in some way			
10. Refused to talk to me			
11. Made fun of me for some reason			
12. Stole something from me			
13. Beat me up			
14. Made other people not talk to me			
15. Swore at me			
16. Deliberately damaged some property of mine			

Appendix H

The Bully Survey

Instructions:

In this survey you will be asked to respond to questions and statements about “bullies” and “bullying”.

Bullying is anything from teasing or saying mean things to physical attacks (hitting, pushing, kicking) where one person or a group of people picks on another person over a long time. Bullying refers to things that happen in school but can also include things that happen on the school grounds or going to and from school.

There are three sections to this survey: (A) When you were bullied by others, (B) When you saw other students getting bullied, and (C) When you were a bully.

The Bully Survey - Section A

In this section, you will be asked about times when other students bullied you.

REMEMBER: Bullying is anything from teasing or saying mean things to physical attacks (hitting, pushing, kicking) where one person or a group of people picks on another person over a long time. Bullying refers to things that happen in school but can also include things that happen on the school grounds or going to and from school.

Have you been bullied this school year? (Circle one) Yes No

If you have not been bullied this year, you may move on to Section B.

1. a . Where have you been bullied? Check all the places:

_____ homeroom

_____ cafeteria

_____ academic class

_____ before school

_____ bus

_____ after school

_____ gym

_____ recess

_____ hallway

_____ other: _____

b. Circle the one place you have been bullied the most.

2. **How did you get bullied?** Place a check in the box for how often these things happened.

<u>never</u>	<u>rarely</u>	<u>sometimes</u>	<u>often</u>	<u>always</u>
<u>happened</u>	<u>happened</u>	<u>happened</u>	<u>happened</u>	<u>happened</u>

- a. called me names
- b. made fun of me
- c. said they will do bad things to me
- d. played jokes on me
- e. won't let me be a part of their group
- f. broke my things
- g. attacked me
- h. nobody would talk to me
- i. wrote bad things about me
- j. said mean things behind my back
- k. other: _____

3. Who bullied you most often (check who bullied you):

_____ older boys

_____ older girls

_____ younger boys

_____ younger girls

_____ boys in my grade

_____ girls in my grade

4. How much of a problem was the bullying for you?

never rarely sometimes often always
a problem a problem a problem a problem a problem

a. made me feel sick

b. I couldn't make friends

c. made me feel bad or sad

d. made it difficult to learn at school

e. I had problems with my family

f. Other: _____

5. Why do you think you were bullied? Check all that are true.

Because (Because of):

- | | |
|--|--|
| <input type="checkbox"/> they think my face looks funny | <input type="checkbox"/> the church I go to |
| <input type="checkbox"/> they think I'm fat | <input type="checkbox"/> my parents |
| <input type="checkbox"/> they think I'm skinny | <input type="checkbox"/> my brother |
| <input type="checkbox"/> they think I look too old | <input type="checkbox"/> my sister |
| <input type="checkbox"/> they think I look too young | <input type="checkbox"/> my family is poor |
| <input type="checkbox"/> they think I am a wimp | <input type="checkbox"/> my family has a lot of money |
| <input type="checkbox"/> they think my friends are weird | <input type="checkbox"/> someone in my family has a disability |
| <input type="checkbox"/> I'm sick alot | <input type="checkbox"/> I am too tall |
| <input type="checkbox"/> I'm disabled | <input type="checkbox"/> I am too short |
| <input type="checkbox"/> I get good grades | <input type="checkbox"/> I am in special education |
| <input type="checkbox"/> I get bad grades | <input type="checkbox"/> I get angry a lot |
| <input type="checkbox"/> where I live | <input type="checkbox"/> I cry a lot |
| <input type="checkbox"/> the clothes I wear | <input type="checkbox"/> I can't get along with other people |
| <input type="checkbox"/> the color of my skin | <input type="checkbox"/> they say I'm gay |
| <input type="checkbox"/> the country I'm from | <input type="checkbox"/> the way I talk |
| <input type="checkbox"/> I am different | |

Other: _____

6. What is the main reason you were bullied?

7. Did the teachers and school staff know about the bullying that happened to you?

_____ Yes _____ No

8. How do you think your teachers and school staff took care of the bullying?

_____ Very well _____ Okay _____ Bad _____ I don't know

9. Do you think that schools should worry about bullying?

_____ Yes _____ No

10. Does anyone bully you at home? Check who has bullied you.

_____ father	_____ stepfather	_____ other relative
_____ mother	_____ stepmother	_____ neighbor
_____ brother	_____ grandparent	_____ no one
_____ sister	_____ friend	_____ other:

11. Is the bullying at home different from the bullying at school? How?

The Bully Survey - Section B

In this section, you will be asked about other students you know that have been bullied.

REMEMBER: Bullying is anything from teasing or saying mean things to physical attacks (hitting, pushing, kicking) where one person or a group of people picks on another person over a long time. Bullying refers to things that happen in school but can also include things that happen on the school grounds or going to and from school.

Did you ever see a student in your grade other than yourself who was bullied this school year?

_____ YES

_____ NO

If you do not know any students who have been bullied this year, you may move on to Section C.

1. a . Where was the student bullied? Check all the places:

_____ homeroom

_____ cafeteria

_____ academic class

_____ before school

_____ bus

_____ after school

_____ gym

_____ recess

_____ hallway

_____ other: _____

b. Circle the one place you saw the student bullied the most.

2. **How did this student get bullied?** Place a check in the box for how often these things happened.

never rarely sometimes often always
happened happened happened happened happened

- a. called them names
- b. made fun of them
- c. said they would do bad things to them
- d. played jokes on them
- e. won't let them be a part of their group
- f. broke their things
- g. attacked them
- h. nobody would talk to them
- i. wrote bad things about them
- k. said mean things behind their back

other: _____

3. Who bullied this student? (check who bullied him or her)

_____ older boys

_____ older girls

_____ younger boys

_____ younger girls

_____ boys in my grade

_____ girls in my grade

4. How much was this a problem for this student?

never rarely sometimes often always
a problem a problem a problem a problem a problem

- a. Made them feel sick
- b. They couldn't make friends
- c. Made them feel bad or sad
- d. Made it difficult for them to learn
- e. They had problems with their family

5. Why do you think this student was bullied? (Check all that are true).

Because (Because of) :

- | | |
|--|---|
| <input type="checkbox"/> their face looks funny | <input type="checkbox"/> the church they go to |
| <input type="checkbox"/> they are fat | <input type="checkbox"/> their parents |
| <input type="checkbox"/> they are skinny | <input type="checkbox"/> their brother |
| <input type="checkbox"/> they look too old | <input type="checkbox"/> their sister |
| <input type="checkbox"/> they look too young | <input type="checkbox"/> their family is poor |
| <input type="checkbox"/> they are a wimp | <input type="checkbox"/> their family has a lot of money |
| <input type="checkbox"/> their friends are weird | <input type="checkbox"/> someone in their family is disabled |
| <input type="checkbox"/> they are sick a lot | <input type="checkbox"/> they are too tall |
| <input type="checkbox"/> they are disabled | <input type="checkbox"/> they are too short |
| <input type="checkbox"/> they get good grades | <input type="checkbox"/> they are in special education |
| <input type="checkbox"/> they get bad grades | <input type="checkbox"/> they get angry a lot |
| <input type="checkbox"/> where they live | <input type="checkbox"/> they cry a lot |
| <input type="checkbox"/> the clothes they wear | <input type="checkbox"/> they can't get along with other people |
| <input type="checkbox"/> the color of their skin | <input type="checkbox"/> they are gay |
| <input type="checkbox"/> the country they are from | <input type="checkbox"/> the way they talk |
| <input type="checkbox"/> they are different | |

Other : _____

6. What do you think is the main reason this student was bullied?

7. Did the teachers and school staff know about the bullying that you saw?

_____ Yes _____ No

8. How do you think your teachers and school staff took care of the bullying?

_____ Very well _____ Okay _____ Bad _____ I don't know

The Bully Survey - Section C

In this section, you will be asked about when you bullied other students.

REMEMBER: Bullying is anything from teasing or saying mean things to physical attacks (hitting, pushing, kicking) where one person or a group of people picks on another person over a long time. Bullying refers to things that happen in school but can also include things that happen on the school grounds or going to and from school.

<p>Did you ever bully anyone this school year?</p> <p>_____ YES _____ NO</p> <p>If you never bullied other students this year, go to question #9 and answer the rest of the questions.</p>

1. a . **Where have you bullied someone?** Check all the places:

- | | |
|-----------------------------|----------------------------|
| _____ homeroom | _____ cafeteria |
| _____ academic class | _____ before school |
| _____ bus | _____ after school |
| _____ gym | _____ recess |
| _____ hallway | _____ other: _____ |

b. **Circle the one place you bullied someone the most.**

2. **How did you bully kids?** Place a check in the box for how often these things

never rarely sometimes often always
happened happened happened happened happened

- a. called them names
- b. made fun of them
- c. said bad things to them
- d. played jokes on them
- e. won't let them be a part of my group
- f. broke their things
- g. attacked them
- h. didn't talk to them
- i. wrote bad things about them
- j. said mean things behind their back

other _____

3. Who did you bully? (check who you bullied)

_____ older boys

_____ older girls

_____ younger boys

_____ younger girls

_____ boys in my grade

_____ girls in my grade

4. How much was this a problem for them?

never rarely sometimes often always
a problem a problem a problem a problem a problem

- a. Made them feel sick
- b. They couldn't make friends
- c. Made them feel bad or sad
- d. Made it difficult for them to learn
- e. They had problems with their family

5. Why did you bully them? Check all that are true.

Because (Because of):

- | | |
|---|---|
| <input type="checkbox"/> their face looks funny | <input type="checkbox"/> the church they go to |
| <input type="checkbox"/> they are fat | <input type="checkbox"/> their parents |
| <input type="checkbox"/> they are skinny | <input type="checkbox"/> their brother |
| <input type="checkbox"/> they look too old | <input type="checkbox"/> their sister |
| <input type="checkbox"/> they look too young | <input type="checkbox"/> their family is poor |
| <input type="checkbox"/> they are a wimp | <input type="checkbox"/> their family has a lot of money |
| <input type="checkbox"/> their friends are weird | <input type="checkbox"/> someone in their family has a disability |
| <input type="checkbox"/> they are sick a lot | <input type="checkbox"/> they are too tall |
| <input type="checkbox"/> they are disabled | <input type="checkbox"/> they are too short |
| <input type="checkbox"/> they get good grades | <input type="checkbox"/> they are in special education |
| <input type="checkbox"/> they get bad grades | <input type="checkbox"/> they get angry a lot |
| <input type="checkbox"/> where they live | <input type="checkbox"/> they cry a lot |
| <input type="checkbox"/> the clothes they wear | <input type="checkbox"/> they can't get along with other people |
| <input type="checkbox"/> the color of their skin | <input type="checkbox"/> they are gay |
| <input type="checkbox"/> the country they're from | <input type="checkbox"/> the way they talk |
| <input type="checkbox"/> they are different | |

Other: _____

6. What is the main reason you bully other kids?

7. Did the teachers and school staff know about the bullying that you did?

_____ Yes _____ No

8. How do you think your teachers and school staff took care of the bullying?

_____ Very well _____ Okay _____ Bad _____ I don't know

9. How much do you agree with each sentence?

<u>Totally False</u>	<u>Sort of False</u>	<u>Both True and False</u>	<u>Sort of True</u>	<u>Totally True</u>
--------------------------	--------------------------	--------------------------------	-------------------------	-------------------------

Most people who get bullied ask for it.

Bullying is a problem for kids.

Bullies are liked more than kids who are picked on.

I don't like bullies.

I am afraid of the bullies at my school.

When kids are bullied, it teaches them to be tough

Bullies hurt kids.

I would be friends with a bully.

I can understand why someone would bully other kids.

I think bullies should be punished.

Most bullies don't mean to hurt anybody.

Bullies make kids feel bad

I feel sorry for kids who are bullied.

Being bullied is no big deal.

10. Please write any other ideas you have about bullying and being bullied.

Thanks for your time!

Appendix I

Self-Perception Profile for Adolescents

INSTRUCTIONS: Please listen carefully to the directions provided by the researcher. There are no right or wrong answers. **Remember you are to check only one of the four boxes on each line (NOT one on each side).**

Really True For Me	Sort of True For Me		BUT		Sort of True For Me	Really True For Me
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that they are just as smart as others their age	BUT	Other teenagers aren't so sure and wonder if they are as smart	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers find it hard to make friends	BUT	For other teenagers it's pretty easy	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers do very well at all kinds of sports	BUT	Other teenagers don't feel that they are very good when it comes to sports	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers are <i>not</i> happy with the way they look	BUT	Other teenagers <i>are</i> happy with the way they look	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that they are ready to do well at a part-time job	BUT	Other teenagers feel that they are not quite ready to handle a part-time job	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that if they are romantically interested someone, that person will like them back	BUT	Other teenagers worry that when they like someone romantically, what person <i>won't</i> like them back	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers usually do the right thing	BUT	Other teenagers often don't do what they know is right	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers are able to make really close friends	BUT	Other teenagers find it hard to make really close friends	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers are often disappointed with themselves	BUT	Other teenagers are pretty pleased with themselves	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers are pretty slow in finishing their school work	BUT	Other teenagers can do their school work more quickly	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers have a lot of friends	BUT	Other teenagers don't have very many friends	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers think they could do well at just about any new athletic activity	BUT	Other teenagers are afraid they might not do well at a new athletic activity	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers wish their body was different	BUT	Other teenagers like their body the way it is	<input type="checkbox"/>	<input type="checkbox"/>

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<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that they <i>don't</i> have enough skills to do well at a job	BUT	Other teenagers feel that they <i>do</i> have enough skills to do a job well	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers are <i>not</i> dating the people they are really attracted to	BUT	Other teenagers <i>are</i> dating those people they are attracted to	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers often get in trouble for the things they do	BUT	Other teenagers usually <i>don't</i> do things that get them in trouble	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers do have a close friend they can share secrets with	BUT	Other teenagers do not have a really close friend they can share secrets with	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that they are better than others their age at sports	BUT	Other teenagers don't feel they can play as well	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers wish their physical appearance was different	BUT	Other teenagers like their physical appearance the way it is	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel they are old enough to get and keep a paying job	BUT	Other teenagers do not feel they are old enough, yet, to really handle a job well	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that people their age will be romantically attracted to them	BUT	Other teenagers worry about whether the people their age will be attracted to them	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel really good about the way they act	BUT	Other teenagers <i>don't</i> feel that good about the way they often act	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers wish they had a really close friend to share things with	BUT	Other teenagers <i>do</i> have a close friend to share things with	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers are happy with themselves most of the time	BUT	Other teenagers are often not happy with themselves	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers have trouble figuring out the answers in school	BUT	Other teenagers almost always can figure out the answers	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers are popular with others their age	BUT	Other teenagers are not very popular	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers don't do well at new outdoor games	BUT	Other teenagers are good at new games right away	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers think that they are good looking	BUT	Other teenagers think that they are not very good looking	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel like they could do better at work they do for pay	BUT	Other teenagers feel that they are doing really well at work they do for pay	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that they are fun and interesting on a date	BUT	Other teenagers wonder about how fun and interesting they are on a date	<input type="checkbox"/>	<input type="checkbox"/>

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<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers do things they know they shouldn't do	BUT	Other teenagers hardly ever do things they know they shouldn't do	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers find it hard to make friends they can really trust	BUT	Other teenagers <i>are</i> able to make close friends they can really trust	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers like the kind of person they are	BUT	Other teenagers often wish they were someone else	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that they are pretty intelligent	BUT	Other teenagers question whether they are intelligent	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that they are socially accepted	BUT	Other teenagers wished that more people their age accepted them	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers do not feel that they are very athletic	BUT	Other teenagers feel that they <i>are</i> very athletic	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers really like their looks	BUT	Other teenagers often wish they looked different	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers feel that they are really able to handle the work on a paying job	BUT	Other teenagers wonder if they are really doing as good a job t work as they should be doing	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers usually don't go out with people they would really like to date	BUT	Other teenagers <i>do</i> go out with the people they really want to date	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers usually act the way they know they are supposed to	BUT	Other teenagers often don't act the way they are supposed to	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers don't have a friend that is close enough to share really personal thoughts with	BUT	Other teenagers do have a close friend that they can share personal thoughts and feelings with	<input type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input type="checkbox"/>	Some teenagers are very happy being the way they are	BUT	Other teenagers wish they were different	<input type="checkbox"/>	<input type="checkbox"/>

Table 1

Grade 6 Descriptive Statistics

Scale	Subscale	Alpha's		Manual			Study			Scale Range	Study Range
		Manual	Study	Mean	(SD)	Mean	(SD)	Mean	(SD)		
PVS	PVS		.84				Boys	2.85	(0.71)	1.00-4.00	1.00-4.00
						Girls	3.10	(0.74)	1.00-4.00		
SPPC	SOAC	.75- .80	.75	Boys	2.95-3.06	(.50-.76)	Boys	2.92	(0.63)	1.00-4.00	1.33-4.00
				Girls	2.86-2.98	(.69-.79)	Girls	3.09	(0.64)		1.00-4.00
	GSW	.78- .84	.80	Boys	2.97-3.20	(.60-.67)	Boys	3.18	(0.58)	1.00-4.00	1.00-4.00
				Girls	3.01-3.10	(.58-.68)	Girls	3.21	(0.62)		1.33-4.00
SSSC	PSUP	.86- .88	.78	Boys	3.03-3.40	(.60-.80)	Boys	3.46	(0.55)	1.00-4.00	1.50-4.00
				Girls	3.37-3.42	(.63-.70)	Girls	3.58	(0.49)		2.17-4.00
	CSUP	.74- .78	.73	Boys	2.87-3.11	(.60-.67)	Boys	3.07	(0.54)	1.00-4.00	1.50-4.00
				Girls	3.15-3.17	(.62-.63)	Girls	3.26	(0.55)		1.33-4.00
	TSUP	.84	.85	Boys	2.91-3.09	(.67-.68)	Boys	3.24	(0.66)	1.00-4.00	1.00-4.00
				Girls	3.14-3.25	(.63-.64)	Girls	3.33	(0.69)		1.00-4.00
MASC	PHYS	.84- .87	.81	Boys	8.74	(6.16)	Boys	9.62	(5.82)	0-36.00	1.00-33.00
				Girls	11.36	(7.00)	Girls	10.09	(6.24)		0-31.00
	SAST	.83- .84	.82	Boys	8.32	(5.38)	Boys	10.49	(5.71)	0-27.00	0-24.00
			Girls	10.03	(5.59)	Girls	11.39	(5.75)	0-24.00		
	MASCT	.88- .89	.87	Boys	36.70	(14.35)	Boys	40.96	(14.48)	0-117.00	5.00-78.00
				Girls	44.23	(14.44)	Girls	45.64	(15.21)		3.00-88.00
RADS	Total	.93	.91	Boys	57.51	(13.41)	Boys	56.53	(13.54)	30-120.00	32.00-96.00
				Girls	62.85	(14.66)	Girls	56.04	(14.21)		31.00-90.00

Note. PVS = Peer Victimization Scale; SOAC = Social Acceptance; GSW = Global Self-Worth; PSUP = Parent Support;

CSUP = Classmate Support; TSUP = Teacher Support; FSUP = Close Friend Support; PHYS = Physical Symptoms of

Anxiety; SAST = Social Anxiety; MASCT = Total Anxiety; RADS = Total Depression.

Table 2

Grade 8 Scale Descriptive Statistics

Scale	Subscale	Alpha's		Manual			Study			Scale Range	Study Range
		Manual	Study	Mean	(SD)	Mean	(SD)	Mean	(SD)		
MPVS	MPVS		.87				Boys	14.23	(6.72)	0-32.00	0-31.00
							Girls	10.36	(7.24)		0-30.00
SPPA	SOAC	.81-.90	.81	Total Sample	2.9-3.1	(.59-.72)	Boys	2.21	(0.50)	1.00-4.00	0.83-3.33
						Girls	2.53	(0.49)	1.50-3.33		
	GSW	.80-.89	.83	Total Sample	3.0-3.1	(.58-.59)	Boys	2.42	(0.55)	1.00-4.00	0.83-3.33
						Girls	2.49	(0.54)	1.33-3.33		
SSSC	PSUP	.86-.88	.83	Boys	3.20	(.58)	Boys	3.09	(0.71)	1.00-4.00	1.33-4.00
				Girls	3.23	(.72)	Girls	3.41	(0.53)		1.83-4.00
	CSUP	.74-.78	.53	Boys	3.05	(.50)	Boys	2.78	(0.46)	1.00-4.00	1.67-3.83
				Girls	3.20	(.57)	Girls	3.18	(0.52)		2.00-4.00
	TSUP	.84-.84	.82	Boys	3.05	(.59)	Boys	2.87	(0.59)	1.00-4.00	1.67-4.00
				Girls	3.17	(.62)	Girls	3.11	(0.65)		1.33-4.00
	FSUP	.77-.83	.87	Boys	3.08	(.64)	Boys	2.92	(0.64)	1.00-4.00	1.17-4.00
				Girls	3.42	(.68)	Girls	3.44	(0.64)		2.00-4.00
MASCT	PHYS	.84-.87	.80	Boys	8.74	(6.16)	Boys	8.80	(5.35)	0-36.00	1.00-19.00
				Girls	11.36	(7.00)	Girls	10.24	(5.86)		0-25.00
	SAST	.83-.84	.85	Boys	8.32	(5.38)	Boys	10.02	(6.34)	0-27.00	0-25.00
			Girls	10.03	(5.59)	Girls	11.62	(5.89)	0-27.00		
	MASCT	.88-.89	.89	Boys	36.70	(14.35)	Boys	37.48	(15.40)	0-117.00	8.00-71.00
				Girls	44.23	(14.44)	Girls	43.96	(14.56)		20.00-81.00
RADS	Total	.91	.91	Boys	57.51	(13.41)	Boys	56.86	(13.75)	30-120.00	38.00-99.00
				Girls	62.85	(14.66)	Girls	57.49	(13.48)		34.00-92.00

Note. MPVS = Multidimensional Peer Victimization Scale; SOAC = Social Acceptance; GSW = Global Self-Worth; PSUP =

Parent Support; CSUP = Classmate Support; TSUP = Teacher Support; FSUP = Close Friend Support; PHYS = Physical

Symptoms of Anxiety; SAST = Social Anxiety; MASCT = Total Anxiety; RADS = Total Depression.

Table 3

T-tests for Grade 6

Scale	Subscale		N	Mean	SD	T (df)	Sig																																																																																																																				
PVS	Total	Boys	133	2.85	0.71	2.819 (269)	.005																																																																																																																				
		Girls	138	3.10	0.74			SPPC	GSW	Boys	133	3.18	0.58	0.391 (269)	ns	Girls	138	3.21	0.62		SOAC	Boys	133	2.92	0.63	2.210 (269)	.028	Girls	138	3.09	0.64	SSSC	PSUP	Boys	133	3.46	0.55	1.795 (269)	ns	Girls	138	3.58	0.49		CSUP	Boys	133	3.07	0.54	2.923 (269)	.004	Girls	138	3.26	0.55		TSUP	Boys	133	3.24	0.66	1.103 (269)	ns	Girls	138	3.33	0.69		FSUP	Boys	133	3.26	0.67	6.012 (269)	.000	Girls	138	3.69	0.48	MASC	PHYS	Boys	137	9.62	5.82	0.641 (275)	ns	Girls	140	10.09	6.24		SAST	Boys	137	10.49	5.71	1.302 (275)	ns	Girls	140	11.39	5.75		Total	Boys	137	40.96	14.48	2.621 (275)	.009	Girls	140	45.64	15.21	RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns
SPPC	GSW	Boys	133	3.18	0.58	0.391 (269)	ns																																																																																																																				
		Girls	138	3.21	0.62				SOAC	Boys	133	2.92	0.63	2.210 (269)	.028	Girls	138	3.09	0.64	SSSC	PSUP	Boys	133	3.46	0.55	1.795 (269)	ns	Girls	138	3.58	0.49		CSUP	Boys	133	3.07	0.54	2.923 (269)	.004	Girls	138	3.26	0.55		TSUP	Boys	133	3.24	0.66	1.103 (269)	ns	Girls	138	3.33	0.69		FSUP	Boys	133	3.26	0.67	6.012 (269)	.000	Girls	138	3.69	0.48	MASC	PHYS	Boys	137	9.62	5.82	0.641 (275)	ns	Girls	140	10.09	6.24		SAST	Boys	137	10.49	5.71	1.302 (275)	ns	Girls	140	11.39	5.75		Total	Boys	137	40.96	14.48	2.621 (275)	.009	Girls	140	45.64	15.21	RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns	Girls	140	56.04	14.21								
	SOAC	Boys	133	2.92	0.63	2.210 (269)	.028																																																																																																																				
		Girls	138	3.09	0.64			SSSC	PSUP	Boys	133	3.46	0.55	1.795 (269)	ns	Girls	138	3.58	0.49		CSUP	Boys	133	3.07	0.54	2.923 (269)	.004	Girls	138	3.26	0.55		TSUP	Boys	133	3.24	0.66	1.103 (269)	ns	Girls	138	3.33	0.69		FSUP	Boys	133	3.26	0.67	6.012 (269)	.000	Girls	138	3.69	0.48	MASC	PHYS	Boys	137	9.62	5.82	0.641 (275)	ns	Girls	140	10.09	6.24		SAST	Boys	137	10.49	5.71	1.302 (275)	ns	Girls	140	11.39	5.75		Total	Boys	137	40.96	14.48	2.621 (275)	.009	Girls	140	45.64	15.21	RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns	Girls	140	56.04	14.21																				
SSSC	PSUP	Boys	133	3.46	0.55	1.795 (269)	ns																																																																																																																				
		Girls	138	3.58	0.49				CSUP	Boys	133	3.07	0.54	2.923 (269)	.004	Girls	138	3.26	0.55		TSUP	Boys	133	3.24	0.66	1.103 (269)	ns	Girls	138	3.33	0.69		FSUP	Boys	133	3.26	0.67	6.012 (269)	.000	Girls	138	3.69	0.48	MASC	PHYS	Boys	137	9.62	5.82	0.641 (275)	ns	Girls	140	10.09	6.24		SAST	Boys	137	10.49	5.71	1.302 (275)	ns	Girls	140	11.39	5.75		Total	Boys	137	40.96	14.48	2.621 (275)	.009	Girls	140	45.64	15.21	RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns	Girls	140	56.04	14.21																																
	CSUP	Boys	133	3.07	0.54	2.923 (269)	.004																																																																																																																				
		Girls	138	3.26	0.55				TSUP	Boys	133	3.24	0.66	1.103 (269)	ns	Girls	138	3.33	0.69		FSUP	Boys	133	3.26	0.67	6.012 (269)	.000	Girls	138	3.69	0.48	MASC	PHYS	Boys	137	9.62	5.82	0.641 (275)	ns	Girls	140	10.09	6.24		SAST	Boys	137	10.49	5.71	1.302 (275)	ns	Girls	140	11.39	5.75		Total	Boys	137	40.96	14.48	2.621 (275)	.009	Girls	140	45.64	15.21	RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns	Girls	140	56.04	14.21																																												
	TSUP	Boys	133	3.24	0.66	1.103 (269)	ns																																																																																																																				
		Girls	138	3.33	0.69				FSUP	Boys	133	3.26	0.67	6.012 (269)	.000	Girls	138	3.69	0.48	MASC	PHYS	Boys	137	9.62	5.82	0.641 (275)	ns	Girls	140	10.09	6.24		SAST	Boys	137	10.49	5.71	1.302 (275)	ns	Girls	140	11.39	5.75		Total	Boys	137	40.96	14.48	2.621 (275)	.009	Girls	140	45.64	15.21	RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns	Girls	140	56.04	14.21																																																								
	FSUP	Boys	133	3.26	0.67	6.012 (269)	.000																																																																																																																				
		Girls	138	3.69	0.48			MASC	PHYS	Boys	137	9.62	5.82	0.641 (275)	ns	Girls	140	10.09	6.24		SAST	Boys	137	10.49	5.71	1.302 (275)	ns	Girls	140	11.39	5.75		Total	Boys	137	40.96	14.48	2.621 (275)	.009	Girls	140	45.64	15.21	RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns	Girls	140	56.04	14.21																																																																				
MASC	PHYS	Boys	137	9.62	5.82	0.641 (275)	ns																																																																																																																				
		Girls	140	10.09	6.24				SAST	Boys	137	10.49	5.71	1.302 (275)	ns	Girls	140	11.39	5.75		Total	Boys	137	40.96	14.48	2.621 (275)	.009	Girls	140	45.64	15.21	RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns	Girls	140	56.04	14.21																																																																																
	SAST	Boys	137	10.49	5.71	1.302 (275)	ns																																																																																																																				
		Girls	140	11.39	5.75				Total	Boys	137	40.96	14.48	2.621 (275)	.009	Girls	140	45.64	15.21	RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns	Girls	140	56.04	14.21																																																																																												
	Total	Boys	137	40.96	14.48	2.621 (275)	.009																																																																																																																				
		Girls	140	45.64	15.21			RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns	Girls	140	56.04	14.21																																																																																																								
RADS	Total	Boys	137	56.53	13.54	-0.298 (275)	ns																																																																																																																				
		Girls	140	56.04	14.21																																																																																																																						

Note. PVS = Peer Victimization; SPPC = Self-Perception Profile for Children; GSW = Global Self-Worth; SOAC = Social Acceptance; SSSC = Social Support Scale for Children; PSUP = Parent Support; CSUP = Classmate Support; TSUP = Teacher Support; FSUP = Close Friend Support; MASC = Multidimensional Anxiety Scale for Children; PHYS = Physical Symptoms of Anxiety; SAST = Social Anxiety; MASCT = Total Anxiety; RADS = Reynolds Adolescent Depression Scale; ns = non-significant.

Table 4

T-tests for Grade 8

Scale	Subscale		N	Mean	SD	T (df)	Sig
MPVS	Total	Boys	44	14.23	6.72	-2.613 (87)	.011
		Girls	45	10.36	7.24		
SPPA	GSW	Boys	44	2.42	0.55	-0.588 (86)	ns
		Girls	44	2.49	0.54		
	SOAC	Boys	44	2.21	0.50	-2.987 (86)	.004
		Girls	44	2.53	0.59		
SSSC	PSUP	Boys	44	3.09	0.71	-2.411 (87)	.018
		Girls	45	3.41	0.53		
	CSUP	Boys	44	2.78	0.46	-3.876 (87)	.000
		Girls	45	3.18	0.52		
	TSUP	Boys	44	2.87	0.64	-1.751 (87)	ns
		Girls	45	3.11	0.65		
	FSUP	Boys	44	2.92	0.67	-3.786 (87)	.000
		Girls	45	3.44	0.64		
MASC	PHYS	Boys	44	8.80	5.35	-1.217 (87)	ns
		Girls	45	10.24	5.86		
	SAST	Boys	44	10.02	6.34	-1.234 (87)	ns
		Girls	45	11.62	5.89		
	Total	Boys	44	37.48	15.40	-2.039 (87)	.044
		Girls	45	43.96	14.56		
RADS	Total	Boys	44	56.86	13.75	-0.217 (87)	ns
		Girls	45	57.49	13.47		

Note. MPVS = Multidimensional Peer Victimization Scale; SPPA = Self-Perception

Profile for Adolescents; GSW = Global Self-Worth; SOAC = Social Acceptance; SSSC =

Social Support Scale for Children; PSUP = Parent Support; CSUP = Classmate Support;

TSUP = Teacher Support; FSUP = Close Friend Support; MASC = Multidimensional

Anxiety Scale for Children; PHYS = Physical Symptoms of Anxiety; SAST = Social

Anxiety; MASCT = Total Anxiety; RADS = Reynolds Adolescent Depression Scale; ns

= non-significant.

Table 5

Sample Reported Peer Victimization by Grade and Gender

Scale	Grade	Gender	\bar{X}	SD	$\bar{X} + 1 \text{ SD}$	N (%)
PVS	6	Boys	2.15	.72	2.87	20 (16.1%)
		Girls	1.88	.73	2.61	24 (17.4%)
MPVS	8	Boys	14.23	6.72	20.95	12 (27.4%)
		Girls	10.36	7.24	17.60	6 (13.3%)

Note. PVS = Peer Victimization Scale; MPVS = Multidimensional Peer Victimization Scale.

Table 6

Eighth Grade Scale Differences by Group (MANOVA and Tukey's HSD)

	Victim (n = 32)	Bully- Victim (n = 27)	Not Involved (n = 26)	<i>df</i>	<i>F</i>
SAST	12.78 _a	11.22	8.31 _b	2, 84	4.14*
PHYS	11.63 _a	10.44 _a	6.69 _b	2, 84	6.59**
MASCT	47.69 _a	39.85	34.50 _b	2, 84	6.04**
RADS	62.16 _a	59.15 _a	50.23 _b	2, 84	6.41**
GSW	2.54 _a	2.19 _b	2.60 _a	2, 84	4.89**
SOAC	2.25	2.39	2.47	2, 84	1.46
PSUP	3.25	3.16	3.29	2, 84	0.27
CSUP	2.84 _a	2.85 _a	3.18 _b	2, 84	4.11*
TSUP	3.06	2.86	2.96	2, 84	0.66
FSUP	3.15	3.04	3.29	2, 84	0.86

Note. Means having different subscripts differ significantly at $p < .05$ in the Tukey

honestly significant difference comparison. SAST = Social Anxiety; PHYS = Physical Symptoms of Anxiety; MASCT = Total Anxiety; RADS = Total Depression; GSW = Global Self-Worth; SOAC = Social Acceptance; PSUP = Parent Support; CSUP = Classmate Support; TSUP = Teacher Support; FSUP = Close Friend Support.

* $p \leq .05$; ** $p \leq .01$.

Table 7

Correlations among Sixth Grade Predictor Variables

	PVS
GSW	.34 [*] .47 ^{**}
SOAC	.46 ^{**} .39 ^{**}
PSUP	.12 .24
CSUP	.58 ^{**} .52 ^{**}
TSUP	-.01 .10
FSUP	.47 ^{**} .22

Note. Correlations for boys (n = 37) are reported above those for girls (n = 39); PVS = Peer Victimization Scale; GSW = Global Self-Worth; SOAC = Social Acceptance; PSUP = Parent Support; CSUP = Classmate Support; TSUP = Teacher Support; FSUP = Close Friend Support.

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

Table 8

Correlations among Sixth Grade Predictor and Eighth Grade Criterion Variables

		Predictor Variables						
		PVS	GSW	SOAC	PSUP	CSUP	TSUP	FSUP
Criterion Variables	PHYS	-.11	-.35*	-.25	-.03	-.23	.02	.18
		-.26	-.39**	-.20	.05	-.17	-.19	-.20
	SAST	-.19	-.47**	-.30*	.05	-.35*	.05	.13
		-.35*	-.41**	-.51**	-.13	-.24	-.28*	-.33*
	MASCT	-.09	-.26	-.27*	.11	-.18	.11	.26
-.25		-.26	-.42**	.05	-.15	-.15	-.27*	
RADS	-.36*	-.56**	-.38**	-.17	-.40**	.04	.07	
	-.21	-.42**	-.26	-.04	-.15	-.12	-.17	

Note. Correlations for boys (n = 37) are reported above those for girls (n = 39); PVS =

Peer Victimization Scale; GSW = Global Self-Worth; SOAC = Social Acceptance; PSUP =

Parent Support; CSUP = Classmate Support; TSUP = Teacher Support; FSUP = Close

Friend Support; PHYS = Physical Symptoms of Anxiety; SAST = Social Anxiety;

MASCT = Total Anxiety; RADS = Total Depression.

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

Table 9

Summary of Hierarchical Regression Analyses for Mediation of Sixth Grade Global Self-Worth in the Grade Six Peer Victimization to Grade Eight Depression Relation - Boys
($n = 36$)

Variable	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1			
PVS	-.946	.418	-.357*
Step 2			
PVS	-.499	.390	-.189
GSW	-2.184	.650	-.496**

Note. $R^2 = .13$ for Step 1 ($p < .05$); $\Delta R^2 = .22$ for Step 2 ($p < .01$). PVS = Peer

Victimization Scale; GSW = Global Self-Worth.

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

Table 10

Summary of Hierarchical Regression Analyses for Mediation of Sixth Grade Social Acceptance in the Grade Six Peer Victimization to Grade Eight Social Anxiety Relation – Girls (n = 38)

Variable	<u>B</u>	<u>SE B</u>	<u>β</u>
Step 1			
PVS	-.500	.221	-.349*
Step 2			
PVS	-.253	.219	-.177
SOAC	-.674	.231	-.445**

Note. $R^2 = .12$ for Step 1 ($p < .05$); $\Delta R^2 = .17$ for Step 2 ($p < .01$). PVS = Peer

Victimization Scale; SOAC = Social Acceptance.

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

Table 11

Summary of Hierarchical Regression Analyses for Moderation of Sixth Grade Teacher Support in the Grade Six Peer Victimization to Grade Eight Depression Relation – Boys (n = 36)

Variable	<u>B</u>	<u>SE B</u>	<u>β</u>	<u>T</u>
Step 1				
PVS	-.946	.418	-.357	-2.264*
Step 2				
PVS	-.945	.424	-.357	-2.231*
TSUP	.111	.534	.033	.207
Step 3				
PVS	-.996	.404	-.376	-2.464*
TSUP	-.224	.533	-.067	-.421
PVS x TSUP	-.208	.098	-.338	-2.116*

Note. $R^2 = .13$ for Step 1 ($p < .05$); $\Delta R^2 = .001$ for Step 2 (*ns*); $\Delta R^2 = .104$ for Step 3 ($p < .05$). PVS = Peer Victimization Scale; TSUP = Teacher Support.

* $p < .05$.

Table 12

Summary of Hierarchical Regression Analyses for Moderation of Sixth Grade Teacher Support in the Grade Six Peer Victimization to Grade Eight Social Anxiety Relation – Boys (n = 36)

Variable	<u>B</u>	<u>SE B</u>	<u>β</u>	<u>T</u>
Step 1				
PVS	-.258	.226	-.190	-1.143
Step 2				
PVS	-.257	.229	-.189	-1.125
TSUP	.089	.289	.052	.308
Step 3				
PVS	-.287	.216	-.211	-1.3321
TSUP	-.108	.285	-.063	-.379
PVS x TSUP	-.122	.053	-.386	-2.327*

Note. $R^2 = .008$ for Step 1 (*ns*); $\Delta R^2 = .003$ for Step 2 (*ns*); $\Delta R^2 = .136$ for Step 3 ($p < .05$). PVS = Peer Victimization Scale; TSUP = Teacher Support.

* $p < .05$.

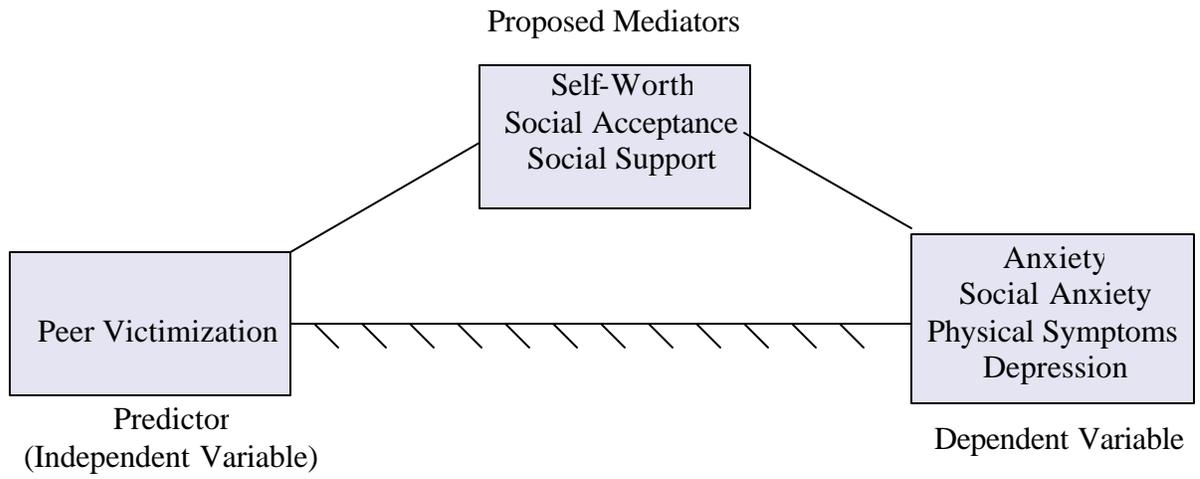


Figure 1. General mediator model. IV

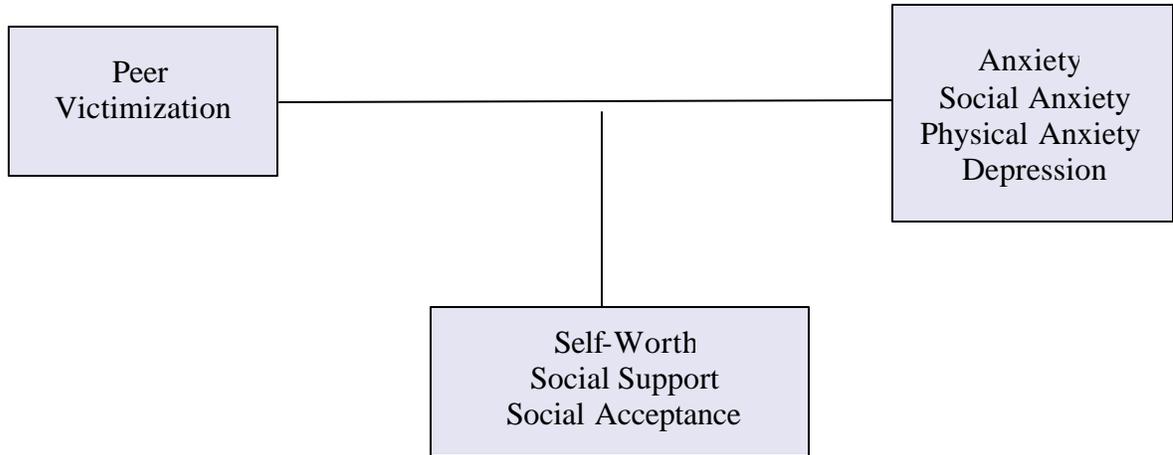


Figure 2. General moderator model.

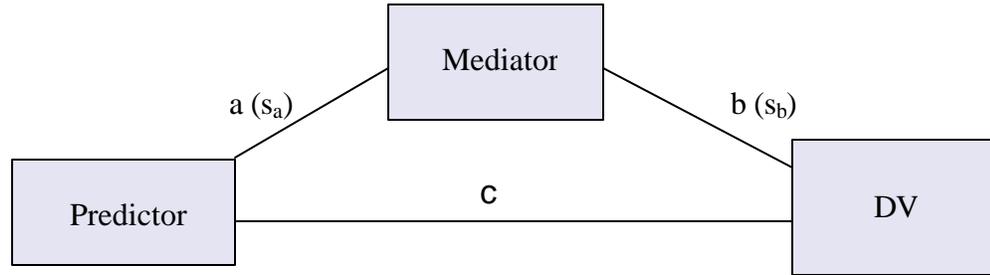


Figure 3. Mediator model with path coefficients and standard errors.

a = unstandardized regression coefficient for the association between predictor-mediator; s_a = standard error of a ; b = unstandardized coefficient for the association between mediator-DV (with the predictor in the model); s_b = standard error of b .

$$b_{\text{indirect effect}} = b_{(a)} * b_{(b)}$$

$$se_{\text{indirect effect}} = [(b_a^2)(se_{b,c}^2) + (b_{b,c}^2)(se_a^2)]^{1/2}$$

$$Z = b_{\text{indirect effect}} / se_{\text{indirect effect}}$$

$$\text{variance} = b_{\text{indirect effect}} / b_{\text{total effect}}$$

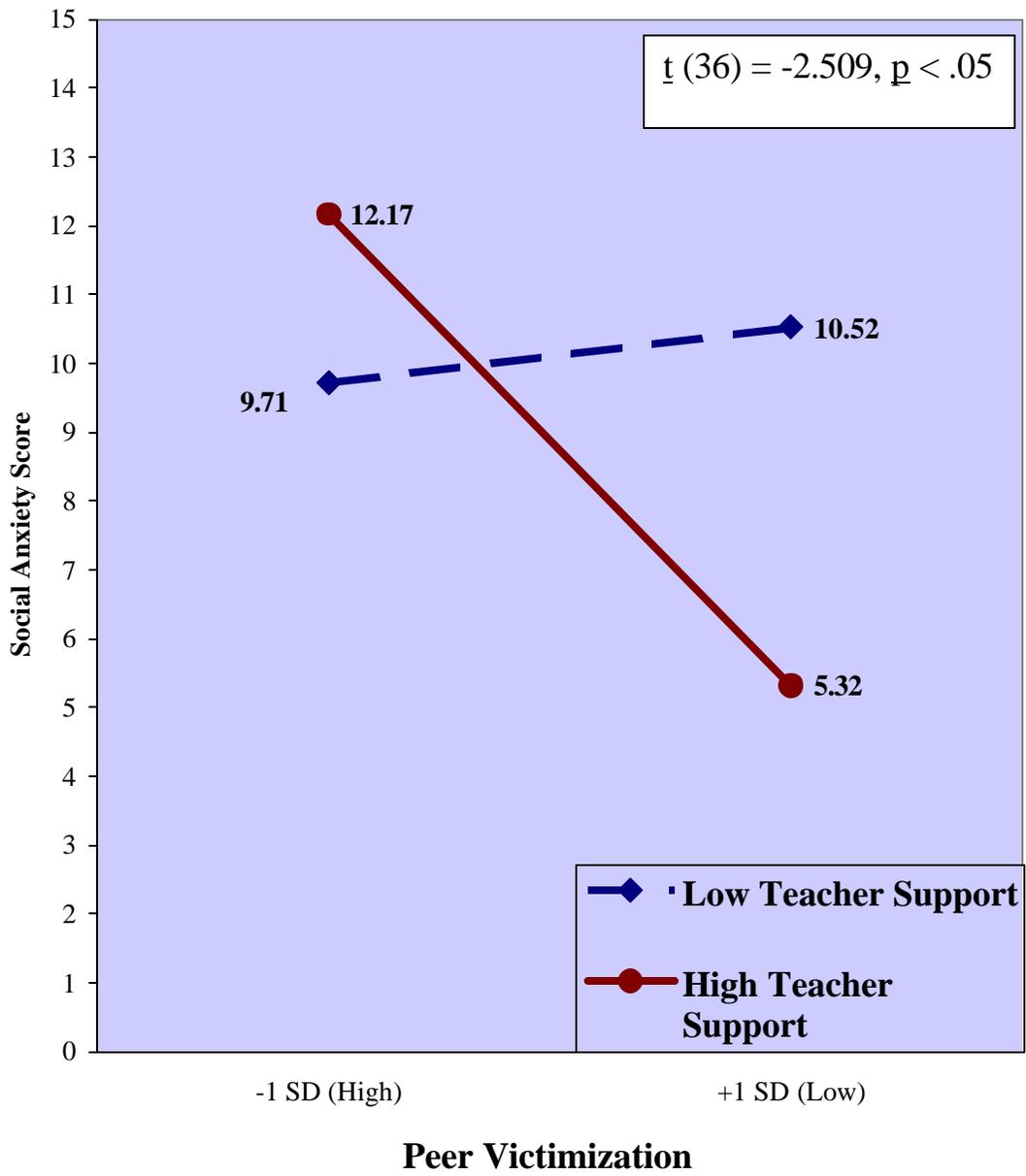


Figure 4. Teacher support at grade six as a moderator of sixth grade peer victimization and grade eight social anxiety in boys.

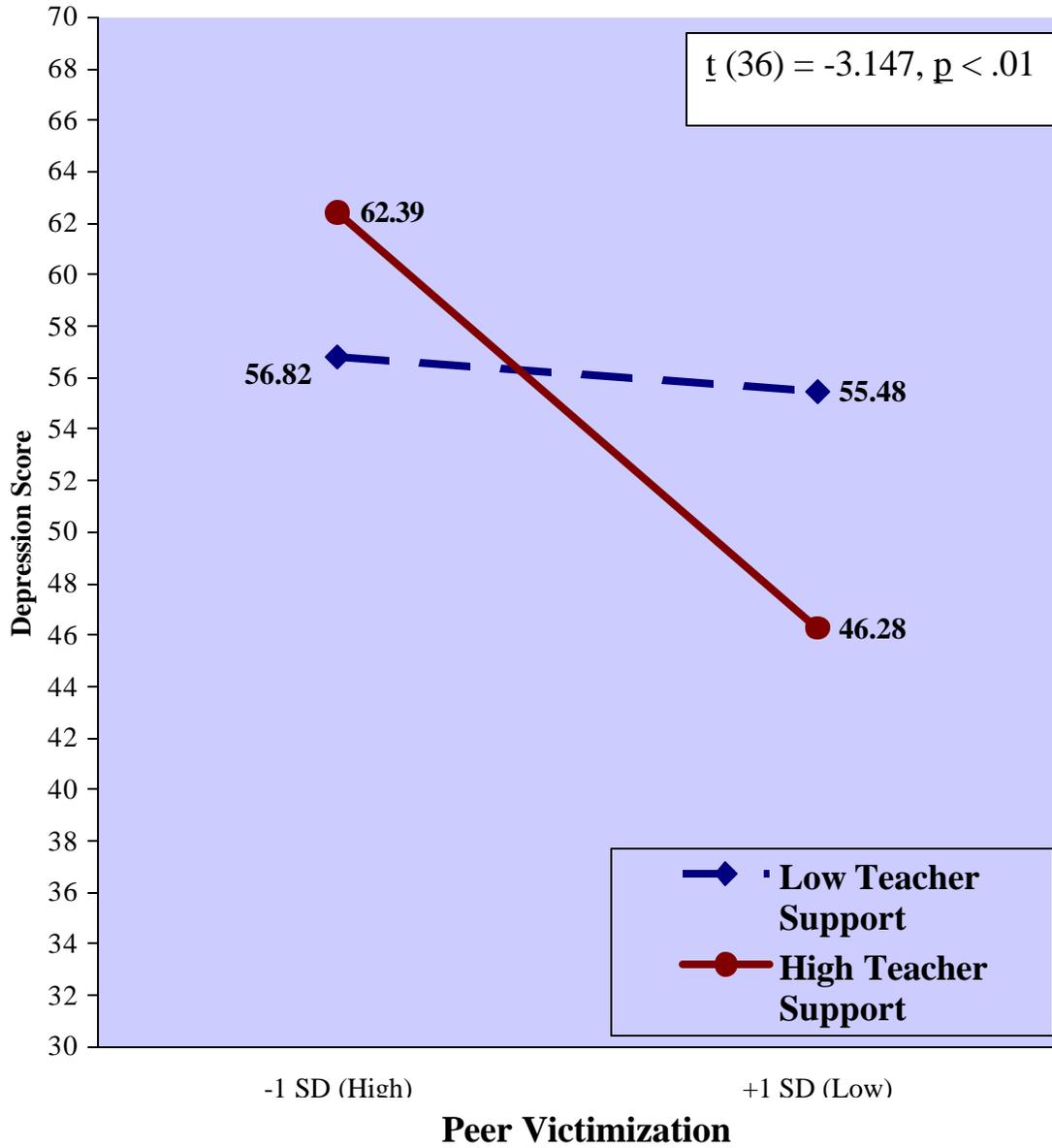


Figure 5. Teacher support at grade six as a moderator of sixth grade peer victimization and grade eight depression in boys.

Amie E. Grills

EDUCATION

1994-1998 *Smith College, Northampton, MA* GPA.: 3.8,
Major GPA.: 3.9

A.B.: Psychology, with a concentration in Clinical Psychology
Honors: Departmental High Honors, Magna Cum Laude, Phi Beta Kappa Dean's List (1994-1998); First Group Scholar (1995-1996; 1997-1998); Psi Chi; Sigma Xi

1998-present *Virginia Polytechnic Institute and State University, Blacksburg, VA* GPA: 3.8
Clinical Psychology, APA Accredited Program

M.S.: August, 2000
Internship: Medical University of South Carolina/Charleston Consortium
Ph.D.: Expected May, 2003
Awards: Galper Memorial Conference Award (2001)
Graduate Student Assembly Research and Travel Award (2001)
Association for the Advancement of Behavior Therapy-Elsie Ramos Memorial Student Poster Award (2001)
Anxiety Disorders Association of America Trainee Travel Award (2002)

RESEARCH EXPERIENCE

**Dissertation, Virginia Polytechnic Institute and State University
(Oct 2001-present)**

“Long-term relations among peer victimization and internalizing symptoms in children”

**Preliminary Examination Paper, Virginia Polytechnic Institute and State University
(May 2001-Aug 2001)**

“Issues in parent-child agreement: The case of structured diagnostic interviews”

**Masters Thesis, Virginia Polytechnic Institute and State University
(Aug 1998-Aug 2000)**

“The relationship between peer victimization and internalizing symptomology”

**Honors Research Thesis, Smith College
(Sep 1997-Apr 1998)**

“Multiple informant reliability and the prediction of socially anxious behavior in children.”

**Research Assistant, Virginia Polytechnic Institute and State University
(Jun 2000-June 2002)**

Integrated and managed large-scale clinical and research databases; Conducted reliability analyses on clinical diagnoses; Trained graduate clinicians in child assessment administration; Supervised child assessment clinic.

PROFESSIONAL PRESENTATIONS AND PUBLICATIONS

Journal Articles (Refereed)

Ollendick, T. H., Grills, A. E., & King, N. J. (2001). Applying developmental theory to the assessment and treatment of childhood disorders: Does it make a difference? *Clinical Psychology and Psychotherapy*, 8, 304-314.

- Grills, A. E., & Ollendick, T. H. (2002). Peer victimization, global self-worth, and anxiety in middle school children. *Journal of Clinical Child and Adolescent Psychology, 31*, 59-68.
- Grills, A. E., & Ollendick, T. H. (2002). Issues in parent-child agreement: The case of structured diagnostic interviews. *Clinical Child and Family Psychology Review, 5*, 57-83.
- Grills, A. E., & Ollendick, T. H. (2003). Multiple informant agreement and the Anxiety Disorders Interview Schedule for Parents and Children. *Journal of the American Academy of Child and Adolescent Psychiatry.*
- DiBartolo, P. M., & Grills, A. E. (Manuscript in preparation). *Multiple informant reliability and the prediction of socially anxious behavior in children.*
- Grills, A. E., Blier, H. B., & Ollendick, T. H. (Manuscript in preparation). *The prediction of internalizing symptoms and victimization experiences in adolescents: A longitudinal study.*
- Ollendick, T. H., & Grills, A. E. (Manuscript in preparation). *The Multidimensional Anxiety Scale for Children: Factor structure, convergent, and discriminant validity in a new clinical outpatient sample.*

Book Chapters

- Ollendick, T. H., Grills, A. E., & Alexander, K. (2001). Fear and anxiety in children and adolescents. In C. A. Essau and F. Petermann (Eds.), *Anxiety in Children and Adolescents: Epidemiology, Risk Factors, and Treatment*. London: Harwood Academic Publishers.
- Grills, A. E., & Ollendick, T. H. (in press). Participant modeling. In T. H. Ollendick and C. S. Schroeder (Eds.), *Encyclopedia of Clinical Child and Pediatric Psychology*. New York: Kluwer Academic/Plenum Publishers.
- Grills, A. E., & Ollendick, T. H. (in press). Systematic desensitization. In T. H. Ollendick and C. S. Schroeder (Eds.), *Encyclopedia of Clinical Child and Pediatric Psychology*. New York: Kluwer Academic/Plenum Publishers.
- Ollendick, T. H., Blier, H. K., & Grills, A. E. (in press). Behavior therapy. In T. H. Ollendick and C. S. Schroeder (Eds.), *Encyclopedia of Clinical Child and Pediatric Psychology*. New York: Kluwer Academic/Plenum Publishers.
- Swearer, S. M., Grills, A. E., & Haye, K. M. (in press). An examination of depression, anxiety, hopelessness, and bully/victim status. In D. L. Espelage and S. M. Swearer (Eds.), *A Social-Ecological Perspective on Bullying Prevention and Intervention in American Schools*. Mahwah, NJ: Lawrence Erlbaum Associates.

Conference Presentations

- Grills, A. E., & DiBartolo, P. M. (1997, November). *The influence of perfectionism and social anxiety on perceived self-efficacy in school-age children*. Poster session presented at the annual meeting of the Association for the Advancement of Behavior Therapy, Miami, FL.
- Grills, A. E., & DiBartolo, P. M. (1999, March). Multiple informant reliability and the prediction of socially anxious behavior in children. In M. Patterson & S. A. Tracey (Chairs), *Assessment and treatment of social phobia in children and adolescents: Understanding the role of the family*. Symposium conducted at the annual meeting of the Anxiety Disorders Association of America, San Diego, CA.

- Ollendick, T. H., & Grills, A. E. (2000, March). Self-efficacy, outcome expectancy, and social anxiety in socially withdrawn and neglected children. In T. L. Morris & C. L. Masia (Chairs), *Social phobia: Biological and environmental influences*. Symposium conducted at the annual meeting of the Anxiety Disorders Association of America, Washington, DC.
- Wintersteen, M. B., Rogers, D. T., Wahler, R. G., Grills, A. E., & Ollendick, T. H. (2000, October). *Assessment informed treatment across two clinical training programs*. Poster session presented at the meeting of the Kansas Conference in Clinical Child Psychology, Lawrence, KS.
- Grills, A. E., & Ollendick, T. H. (2001, March). Peer victimization and social anxiety in middle school children. In T. H. Ollendick (Chair), *Developments in the psychopathology of social anxiety/phobia*. Symposium conducted at the annual meeting of the Anxiety Disorders Association of America, Atlanta, GA.
- Grills, A. E., Francisco, J., & Ollendick, T. H. (2001, March). *Discriminant validity of three self-report measures of anxiety*. Poster session presented at the annual meeting of the Anxiety Disorders Association of America, Atlanta, GA.
- Grills, A. E. (Discussant). (2001, July). In T. H. Ollendick (Chair), *Structured clinical interviews with children and parents: The anxiety disorders interview schedule for children (ADIS-C-IV)*. Clinical Roundtable conducted at the meeting of the World Congress of Behavior and Cognitive Therapy, Vancouver, Canada.
- Grills, A. E., & Ollendick, T. H. (2001, July). *Reliability of the factor structure, internal consistency, and convergent validity of the Multidimensional Anxiety Scale for Children in a new sample of outpatient children*. Poster session presented at the meeting of the World Congress of Behavior and Cognitive Therapy, Vancouver, Canada.
- Grills, A. E., & Ollendick, T. H. (2001, July). *Peer victimization, global self-worth, social support, and internalizing symptoms in middle school children*. Poster session presented at the meeting of the World Congress of Behavior and Cognitive Therapy, Vancouver, Canada.
- Grills, A. E., & Ollendick, T. H. (2001, July). *An examination of multiple informant agreement and variables which may influence agreement using the anxiety disorders interview schedule*. Poster session presented at the meeting of the World Congress of Behavior and Cognitive Therapy, Vancouver, Canada.
- Grills, A. E. (Chair). (2001, November). *The psychopathology of anxiety disorders in children*. Symposium conducted at the annual meeting of the Association for the Advancement of Behavior Therapy, Philadelphia, PA.
- Grills, A. E., Blier, H. K., & Ollendick, T. H. (2001, November). *Parent-child agreement on ADIS anxiety and ADHD diagnoses*. Poster session presented at the annual meeting of the Association for the Advancement of Behavior Therapy, Philadelphia, PA.
- Grills, A. E., & Ollendick, T. H. (2001, November). *Peer victimization and social anxiety in middle school children*. Poster session presented at the annual meeting of the Association for the Advancement of Behavior Therapy, Philadelphia, PA.
- Grills, A. E., Francisco, J., & Ollendick, T. H. (2001, November). *Discriminant validity of self-report measures of anxiety*. Poster session presented at the annual meeting of the Association for the Advancement of Behavior Therapy, Philadelphia, PA.

- Ollendick, T. H., Seligman, A., Butcher, A. T., & Grills, A. E. (2001, November). *Behavioral inhibition and impulsivity in children with anxiety disorders: Evidence from laboratory-based tasks*. In A. E. Grills (Chair), *The psychopathology of anxiety disorders in children*. Symposium conducted at the annual meeting of the Association for the Advancement of Behavior Therapy, Philadelphia, PA.
- Grills, A. E., Blier, H. K., & Ollendick, T. H. (2002, March). *Reliability of the factor structure, internal consistency, and divergent validity of the Multidimensional Anxiety Scale for Children (MASC) in two community samples of children*. Poster session presented at the annual meeting of the Anxiety Disorders Association of America, Austin, TX.
- Grills, A. E., Blier, H. K., & Ollendick, T. H. (2002, March). *The prediction of internalizing symptoms and victimization experiences in adolescents: A longitudinal study*. Poster session presented at the annual meeting of the Anxiety Disorders Association of America, Austin, TX.
- Blier, H. K., Grills, A. E., & Ollendick, T. H. (2002, March). *Psychosocial correlates of self-reported anxiety in adolescents: Results from a four-year school-based prospective study of adolescent functioning*. Poster session presented at the annual meeting of the Anxiety Disorders Association of America, Austin, TX.
- Blier, H. K., Grills, A. E., & Ollendick, T. H. (2002, March). *Family environment and children's self-reported anxiety and depression: The independent contribution of parent and child characteristics*. Poster session presented at the annual meeting of the Anxiety Disorders Association of America, Austin, TX.
- Grills, A. E., & Storch, E. A. (Chairs). (2002, November). *Peer victimization and psychosocial adjustment in children*. Symposium to be conducted at the annual meeting of the Association for the Advancement of Behavior Therapy, Reno, NV.
- Grills, A. E., & Ollendick, T. H. (2002, November). Long-term relations among peer victimization and internalizing symptoms in children. In A. E. Grills & E. A. Storch (Chairs), *Peer victimization and psychosocial adjustment in children*. Symposium to be conducted at the annual meeting of the Association for the Advancement of Behavior Therapy, Reno, NV.
- Blier, H. K., Grills, A. E., & Ollendick, T. H. (2002, November). *The impact of distress and family dysfunction on maternal paternal report of child psychopathology in the clinical setting*. Poster session to be presented at the annual meeting of the Association for the Advancement of Behavior Therapy, Reno, NV.
- Blier, H. K., Grills, A. E., Goring, J., & Ollendick, T. H. (2002, November). *The phenomenology of anxiety in children with comorbid internalizing and externalizing problems*. Poster session to be presented at the annual meeting of the Association for the Advancement of Behavior Therapy, Reno, NV.

TEACHING EXPERIENCE

Psychology Department, Virginia Polytechnic Institute and State University

Supervisor: Jack Finney, Ph.D.

Course Instructor: Abnormal Psychology	(Summer I. 2002)
Course Instructor: Abnormal Psychology	(Jan-May 2002)
Course Co-Instructor: Senior Seminar on Diversity Issues in Psychology	(Jan-May 2002)
Course Instructor: Behavior Disorders of Childhood	(Aug-Dec 2001)
Course Instructor: Developmental Psychology	(Summer II. 2001)
Teaching Assistant: Introductory Psychology	(Aug 1998-May 1999)

**Human Resources/Education Department, Virginia Polytechnic Institute and State University
(Feb 2001)**

Supervisor: Cherry K. Houck, Ph.D.

Invited Lecturer and Supervisor for the “Assessing Individual Students Educational Needs” class within the Department of Teaching and Learning.

**Summer Science Program, Smith College
(Summer 1997)**

Supervisor: Patricia M. DiBartolo, Ph.D.

Intern/Teaching Assistant for a class on *Eating Disorders* offered by the Smith College Summer Science Program.

**Psychology Department, Smith College
(Jan-May 1997)**

Supervisor: Randy O. Frost, Ph.D.

Proctor/Teaching Assistant for the Introduction to Psychology course.

CLINICAL EXPERIENCE

**Pediatrics Consultant and Liaison, Medical University of South Carolina, Charleston, SC
(Feb 2003-present)**

Supervisors: Ron Brown, Ph.D. and Deborah Anderson, Ph.D.

Internship Rotation. Consulting on inpatient and outpatient pediatric cases through the Medical University of South Carolina; assessment of pediatric and childhood behavior disorders; conduct specialty treatment groups.

National Crime Victims Research and Treatment Center, Medical University of South Carolina, Charleston, SC (Aug 2002-Jan 2003)

Supervisors: Ron E. Acierno, Ph.D. and Rochelle F. Hanson, Ph.D.

Internship Rotation. Conduct intake evaluations and provide individual and family therapy for adults, children, and families who have been victims of crime and are experiencing trauma-related symptoms; attend weekly treatment didactics, case staffing, and supervision meetings, as well as monthly case conferences and psychiatry grand rounds.

**IMPACT, Medical University of South Carolina, Charleston, SC
(Aug 2002-Jan 2003)**

Supervisor: Owen S. Shoemaker, Ph.D.

Internship Rotation. Conduct intake evaluations of families seeking placement for their child at IMPACT, a day treatment center for preschool to early elementary age children with severe behavioral problems; provide parent training and outreach family therapy; consult and provide observations at local daycare centers and schools; attend weekly case staffing and supervision meetings; assist in post-treatment planning and school placements.

**Psychological Services Center, Blacksburg, VA
(Aug 2001-June 2002)**

Supervisors: Thomas H. Ollendick, Ph.D. and Angela Scarpa-Friedman, Ph.D.

Advanced Graduate Student Supervisor. Supervised graduate student therapy cases; conducted weekly individual supervision meetings; assisted in preparation for therapy sessions; participated in practicum team client conferences.

**Christiansburg High School, Christiansburg, VA
(Aug 2001-Jan 2002)**

Supervisor: Thomas H. Ollendick, Ph.D.

Therapy Group Co-Facilitator for a group of adolescent males determined to be at-risk for conduct problems. Incorporated the EQUIP program into planned group sessions, co-led twice weekly meetings, participated in weekly planning and supervision meetings.

**Montgomery County School Department, Montgomery County, VA
(Sep 2000-May 2001)**

Supervisor: Bonita Sims-Gude, Ph.D.

School Counselor. Externship placement within the Montgomery County School System. Conducted assessments and counseling sessions with children; prepared and administered weekly group counseling sessions; attended weekly supervision meetings; participated in children's individualized educational program conferences and parent meetings.

**Psychological Services Center, Blacksburg, VA
(Sep 1999-May 2002)**

Supervisors: Thomas H. Ollendick, Ph.D. and Lee D. Cooper, Ph.D.

Graduate Student Assessment Clinician and Supervisor. Conducted assessments of clients (children, parents, adults); prepared and administered intelligence, behavioral, and psychological tests; scored measures and prepared reports; participated in assessment team client conferences; provided feedback to clients; trained and supervised graduate clinicians' sessions and reports.

**Psychological Services Center, Blacksburg, VA
(Sep 1998-Aug 2000)**

Supervisors: George Clum, Ph.D. and Lee D. Cooper, Ph.D. (1998-1999);

Lee Cooper, Ph.D. (Summer 1999); Thomas H. Ollendick, Ph.D. (1999-2000)

Graduate Student Clinician. Conducted initial intake and assessments of clients (children, adults, families); prepared and administered weekly therapy sessions; created progress notes; participated in practicum team client conferences.

**Psychology Department, Virginia Polytechnic Institute and State University
(Sep 1998-Jun 2000)**

Supervisors: Thomas H. Ollendick, Ph.D. and Russell T. Jones, Ph.D.

Clinician for an NIMH-Funded Research Grant on Victims of Residential Fires. Conducted assessments of parent and child experimental and control subjects who had experienced a fire in their homes.

PROFESSIONAL AFFILIATIONS

Student Representative (2002-present), Society of Clinical Child and Adolescent Psychology, Division 53 of the American Psychological Association

Student Member, American Psychological Association

Student Member, Society of Clinical Psychology, Division 12 of the American Psychological Association

Student Member, Society of Clinical Child and Adolescent Psychology, Division 53 of the American Psychological Association

Student Member, Association for Advancement of Behavior Therapy

Student Member, Association for Advancement of Behavior Therapy–Anxiety Disorders Special Interest Group

Student Member, Anxiety Disorders Association of America

Psi Chi

Sigma Xi

Phi Beta Kappa